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39 Years

Southbridge Long Term Care Home

65 Ward Street, Port Hope ON

Transportation Impact Study

Southbridge Long-Term Care Home
65 Ward Street, Port Hope ON

Transportation Impact Study

Prepared for:

SOUTHBRIDGE
CARE HOMES
Creating Caring Environments

Prepared By:

NOVATECH
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario
K2M 1P6

Dated: October 2021
Revised: January 2022

Novatech File: 120226
Ref: R-2021-014

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January 31, 2022

Municipality of Port Hope
Joint Operations Centre
284 Victoria Street North
Port Hope, Ontario

Attention: **Mr. Mike van den Broek**
Engineering Manager, Works & Engineering

Dear Mr. van den Broek:

Reference: **65 Ward Street**
Revised Transportation Impact Study
Novatech File No. 120226

A Transportation Impact Study (TIS) dated October 2021 was prepared in support of Zoning By-Law Amendment and Site Plan applications for the property located at 65 Ward Street. We are pleased to submit the following revised TIS, which reflects changes in the site plan and addresses comments provided by the Municipality. The structure and format of this TIS report generally follows the traffic study guidelines included in the *Port Hope Development Guide* (2015), and has been confirmed with Municipality staff.

If you have any questions or comments regarding this report, please feel free to contact Jennifer Luong, or the undersigned.

Yours truly,

NOVATECH

Joshua Audia, B.Sc.
E.I.T. | Transportation/Traffic

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EXECUTIVE SUMMARY

This Transportation Impact Study (TIS) has been prepared in support of Zoning By-Law Amendment and Site Plan applications for the property located at 65 Ward Street in the Municipality of Port Hope, Ontario. The southern portion of the subject site is currently occupied by the Hope Street Terrace Long Term Care Facility and powerhouse, while the northern portion of the site is occupied by a single-detached home and a three-storey institutional building, which was the former Port Hope hospital.

The subject site is surrounded by the following:

- Ward Street, followed by affordable housing units to the north;
- Low-density residential uses, followed by William Street to the south;
- Hope Street South, followed by low-density residential uses to the east;
- Princess Street, followed by low-density residential uses to the west.

The proposed project involves demolition of all existing structures on the subject site, and redevelopment of the entire site with a new seven-storey long term care facility with 192 beds. The site will be accessed via two proposed driveways to Hope Street South, one proposed driveway to Princess Street, and a one-way pick-up/drop-off loop with vehicles entering from Ward Street and exiting to Hope Street. A total of 100 vehicle parking spaces and 13 bicycle parking spaces will be provided. It is anticipated that the proposed redevelopment will be constructed in a single phase, with a buildout year of 2024.

The site is designated as 'Institutional' in the Municipality of Port Hope's Official Plan, and is zoned IU (Urban Institutional) in the Comprehensive Zoning By-Law No. 20-2010. A Zoning By-Law Amendment is required to permit an increase in the maximum building height and variances to general provisions such as the proposed loading space and waste storage location. The subject site is surrounded by low- or medium-density residential land uses or parkland in all directions.

The conclusions and recommendations of the analysis can be summarized as follows:

- The proposed development is projected to generate 33 vehicle trips during the AM peak hour, 21 vehicle trips during the PM peak hour, and 77 vehicle trips during the Sunday peak hour.

- Accounting for the existing long-term care facility, this results in a net increase of 17 vehicle trips during the AM peak hour, 21 vehicle trips during the PM peak hour, and 38 vehicle trips during the Sunday peak hour.

- The concrete sidewalks on the south side of Ward Street and the west side of Hope Street South will be maintained. Curbs will be depressed wherever these sidewalks meet one of the proposed driveways to Hope Street South or Ward Street. Pedestrian walkways will also be provided around the perimeter of the proposed facility, connecting to the existing sidewalks. A landscaped area within the centre of the horseshoe-shaped facility will also include walkways.

- Pick-ups and drop-offs will be provided in a lay-by lane provided on the south side of the loop between Ward Street and Hope Street South. This loop also forms the on-site fire route for the proposed development, which will run in front of the main entrance.

- The driveway design and amount of parking proposed meets the provisions of the Municipality's *Zoning By-Law*.

- A loading space will be provided adjacent to the driveway to Princess Street, near the southwest corner of the proposed building. While it is understood that no loading spaces are required per the *Zoning By-Law*, a space is required to receive routine deliveries.

- The existing long-term care facility will remain operational during construction of the proposed building. During construction, approximately 20 of the existing 40 parking spaces will become unavailable. Therefore, approximately 20 off-site parking spaces will be required to offset the shortfall in parking for staff and visitors, based on the existing parking supply.

- Long-term care staff will park on-site where possible or will make alternative transportation arrangements (such as carpooling) during the construction period. Additionally, the proponent has committed to securing off-site parking arrangements for staff and visitors that will not include on-street parking within vicinity of the site.

- Relating to construction workers, the proponent will include clauses within the construction contracts that will disallow construction trades from parking on-site, and will require the construction manager to be responsible for off-site/off-street parking arrangements.

- At the stop bar, insufficient sight distances are provided for drivers on Princess Street at Ward Street, as trees on/near both corners can obstruct drivers' vision. Drivers on Princess Street can adequately see in both directions by encroaching over the crosswalk before proceeding. Trimming the vegetation to improve sightlines from the stop bar is identified for the Municipality's consideration.

- There are no operational concerns at Ward Street/Hope Street South, based on existing or future traffic conditions. For all peak hours, each approach achieves a level of service (LOS) A, which translates to an average delay of 10 seconds or less. Therefore, the all-way stop control at Ward Street/Hope Street is currently an appropriate traffic control device, and will continue to be appropriate following buildout of the proposed development.

- Trees on/near both corners of Ward Street/Princess Street can obstruct the vision of drivers, and therefore trimming the vegetation to improve sightlines from the stop bar is identified for the Municipality's consideration. The analysis does not identify any other improvements to the infrastructure within the study area, since the additional site-generated traffic is not anticipated to have a significant impact on operations.

- The proposed development is recommended from a transportation perspective.

1.0 PROPOSED DEVELOPMENT

1.1 Subject Site

This Transportation Impact Study (TIS) has been prepared in support of Zoning By-Law Amendment and Site Plan applications for the property located at 65 Ward Street in the Municipality of Port Hope, Ontario. The southern portion of the subject site is currently occupied by the Hope Street Terrace Long Term Care Facility and powerhouse, while the northern portion of the site is occupied by a single-detached home and a three-storey institutional building, which was the former Port Hope hospital.

The subject site is surrounded by the following:

- Ward Street, followed by affordable housing units to the north;
- Low-density residential uses, followed by William Street to the south;
- Hope Street South, followed by low-density residential uses to the east;
- Princess Street, followed by low-density residential uses to the west.

A view of the subject site is provided in **Figure 1**.

The proposed project involves demolition of all existing structures on the subject site, and redevelopment of the entire site with a new seven-storey long term care facility with 192 beds. The site will be accessed via two proposed driveways to Hope Street South, one proposed driveway to Princess Street, and a one-way pick-up/drop-off loop with vehicles entering from Ward Street and exiting to Hope Street. A total of 100 vehicle parking spaces and 13 bicycle parking spaces will be provided. It is anticipated that the proposed redevelopment will be constructed in a single phase, with a buildout year of 2024.

A copy of the site plan is included in **Appendix A**.

The site is designated as 'Institutional' in the Municipality of Port Hope's Official Plan, and is zoned IU (Urban Institutional) in the Comprehensive Zoning By-Law No. 20-2010. A Zoning By-Law Amendment is required to permit an increase in the maximum building height and variances to general provisions such as the proposed loading space and waste storage location. The subject site is surrounded by low- or medium-density residential land uses or parkland in all directions.

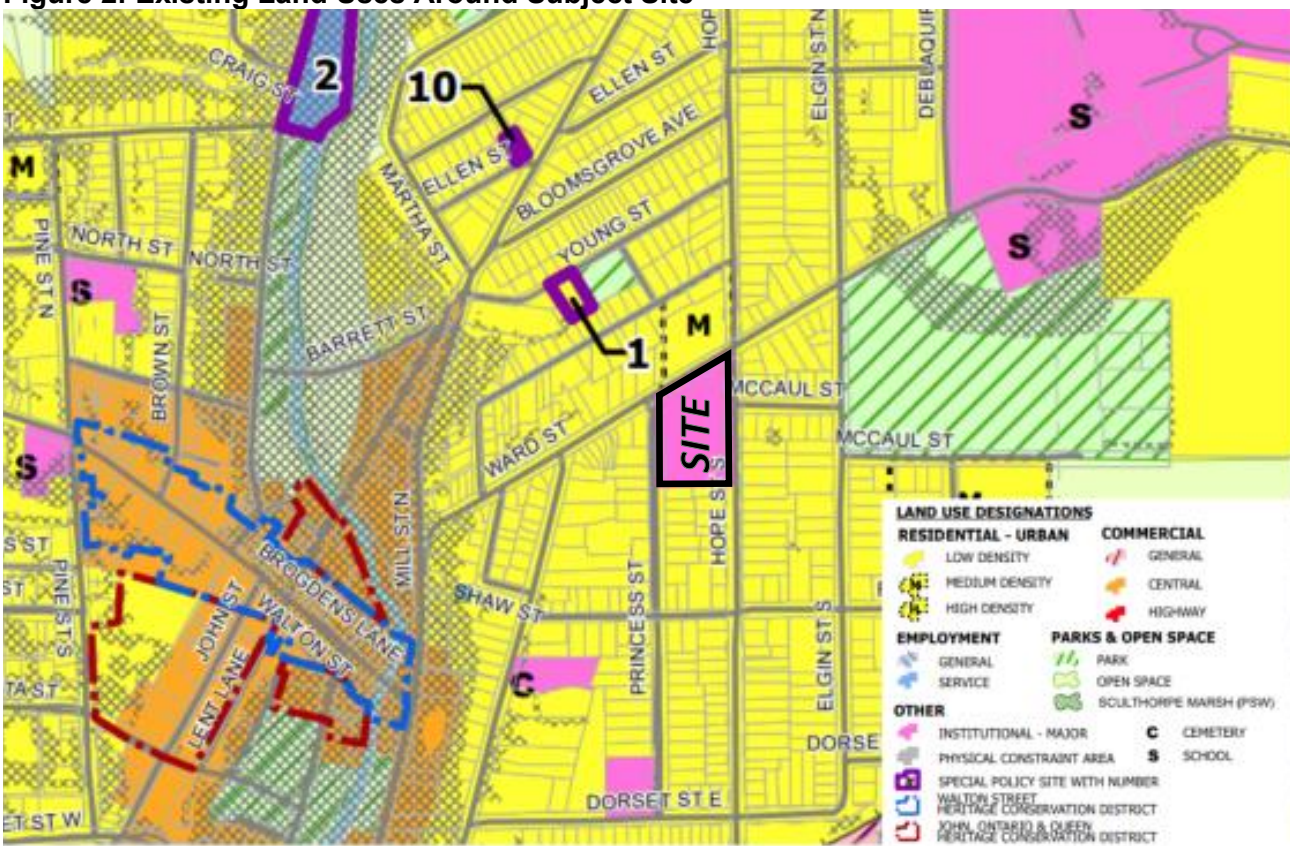
An excerpt of Schedule C1 of the Municipality's Official Plan, which outlines the land use designations for all properties within the Municipality, is included in **Figure 2**.

1.2 Off-Site Developments

Based on a review of the Municipality of Port Hope's Current Planning Applications page, there are two other development applications on Hope Street North. These development applications have been made for the purpose of constructing a single-detached dwelling at 21 Hope Street North (Application No. A06/21) and a detached garage at 86 Hope Street North (Application No. A08/21).

Figure 1: Aerial View of the Subject Site

Figure 2: Existing Land Uses Around Subject Site



2.0 AREA CONDITIONS

2.1 Study Area Limits

The study area of this TIS includes the boundary streets Ward Street, Princess Street, and Hope Street South, the intersection of Ward Street/Hope Street, and the proposed accesses to Princess Street and Hope Street South.

2.2 Study Area Land Use

The subject site is generally surrounded by low-density residential or park land uses. Medium-density residential is located immediately north of the subject site at 64 Ward Street, which includes 24 affordable housing units. The development was previously Dr. L.B. Powers School.

There are no other development applications in the area surrounding the subject site that are considered significant from a transportation perspective.

2.3 Site Accessibility

2.3.1 Study Area Roadways

Ward Street is a collector roadway that generally runs on an east-west alignment between Mill Street North and Hamilton Road. Within proximity of the subject site, the roadway has a two-lane undivided urban cross-section, a regulatory speed limit of 50 km/h per the Highway Traffic Act, and concrete sidewalks on both sides of the roadway. Ward Street has a width of 9.5m, and on-street parking is generally permitted on the north side of the roadway. An on-street lay-by is also provided on the south side of Ward Street, across the frontage of the subject site.

Hope Street is a collector roadway that generally runs on a north-south alignment between Ontario Street and Lake Street. Hope Street is divided into Hope Street North and Hope Street South at the intersection of Ward Street. Within proximity of the subject site, the roadway has a two-lane undivided urban cross-section, a regulatory speed limit of 50 km/h, and concrete sidewalks on both sides of the roadway. Hope Street has a width of 9.5m, and on-street parking is generally permitted on the east side of the roadway.

Princess Street is a local roadway that generally runs on a north-south alignment between Ward Street and Dorset Street East. Within proximity of the subject site, the roadway has a two-lane undivided rural cross-section, a regulatory speed limit of 50 km/h, and a concrete sidewalk on the west side of the roadway. Princess Street has a width of 6.0m, and on-street parking is not prohibited.

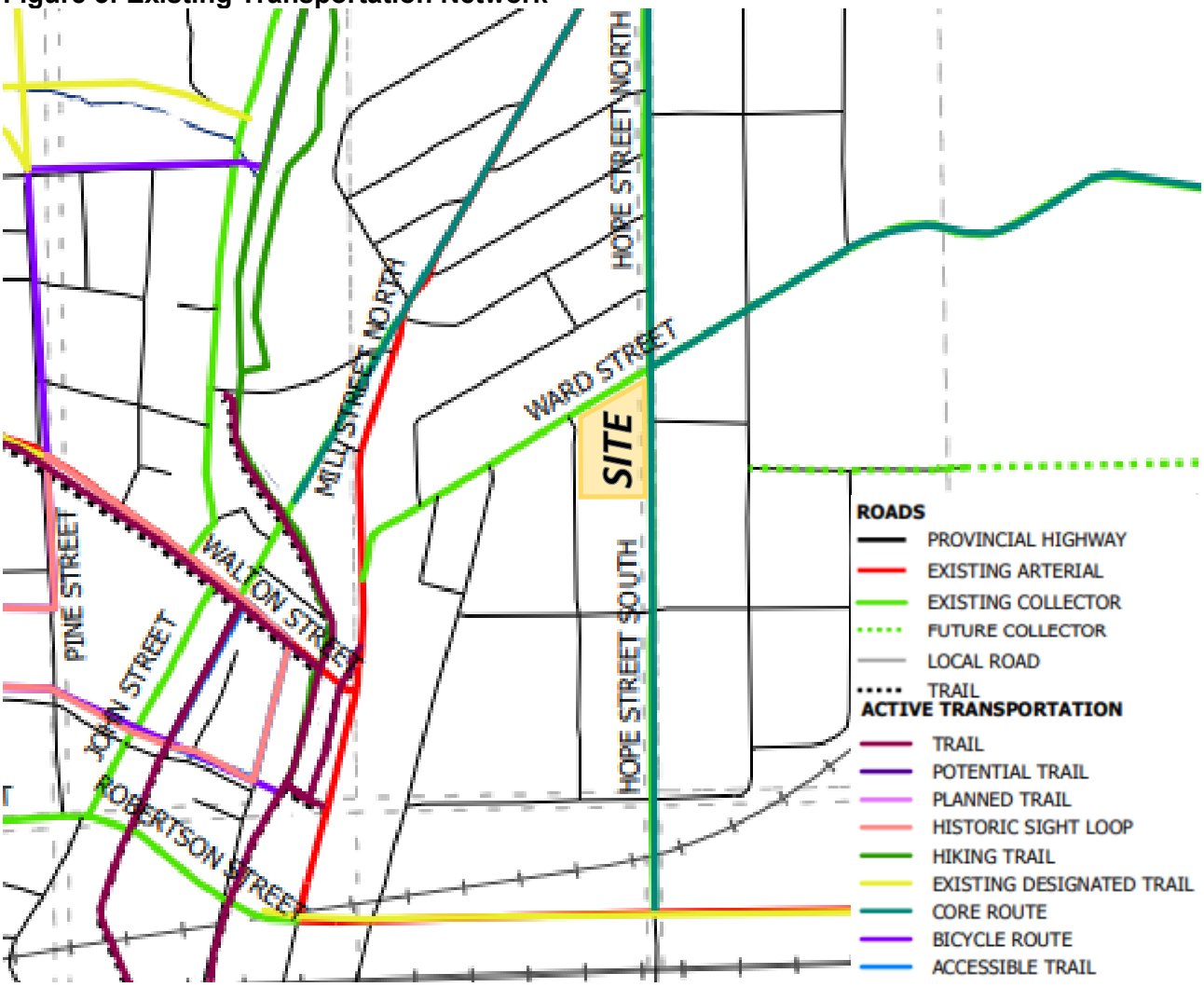
An excerpt of Schedule D1 of the Municipality's Official Plan, which shows the existing transportation network in the vicinity of the subject site, is shown in **Figure 3**.

2.3.2 Traffic Volumes

Traffic counts were coordinated by Novatech on Sunday, September 12, 2021 and Tuesday, September 14, 2021, to determine the existing pedestrian, cyclist, and vehicular traffic volumes at the intersection of Ward Street/Hope Street. Traffic count data is included in **Appendix B**, and traffic volumes within the study area are shown in **Figure 4**.

A radar count to determine the average annual daily traffic (AADT) volumes on Hope Street South was commissioned by the Municipality from October 27, 2016 to November 1, 2016, and was located at 54 Hope Street South. Comparing the 2016 and 2021 counts, the AADT of Hope Street South has increased from approximately 2,330 vehicles per day in 2016 to approximately 2,940 vehicles per day in 2021.

Figure 3: Existing Transportation Network



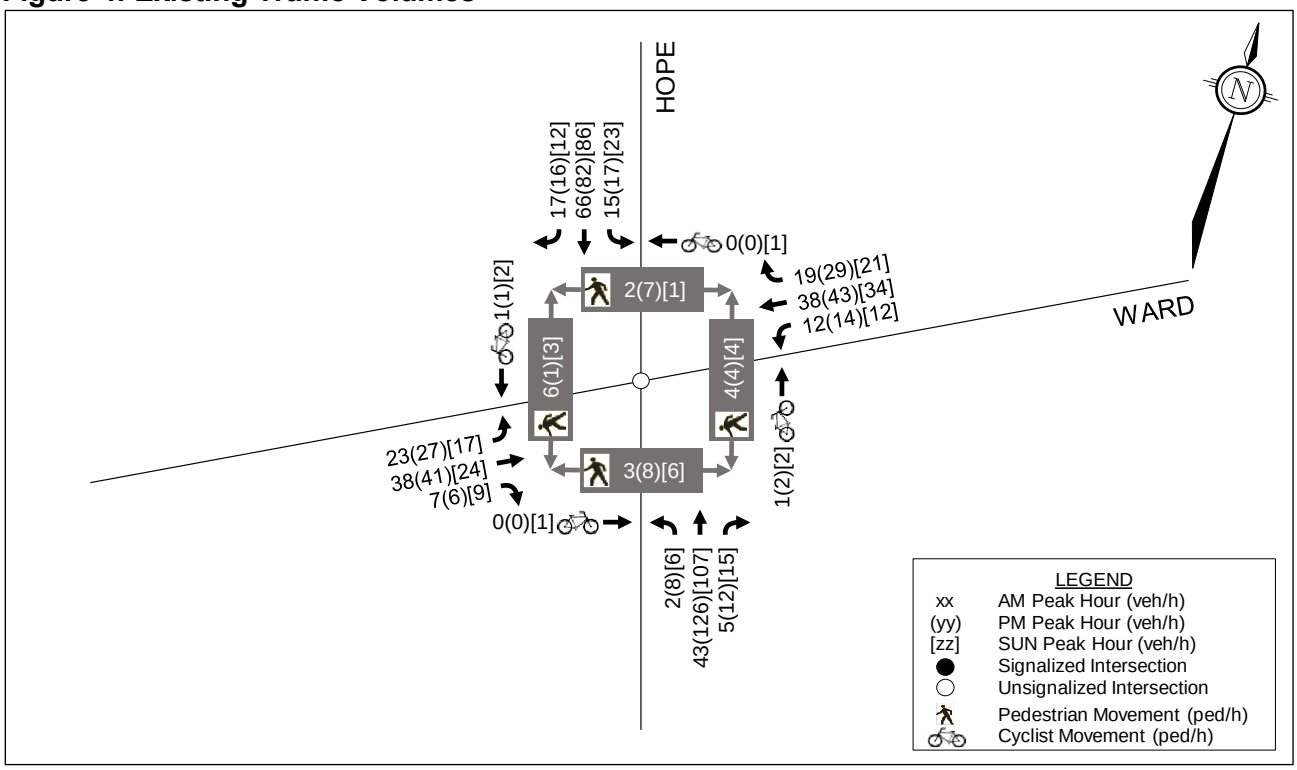
2.3.3 Transit

The subject site is served by Bus Route 'B,' which generally serves the area of Port Hope east of Ontario Street and south of Highway 401. From the subject site, the nearest bus stops served by Route B are located at the northwest corner of Ward Street/Hope Street and on the west side of Hope Street South, in front of the Hope Street Terrace facility. It is noted that the Municipality also provides the ROLLS specialized (accessible) transit service, for prospective riders who are unable to use regular public transit.

2.3.4 Transportation System Management

The intersection of Ward Street/Hope Street is all-way stop-controlled. Ward Street and Hope Street are generally free-flow roadways outside of this intersection (i.e. Ward Street/Princess Street and Hope Street South/McCaul Street are side-street stop-controlled).

Figure 4: Existing Traffic Volumes



3.0 PROJECTED TRAFFIC

3.1 Site-Generated Traffic

3.1.1 Trip Generation

The proposed development consists of a seven-storey long-term care facility with 192 beds, and will ultimately replace the existing Hope Street Terrace facility, which includes 97 beds. Trips generated by the existing and proposed facilities have been estimated using rates in the *ITE Trip Generation Manual, 10th Edition*, corresponding to the Nursing Home land use (code 620). The *ITE Trip Generation Manual* also includes the inbound/outbound percentages for each peak hour. The estimated number of trips generated by the existing and proposed facilities during the weekday AM peak hour, weekday PM peak hour, and Sunday peak hour are summarized in **Table 1**.

Table 1: Proposed Development – Peak Hour Trip Generation

Land Use	ITE Code	Units	AM Peak (vph)(1)			PM Peak (vph)(2)			SUN Peak (vph)(3)		
			IN	OUT	TOT	IN	OUT	TOT	IN	OUT	TOT
Existing Development											
Nursing Home	620	97 beds	11	5	*16*	7	14	*21*	22	17	*39*
Proposed Development											
Nursing Home	620	192 beds	24	9	*33*	14	28	*42*	44	33	*77*
Net Increase			**13**	**4**	***17***	**7**	**14**	***21***	**22**	**16**	***38***

1. AM Peak Hour rate: 0.17 vehicles per bed during the peak hour. Directional distribution is 79% entering, 21% exiting.
2. PM Peak Hour rate: 0.22 vehicles per bed during the peak hour. Directional distribution is 32% entering, 68% exiting.
3. SUN Peak Hour rate: 0.40 vehicles per bed during the peak hour. Directional distribution is 66% entering, 34% exiting.

From the previous table, the proposed development is projected to generate 33 vehicle trips during the AM peak hour, 21 vehicle trips during the PM peak hour, and 77 vehicle trips during the Sunday peak hour. Accounting for the existing long-term care facility, this results in a net increase of 17 vehicle trips during the AM peak hour, 21 vehicle trips during the PM peak hour, and 38 vehicle trips during the Sunday peak hour.

3.1.2 Trip Distribution

The assumed distribution of trips generated by the existing and proposed developments have been derived based on the September 2021 counts at Ward Street/Hope Street. The trip distribution can be described as follows:

Weekday AM and PM Peak Hours

- 30% to/from the north via Hope Street North;
- 30% to/from the south via Hope Street South or Princess Street;
- 20% to/from the east via Ward Street;
- 20% to/from the west via Ward Street.

Sunday Peak Hours

- 35% to/from the north via Hope Street North;
- 30% to/from the south via Hope Street South or Princess Street;
- 20% to/from the east via Ward Street;
- 15% to/from the west via Ward Street.

3.1.3 Trip Assignment

The existing development includes three driveways to Hope Street South and two driveways to Princess Street. The two southernmost driveways on Hope Street South form the pick-up and drop-off loop for the existing development. Based on the location of the main entrance to the existing long-term care home, it is assumed that all trips entering the pick-up/drop-off loop will do so from the northerly driveway, and all trips exiting will do so from the southerly driveway. Based on this, the trips generated by the existing development have been assigned to each driveway as follows:

Northerly Access to Princess Street

- 100% of trips arriving from or are destined to the west.

Southerly Access to Princess Street

- 25% of trips arriving from or are destined to the south.

Northerly Access to Hope Street South

- 75% of trips arriving from or are destined to the north;
- 50% of trips arriving from or are destined to the south;
- 75% of trips arriving from or are destined to the east.

Central Access to Hope Street South (Northern Driveway of Pick-up/Drop-off Loop)

- 25% of trips arriving from the north;
- 25% of trips arriving from the south;
- 25% of trips arriving from the east.

Southerly Access to Hope Street South (Southern Driveway of Pick-up/Drop-off Loop)

- 25% of trips destined to the north;
- 25% of trips destined to the south;
- 25% of trips destined to the east.

The site will be accessed via two proposed driveways to Hope Street South, one proposed driveway to Princess Street, and a one-way pick-up/drop-off loop with vehicles entering from Ward Street and exiting to Hope Street South. The trips generated by the proposed development have been assigned to each driveway as follows:

Access to Princess Street

- 75% of trips arriving from or are destined to the west;
- 25% of trips arriving from or are destined to the south.

Access to Hope Street South

- 75% of trips arriving from or are destined to the north;
- 75% of trips arriving from or are destined to the south;
- 75% of trips arriving from or are destined to the east.

Ingress to Ward Street (Western Driveway of Pick-up/Drop-off Loop)

- 25% of trips arriving from the north;
- 25% of trips arriving from the east;
- 25% of trips arriving from the west.

Egress to Hope Street South (Eastern Driveway of Pick-up/Drop-off Loop)

- 25% of trips destined to the north;
- 25% of trips destined to the east;
- 25% of trips destined to the west.

Traffic volumes generated by the existing development and the proposed development are shown in **Figure 5** and **Figure 6**, respectively. The net difference in traffic generated by the proposed development at Ward Street/Hope Street is shown in **Figure 7**.

Figure 5: Current Site-Generated Traffic Volumes

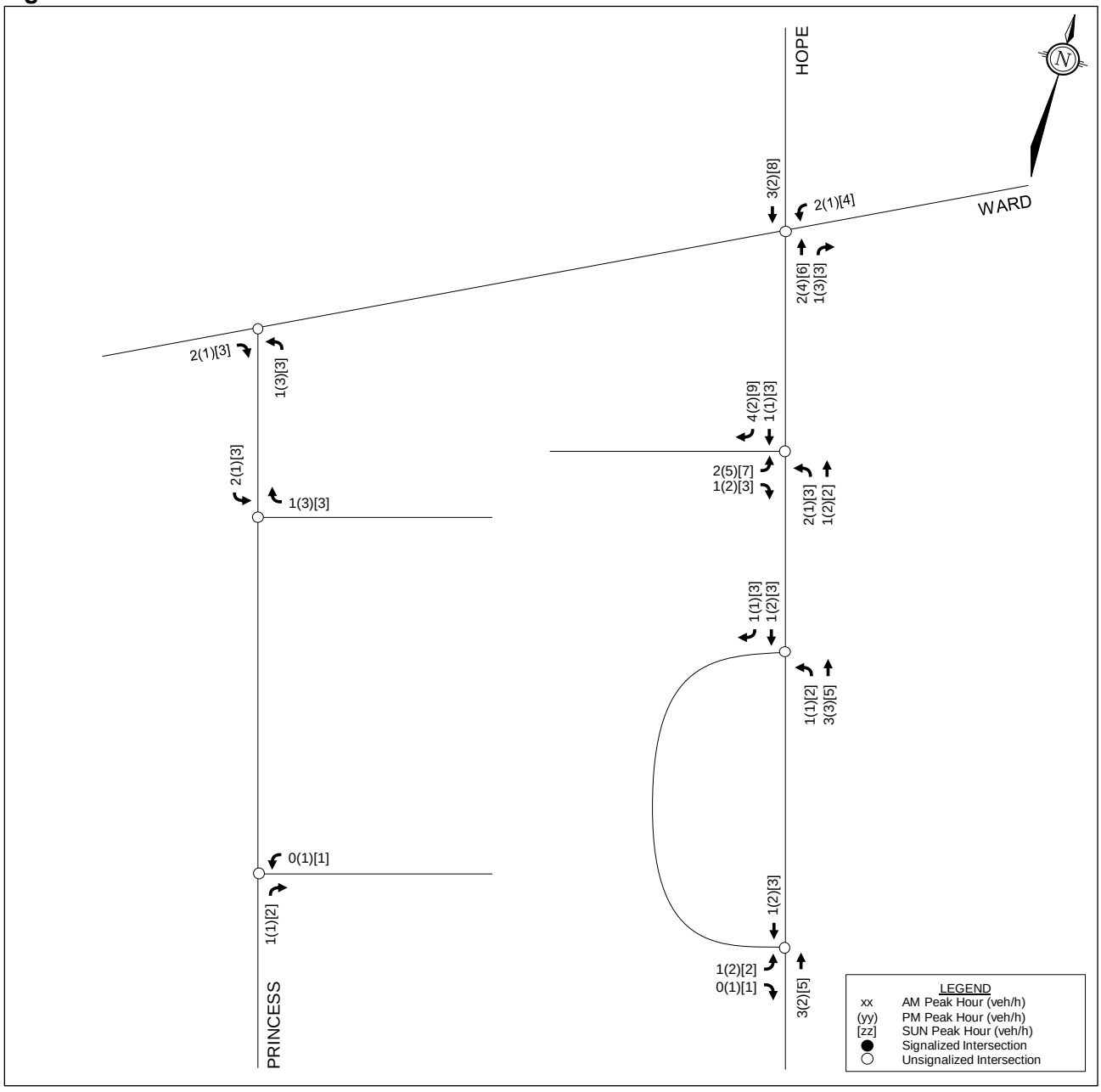


Figure 6: Proposed Site-Generated Traffic Volumes

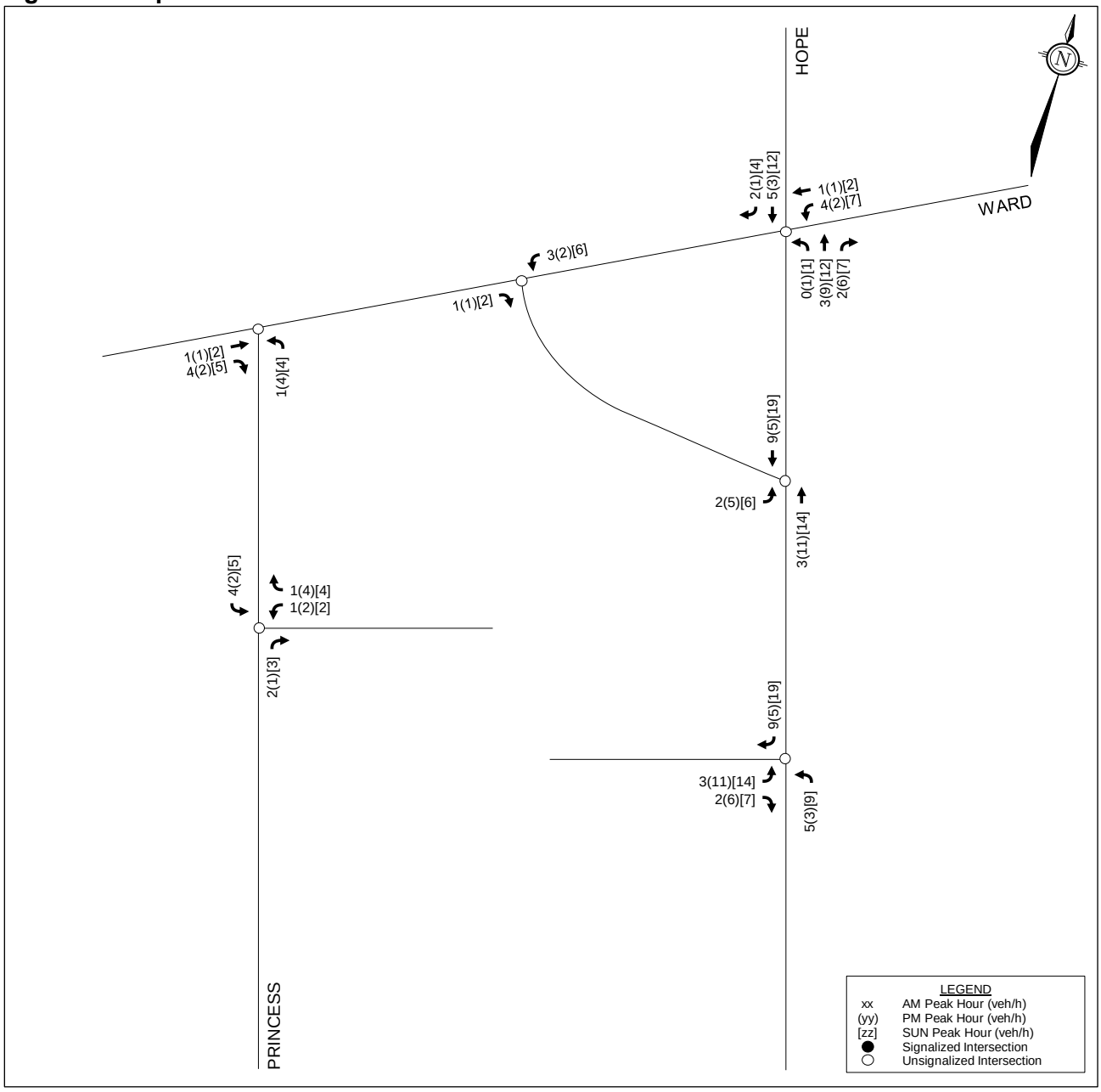
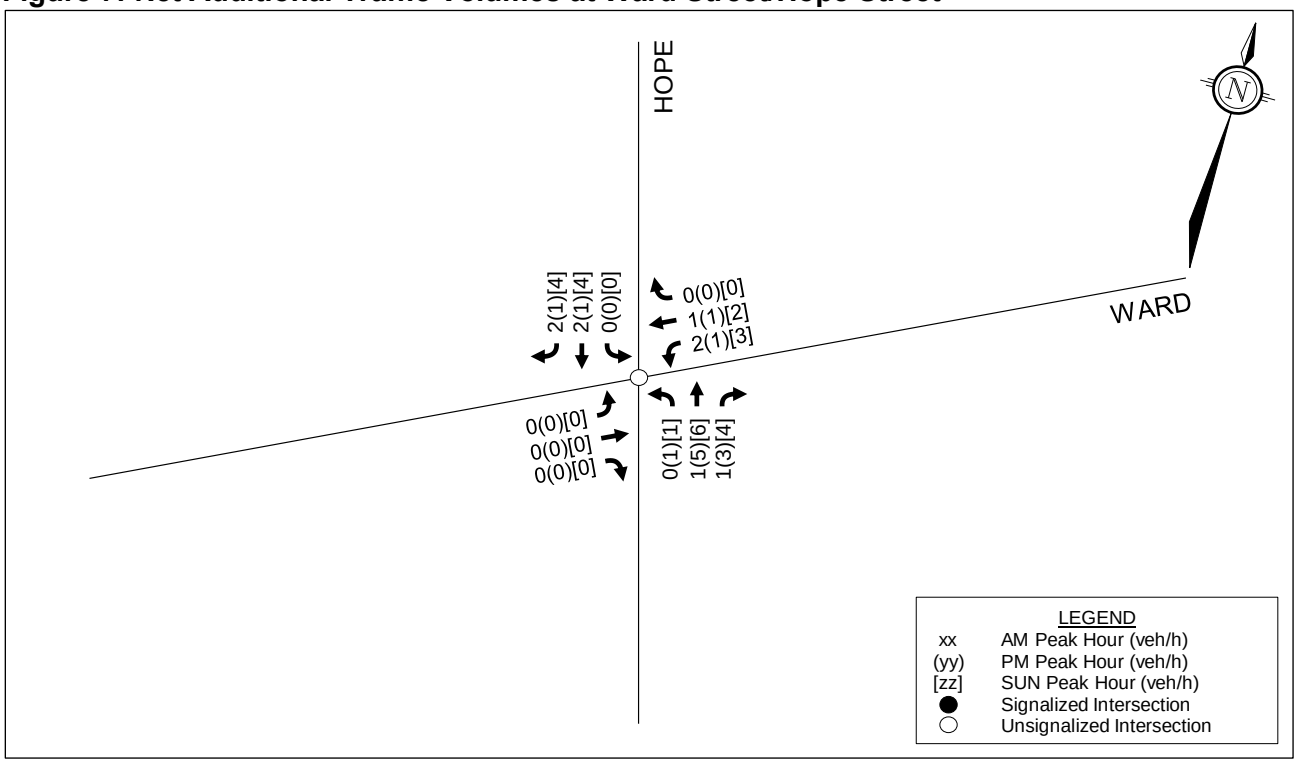


Figure 7: Net Additional Traffic Volumes at Ward Street/Hope Street



3.2 Background Traffic

A rate of background growth for Ward Street and Hope Street has been established, through a review of the AADT of Hope Street South. As discussed in Section 2.3.2, the AADT of Hope Street South has increased from approximately 2,330 vehicles per day in 2016 to approximately 2,940 vehicles per day in 2021. This equates to an annual growth rate of approximately 4.8% per annum. To maintain a conservative analysis, an annual background growth rate of 5% has been assumed.

The future background traffic volumes in the buildout year 2024 and horizon year 2029 are shown in **Figure 8** and **Figure 9**, respectively.

3.3 Total Traffic

The future background traffic volumes in 2024 and 2029 plus the net additional traffic generated by the proposed development are shown in **Figure 10** and **Figure 11**, respectively.

Figure 8: 2024 Background Traffic Volumes

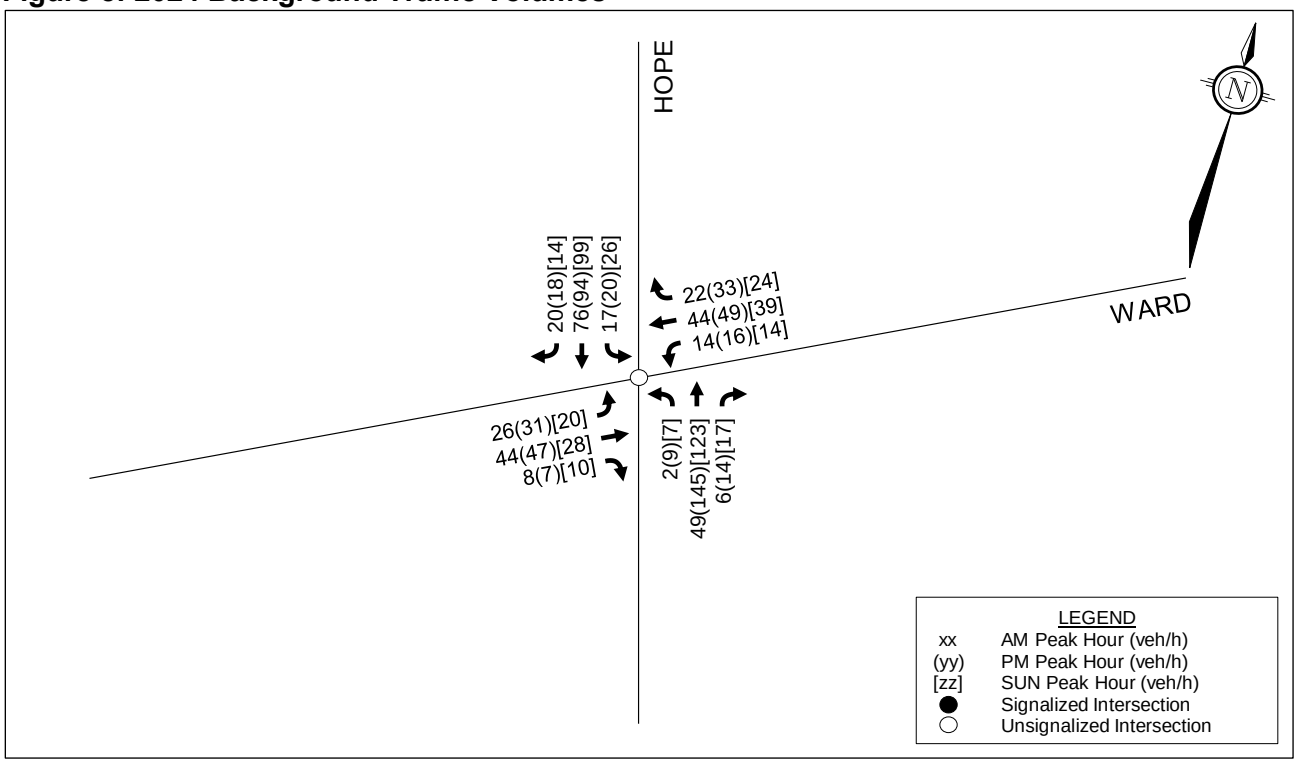


Figure 9: 2029 Background Traffic Volumes

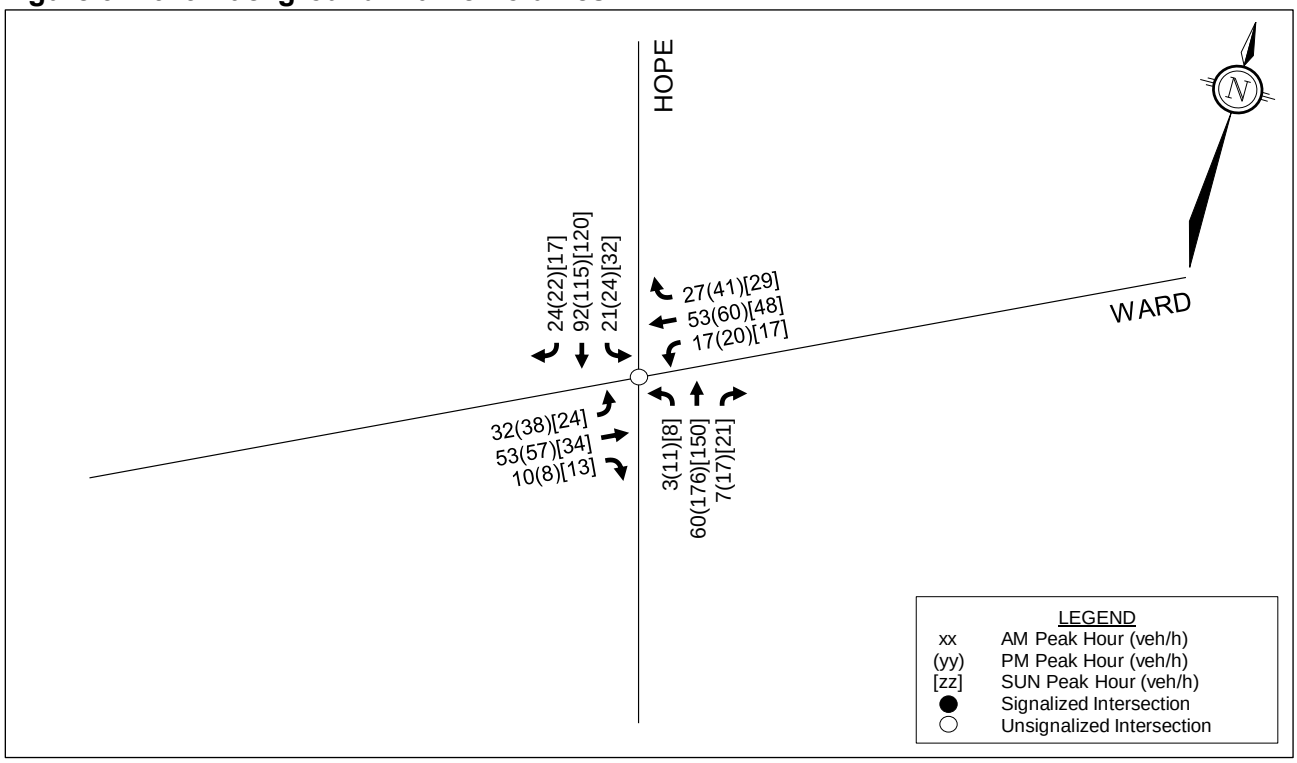


Figure 10: 2024 Total Traffic Volumes

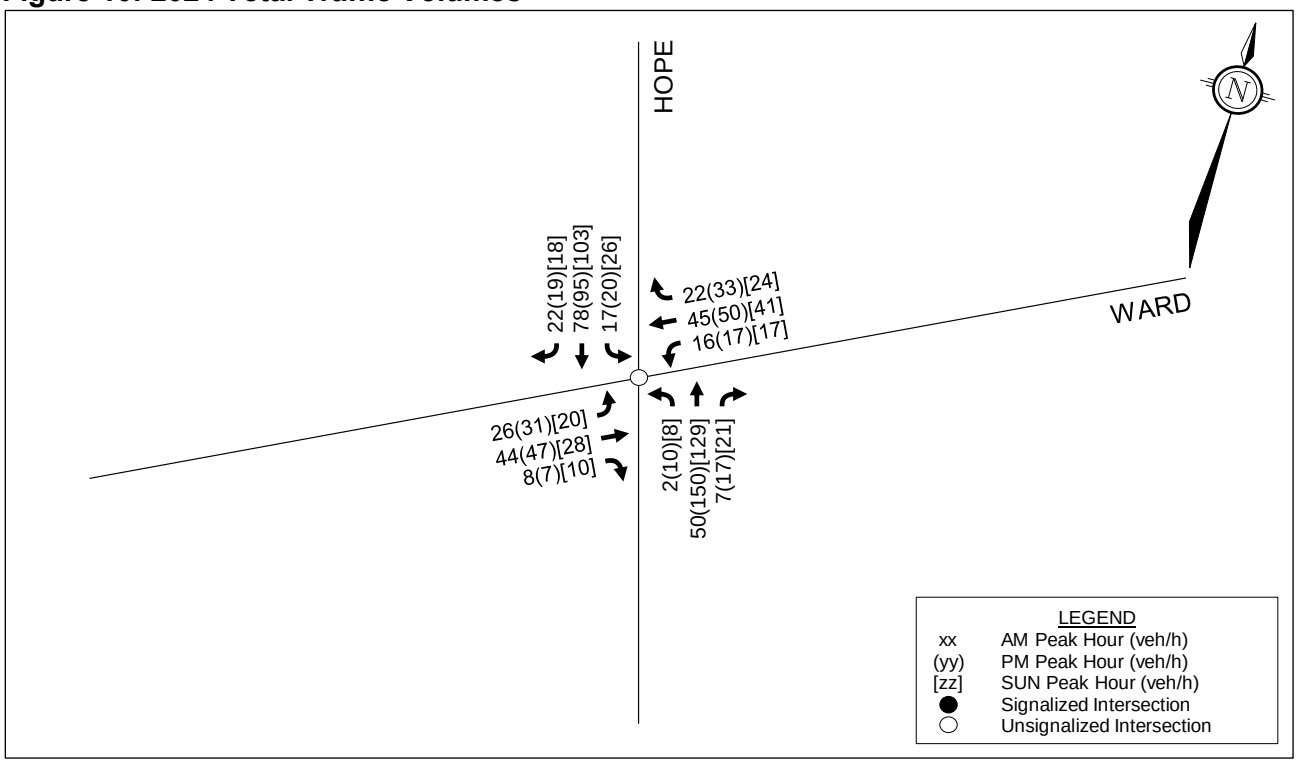
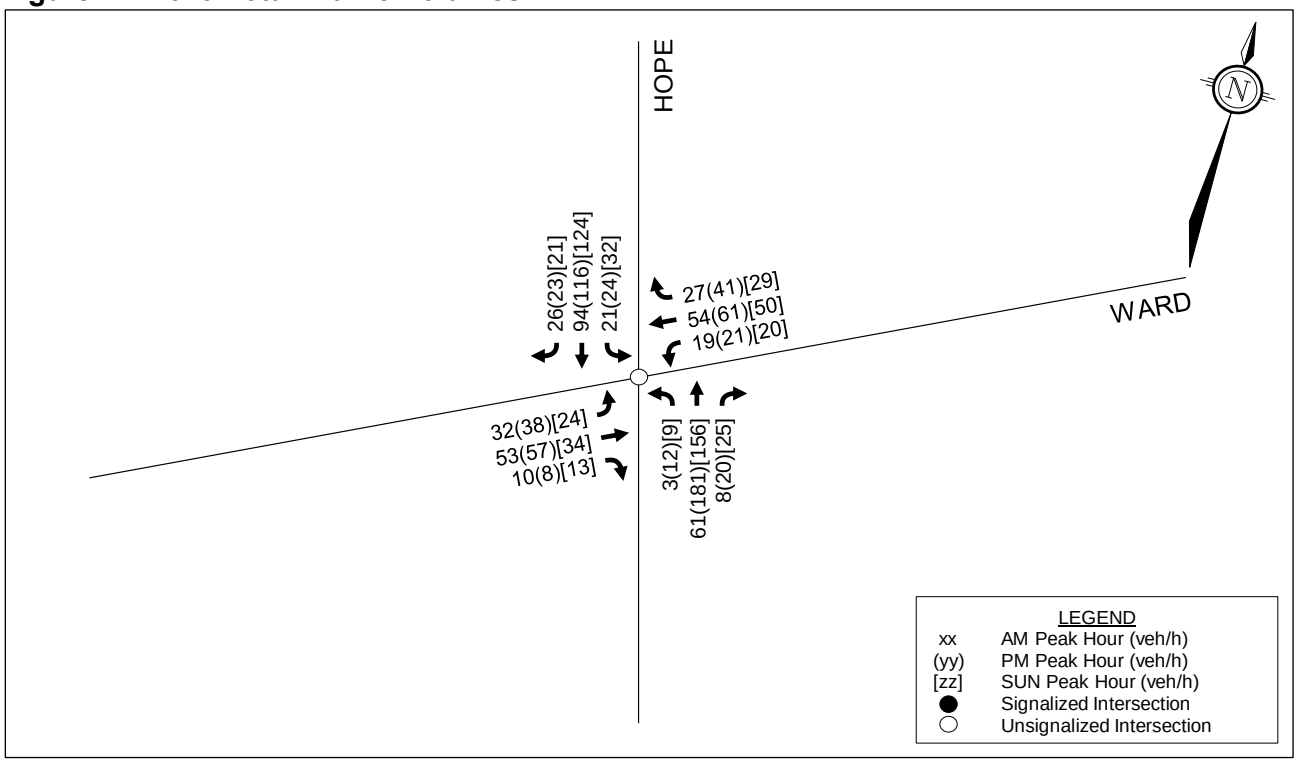


Figure 11: 2029 Total Traffic Volumes



4.0 ANALYSIS

4.1 Site Access and Circulation

The concrete sidewalks on the south side of Ward Street and the west side of Hope Street South will be maintained. Curbs will be depressed wherever these sidewalks meet one of the proposed driveways to Hope Street South or Ward Street. Pedestrian walkways will also be provided around the perimeter of the proposed facility, connecting to the existing sidewalks. A landscaped area within the centre of the horseshoe-shaped facility will also include walkways.

Pick-ups and drop-offs will be provided in a lay-by lane provided on the south side of the loop between Ward Street and Hope Street South. This loop also forms the on-site fire route for the proposed development, which will run in front of the main entrance.

Section 5.2.8.3 of the Municipality's *Zoning By-Law* identifies that two-way driveways accessing a parking area or parking lot shall have a minimum width of 6.0m and a maximum width of 9.0m. Measuring at the right-of-way lines, all proposed driveways will have widths between 6.7m and 8.4m. Therefore, this requirement is met.

Loading and delivery vehicles will enter and exit the site via Hope Street, and will utilize the loading space at the southwest corner of the proposed building. Garbage collection will take place adjacent to this loading space, and garbage trucks will enter and exit the site via Princess Street.

4.2 Parking

4.2.1 Ultimate Parking

Minimum vehicle and bicycle parking rates for the proposed development are identified in Table 5.5 and Table 5.9 of the Municipality's *Zoning By-Law*, and minimum barrier-free parking rates are identified in Table 5.3 of the *Port Hope Development Guide*. A review of these rates, as well as the number of parking spaces proposed, are included in **Table 2**.

Table 2: Required and Proposed Parking

Relevant Land Use	Rate	Units/NFA[(1)]	Required	Provided
Minimum Vehicle Parking				
Nursing Home	0.5 spaces per bed	192 beds	96	100
Minimum Barrier-Free Parking				
Medical Centre	3 spaces when required total is 61 to 100	96 spaces	3	4
Minimum Bicycle Parking				
Institutional Use	2 spaces plus 1 space per 1,000 m^2 NFA	10,634 m^2	13	13

1. NFA: Net Floor Area

A total of 100 vehicle parking spaces are proposed for the proposed development, meeting the minimum requirements outlined in the *Zoning By-Law*. A total of four accessible parking spaces will be provided on-site. Two of these spaces will be located adjacent to the lay-by intended for pick-ups and drop-offs, and two will be located adjacent to the southeast corner of the proposed building.

Nine of the 13 bicycle parking spaces will be provided near the southeast corner of the proposed building, and four of the 13 bicycle parking spaces will be provided near the southwest corner.

A loading space will be provided adjacent to the driveway to Princess Street, near the southwest corner of the proposed building. While it is understood that no loading spaces are required per the *Zoning By-Law*, a space is required to receive routine deliveries.

4.2.2 Interim Parking

Currently, there are approximately 40 on-site parking spaces provided for long-term care staff and visitors. The existing facility will remain operational during construction of the proposed building, and approximately 20 of the 40 existing spaces will become unavailable during this time. Therefore, approximately 20 off-site parking spaces will be required to offset the shortfall in parking for staff and visitors, based on the existing parking supply.

As discussed in the previous section, the final parking arrangement for the proposed long-term care facility will meet the requirements outlined in the *Zoning By-Law*. However, the proposed parking supply will only become available once the existing facility is removed and replaced with the new parking lot. Long-term care staff will park on-site where possible or will make alternative transportation arrangements (such as carpooling) during the construction period. Additionally, the proponent has committed to securing off-site parking arrangements that will not include on-street parking within vicinity of the site. Therefore, an on-street parking utilization study is not required, as interim parking will not include staff or visitors parking on-street.

Relating to construction workers, the proponent will include clauses within the construction contracts that will disallow construction trades from parking on-site, and will require the construction manager to be responsible for off-site/off-street parking arrangements.

4.3 Traffic Safety

4.3.1 Collision Data Review

Historical collision reports between 2017 and 2020 have been obtained from the Port Hope Police Service. The reports do not identify any collisions that have occurred at Ward Street/Hope Street during this timeframe. In 2017, a non-intersection collision was recorded on Ward Street (west of Princess Street). In 2018, a non-intersection collision was recorded on Hope Street South (south of McCaul Street). No other collisions in the vicinity of the subject site were identified in the 2017-2020 reports.

4.3.2 Sightline Review

The intersection of Ward Street/Princess Street has a potential hazard relating to sightlines for drivers attempting to turn left or right from Princess Street from Ward Street. Based on a design speed of 60 km/h, the Transportation Association of Canada (TAC)'s *Geometric Design Guide for Canadian Roads* suggests the following minimum sight distances at this intersection:

- 130m looking right, for drivers turning left from Princess Street onto Ward Street;
- 110m looking left, for drivers turning right from Princess Street on Ward Street.

Based on street-level photography, it appears that insufficient sight distances are provided for drivers on Princess Street, as trees on/near both corners can obstruct drivers' vision. Based on the collision history review included above, this potential hazard has not caused any collisions in the review period, and drivers on Princess Street can adequately see in both directions by encroaching over the crosswalk before proceeding. Trimming the vegetation to improve sightlines from the stop bar is identified for the Municipality's consideration.

The all-way stop-controlled intersection of Ward Street/Hope Street also has vegetation or structures that can obstruct the vision of drivers, particularly at the southwest and southeast corners. However, drivers can adequately see slowing or stopped vehicles at all approaches.

4.4 Capacity Analysis

4.4.1 Existing Traffic Conditions

Intersection capacity analysis has been completed for the existing traffic conditions at Ward Street/ Hope Street, using the macrosimulation software Synchro 10. The peak hour factors used for each peak hour correspond to the calculated peak hour factors included in the traffic count data (see **Appendix B**). Therefore, the peak hour factors are 0.95 for the AM peak hour, 0.92 for the PM peak hour, and 0.90 for the Sunday peak hour.

Results of the intersection capacity analysis are included in **Table 3**. Detailed Synchro analysis is included in **Appendix C**.

Table 3: Existing Traffic Operations

Intersection	AM Peak Hour			PM Peak Hour			SUN Peak Hour		
	Delay	LOS	Mvmt	Delay	LOS	Mvmt	Delay	LOS	Mvmt
Ward Street/ Hope Street South	8 sec	A	NB	9 sec	A	NB	8 sec	A	NB
	8 sec	A	SB	8 sec	A	SB	8 sec	A	SB
	8 sec	A	EB	8 sec	A	EB	8 sec	A	EB
	8 sec	A	WB	8 sec	A	WB	8 sec	A	WB

From the previous table, there are no operational concerns at Ward Street/Hope Street. For all peak hours, each approach achieves a level of service (LOS) A, which translates to an average delay of 10 seconds or less.

4.4.2 Background Traffic Conditions

Intersection capacity analysis has been completed for the 2024 and 2029 background traffic conditions at Ward Street/Hope Street. Results of the intersection capacity analysis are included in **Table 4**. Detailed Synchro analysis is included in **Appendix C**.

Table 4: Background Traffic Operations

Intersection	AM Peak Hour			PM Peak Hour			SUN Peak Hour		
	Delay	LOS	Mvmt	Delay	LOS	Mvmt	Delay	LOS	Mvmt
2024 Background Conditions									
Ward Street/ Hope Street South	8 sec	A	NB	9 sec	A	NB	9 sec	A	NB
	8 sec	A	SB	9 sec	A	SB	9 sec	A	SB
	8 sec	A	EB	9 sec	A	EB	8 sec	A	EB
	8 sec	A	WB	8 sec	A	WB	8 sec	A	WB
2029 Background Conditions									
Ward Street/ Hope Street South	8 sec	A	NB	10 sec	A	NB	9 sec	A	NB
	9 sec	A	SB	9 sec	A	SB	9 sec	A	SB
	8 sec	A	EB	9 sec	A	EB	9 sec	A	EB
	8 sec	A	WB	9 sec	A	WB	9 sec	A	WB

From the previous table, the growth in background traffic is anticipated to have little to no effect on the operations of Ward Street/Hope Street.

4.4.3 Total Traffic Conditions

Intersection capacity analysis has been completed for the 2024 and 2029 total traffic conditions at Ward Street/Hope Street. Results of the intersection capacity analysis are included in **Table 5**. Detailed Synchro analysis is included in **Appendix C**.

Table 5: Total Traffic Operations

Intersection	AM Peak Hour			PM Peak Hour			SUN Peak Hour		
	Delay	LOS	Mvmt	Delay	LOS	Mvmt	Delay	LOS	Mvmt
2024 Total Conditions									
Ward Street/ Hope Street South	8 sec	A	NB	9 sec	A	NB	9 sec	A	NB
	8 sec	A	SB	9 sec	A	SB	9 sec	A	SB
	8 sec	A	EB	9 sec	A	EB	8 sec	A	EB
	8 sec	A	WB	9 sec	A	WB	8 sec	A	WB
2029 Total Conditions									
Ward Street/ Hope Street South	8 sec	A	NB	10 sec	A	NB	9 sec	A	NB
	9 sec	A	SB	9 sec	A	SB	9 sec	A	SB
	8 sec	A	EB	9 sec	A	EB	9 sec	A	EB
	8 sec	A	WB	9 sec	A	WB	9 sec	A	WB

From the previous table, the addition of site-generated traffic is anticipated to have little to no effect on the operations of Ward Street/Hope Street. Therefore, the all-way stop control at Ward Street/ Hope Street is currently an appropriate traffic control device, and will continue to be appropriate following buildout of the proposed development.

5.0 IMPROVEMENT ANALYSIS

As discussed in Section 4.3.2, trees on/near both corners of Ward Street/Princess Street can obstruct the vision of drivers, and therefore trimming the vegetation to improve sightlines from the stop bar is identified for the Municipality's consideration. The analysis does not identify any other improvements to the infrastructure within the study area, since the additional site-generated traffic is not anticipated to have a significant impact on operations.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations of the analysis can be summarized as follows:

- The proposed development is projected to generate 33 vehicle trips during the AM peak hour, 21 vehicle trips during the PM peak hour, and 77 vehicle trips during the Sunday peak hour.

- Accounting for the existing long-term care facility, this results in a net increase of 17 vehicle trips during the AM peak hour, 21 vehicle trips during the PM peak hour, and 38 vehicle trips during the Sunday peak hour.

- The concrete sidewalks on the south side of Ward Street and the west side of Hope Street South will be maintained. Curbs will be depressed wherever these sidewalks meet one of the proposed driveways to Hope Street South or Ward Street. Pedestrian walkways will also be provided around the perimeter of the proposed facility, connecting to the existing sidewalks. A landscaped area within the centre of the horseshoe-shaped facility will also include walkways.

- Pick-ups and drop-offs will be provided in a lay-by lane provided on the south side of the loop between Ward Street and Hope Street South. This loop also forms the on-site fire route for the proposed development, which will run in front of the main entrance.

- The driveway design and amount of parking proposed meets the provisions of the Municipality's *Zoning By-Law*.

- A loading space will be provided adjacent to the driveway to Princess Street, near the southwest corner of the proposed building. While it is understood that no loading spaces are required per the *Zoning By-Law*, a space is required to receive routine deliveries.

- The existing long-term care facility will remain operational during construction of the proposed building. During construction, approximately 20 of the existing 40 parking spaces will become unavailable. Therefore, approximately 20 off-site parking spaces will be required to offset the shortfall in parking for staff and visitors, based on the existing parking supply.

- Long-term care staff will park on-site where possible or will make alternative transportation arrangements (such as carpooling) during the construction period. Additionally, the proponent has committed to securing off-site parking arrangements for staff and visitors that will not include on-street parking within vicinity of the site.

- Relating to construction workers, the proponent will include clauses within the construction contracts that will disallow construction trades from parking on-site, and will require the construction manager to be responsible for off-site/off-street parking arrangements.

- At the stop bar, insufficient sight distances are provided for drivers on Princess Street at Ward Street, as trees on/near both corners can obstruct drivers' vision. Drivers on Princess Street can adequately see in both directions by encroaching over the crosswalk before proceeding. Trimming the vegetation to improve sightlines from the stop bar is identified for the Municipality's consideration.

- There are no operational concerns at Ward Street/Hope Street South, based on existing or future traffic conditions. For all peak hours, each approach achieves a level of service (LOS) A, which translates to an average delay of 10 seconds or less. Therefore, the all-way stop control at Ward Street/Hope Street is currently an appropriate traffic control device, and will continue to be appropriate following buildout of the proposed development.

- Trees on/near both corners of Ward Street/Princess Street can obstruct the vision of drivers, and therefore trimming the vegetation to improve sightlines from the stop bar is identified for the Municipality's consideration. The analysis does not identify any other improvements to the infrastructure within the study area, since the additional site-generated traffic is not anticipated to have a significant impact on operations.

Based on the foregoing, the proposed development is recommended from a transportation perspective.

NOVATECH

Prepared by:

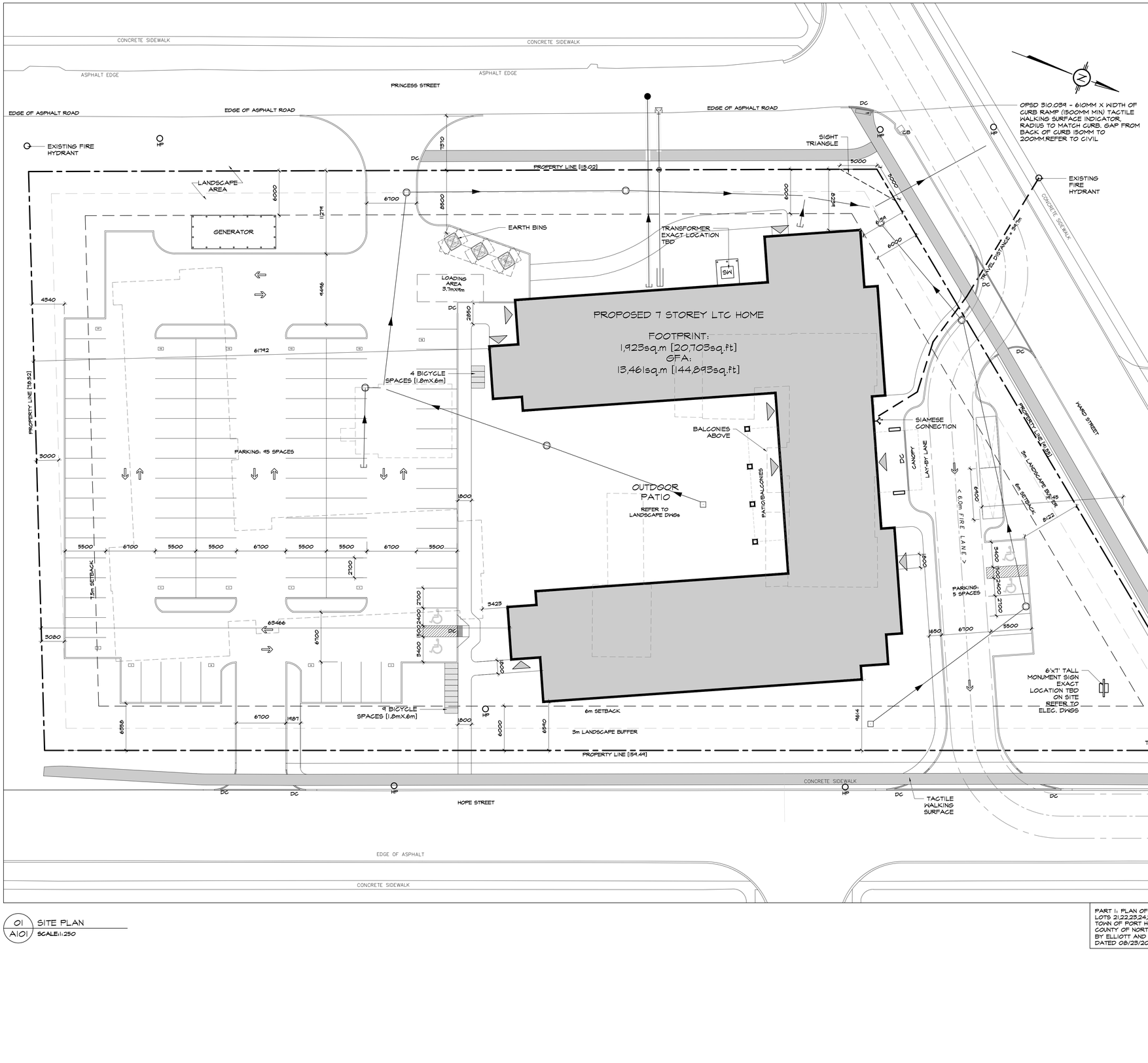
Joshua Audia, B.Sc.
E.I.T.,
Transportation/Traffic

Reviewed by:

Jennifer Luong, P.Eng.
Senior Project Manager,
Transportation/Traffic

APPENDIX A

Site Plan



01 SITE PLAN
A101 SCALE:1:250

AUTOMOBILE PARKING SUMMARY

REQUIRED PARKING			
NURSING HOME (1 SPACE PER 2 BEDS)	192 BEDS / 2 = 96 PARKING SPACES REQUIRED		
TOTAL PROVIDED	100 PARKING SPACES		
PROVIDED PARKING			
		UNDERGROUND	ABOVE GROUND
REGULAR SPACES	MIN. 2.7m x 5.5m	-	96
ACCESSIBLE SPACES	TYPE A [3.4mX5.5m]	-	2
ACCESSIBLE SPACES	TYPE B [2.4mX5.5m]	-	2
TOTAL	= 100 PROVIDED PARKING SPACES		

BICYCLE PARKING SUMMARY

REQUIRED BICYCLE PARKING	
2 SPACES, PLUS 1 PER 1,000sq.m OF NFA	NET FLOOR AREA = 10,091sq.m 10,834 / 1,000 = 10.6 + 2 = 13 spaces
TOTAL PROVIDED	13 BICYCLE SPACES

LOADING SPACE SUMMARY

REQUIRED LOADING	
LOADING SPACE TO BE WITHIN 15m OF BUILDING AND SETBACK 10m FROM STREET.	LOADING SPACE SHALL BE A MIN. OF 3.7m X 9m AND HAVE A VERTICAL CLEARANCE OF 4.5m
TOTAL PROVIDED	1 LOADING SPACE

BUILDING AREAS

	CONSTRUCTION AREA [SQ.M]	CONSTRUCTION AREA [SQ.FT]
GROUND FLOOR AREA	1,923sq.m	20,699sq.ft
SECOND FLOOR AREA	1,923sq.m	20,699sq.ft
THIRD FLOOR AREA	1,923sq.m	20,699sq.ft
FOURTH FLOOR AREA	1,923sq.m	20,699sq.ft
FIFTH FLOOR AREA	1,923sq.m	20,699sq.ft
SIXTH FLOOR AREA	1,923sq.m	20,699sq.ft
SEVENTH FLOOR AREA	1,923sq.m	20,699sq.ft
TOTAL	13,461sq.m	144,893sq.ft

MUNICIPALITY OF PORT HOPE ZONING BY-LAW - 10

ZONING PROVISIONS	REQUIRED	PROPOSED
URBAN INSTITUTIONAL		
MIN. LOT AREA	N/A	10,799.7sq.m
MIN. LOT FRONTAGE	N/A	91.55m
MIN. FRONT YARD SETBACK WARD STREET	6m	6.14m
MIN. REAR YARD SETBACK	7.5m	61.79m
MIN. EXTERIOR SIDE YARD SETBACK PRINCESS STREET	6m	8.24m
MIN. EXTERIOR SIDE YARD SETBACK HOPE STREET	6m	6.59m
MAX. BUILDING HEIGHT	19m	24.3m
LOT COVERAGE	N/A	17.8%

PART 1: PLAN OF SURVEY SHOWING TOPOGRAPHY OF LOTS 21,22,23,24,25,26,27,28,29,30 AND 31 SMITH ESTATE PLAN TOWN OF PORT HOPE NOW IN THE MUNICIPALITY OF PORT HOPE COUNTY OF NORTHUMBERLAND
BY ELLIOTT AND PARR (PETERBOROUGH) LTD.
DATED 08/23/2019

SOUTHBRIDGE CARE HOMES

NOTES:

1) ALL WORK TO BE IN COMPLIANCE WITH LOCAL BUILDING CODES, REGULATIONS AND BY-LAWS.

2) ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME MEANING AND INTENT AS IF THEY WERE INCLUDED WITH PLANS IN CONTRACT DOCUMENTS.

3) DO NOT SCALE DRAWINGS.

4) ALL SUB-CONTRACTORS TO TAKE THEIR OWN ON-SITE MEASUREMENTS AND BE RESPONSIBLE FOR THEIR ACCURACY.

5) NOTIFY SHAWN J. LAWRENCE ARCHITECT FOR ANY ERRORS AND/OR OMISSIONS PRIOR TO START OF WORK.

SEAL: ONTARIO ASSOCIATION OF ARCHITECTS — SHAWN JAMES LAWRENCE — LICENCE 4462

NORTH ARROW: N

No.	DATE	REVISION
15.	2022.01.27	RE-ISSUED FOR ZONING & SPC
14.	2021.11.12	ISSUED FOR REVIEW
13.	2021.11.10	ISSUED FOR REVIEW
12.	2021.09.01	ISSUED FOR PERMIT
09.	2021.07.19	LONG-TERM CARE HOME PRELIMINARY PLAN SUBMISSION
08.	2021.07.16	ISSUED FOR CM RFP ADD #2
07.	2021.06.28	ISSUED FOR CM RFP
06.	2021.06.18	ISSUED FOR MINISTRY REVIEW
05.	2021.06.14	ISSUED FOR ZONING & SPC
04.	2021.06.02	ISSUED FOR REVIEW
03.	2021.05.26	ISSUED FOR REVIEW
02.	2021.01.26	ISSUED FOR REVIEW
01.	2020.12.10	ISSUED FOR REVIEW

S.J.LAWRENCE ARCHITECT INCORPORATED
18 DEAKIN STREET
SUITE 205
OTTAWA, ONTARIO
K2E 8B7
T: (613) 739.7770
F: (613) 739.7703
sj@sjlarchitect.com

LAWRENCE ARCHITECT INCORPORATED

PROJECT:
SOUTHBRIDGE PORT HOPE LTC
20 HOPE ST. SOUTH, ON L1A 2M8

SHEET TITLE:
SITE PLAN

DRAWN BY: B.L. | CHECKED BY: S.J.L.
PLOT DATE: 2022.01.27 | PROJECT DATE: 2020.10.31
JOB NUMBER: SL-1059-20 | SCALE: AS SHOWN
SHEET NUMBER: A1.1 PLAN #

APPLICATION #

APPENDIX B

Traffic Count Data

Turning Movement Count
Summary Report Including Peak Hours, AADT and Expansion Factors
All Vehicles Except Bicycles

Hope Street & Ward Street — Port Hope, ON

Survey Date: Tuesday, September 14, 2021 **Start Time:** 0700 **AADT Factor:** 1.0

Weather AM: Cloudy 14° C **Survey Duration:** 8 Hrs. **Survey Hours:** 0700-1000, 1130-1330 & 1500-1800

Weather PM: Partly Cloudy 22° C **Surveyor(s):** T. Carmody

	Ward St. Eastbound					Ward St. Westbound						Hope St. (S) Northbound					Hope St. (N) Southbound						
Time Period	LT	ST	RT	UT	E/B Tot	LT	ST	RT	UT	W/B Tot	Street Total	LT	ST	RT	UT	N/B Tot	LT	ST	RT	UT	S/B Tot	Street Total	Grand Total
0700-0800	23	21	6	0	**50**	4	10	10	0	**24**	**74**	2	33	5	0	**40**	11	61	8	0	**80**	**120**	**194**
0800-0900	25	38	7	0	**70**	13	37	16	0	**66**	**136**	2	42	5	0	**49**	19	60	18	0	**97**	**146**	**282**
0900-1000	12	20	5	0	**37**	8	24	14	0	**46**	**83**	3	60	6	0	**69**	9	82	15	0	**106**	**175**	**258**
1130-1230	20	26	7	0	**53**	16	26	17	0	**59**	**112**	7	90	10	0	**107**	14	77	12	0	**103**	**210**	**322**
1230-1330	18	21	6	0	**45**	8	31	16	0	**55**	**100**	3	80	16	0	**99**	18	86	19	0	**123**	**222**	**322**
1500-1600	28	37	8	0	**73**	12	38	24	0	**74**	**147**	6	129	17	0	**152**	15	82	9	0	**106**	**258**	**405**
1600-1700	17	29	5	0	**51**	9	38	27	0	**74**	**125**	5	111	12	0	**128**	21	68	20	0	**109**	**237**	**362**
1700-1800	27	37	7	0	**71**	8	34	18	0	**60**	**131**	6	101	16	0	**123**	32	79	11	0	**122**	**245**	**376**
Totals	**170**	**229**	**51**	**0**	**450**	**78**	**238**	**142**	**0**	**458**	**908**	**34**	**646**	**87**	**0**	**767**	**139**	**595**	**112**	**0**	**846**	**1613**	**2521**

Equivalent 12 & 24-hour Vehicle Volumes Including the Annual Average Daily Traffic (AADT) Factor Applicable to the Day and Month of the Turning Movement Count

Expansion factors are applied exclusively to standard weekday 8-hour turning movement counts conducted during the hours of 0700h - 1000h, 1130h - 1330h and 1500h - 1800h

Equivalent 12-hour vehicle volumes. These volumes are calculated by multiplying the 8-hour totals by the 8 ➡12 expansion factor of 1.39

Equ. 12 Hr	236	318	71	0	**626**	108	331	197	0	**637**	**1262**	47	898	121	0	**1066**	193	827	156	0	**1176**	**2242**	**3504**

Average daily 12-hour vehicle volumes. These volumes are calculated by multiplying the equivalent 12-hour totals by the AADT factor of: 1.0

AADT 12-hr	236	318	71	0	**626**	108	331	197	0	**637**	**1262**	47	898	121	0	**1066**	193	827	156	0	**1176**	**2242**	**3504**

24-Hour AADT. These volumes are calculated by multiplying the average daily 12-hour vehicle volumes by the 12 ➡24 expansion factor of 1.31

AADT 24 Hr	310	417	93	0	**819**	142	433	259	0	**834**	**1653**	62	1176	158	0	**1397**	253	1083	204	0	**1540**	**2937**	**4590**

AADT and expansion factors provided by the City of Ottawa

AM Peak Hour Factor ➡ 0.95												Highest Hourly Vehicle Volume Between 0700h & 1000h										
AM Peak Hr	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	Gr. Tot.
0815-0915	23	38	7	0	**68**	12	38	19	0	**69**	**137**	2	43	5	0	**50**	15	66	17	0	**98**	**148**	**285**
OFF Peak Hour Factor ➡ 0.91												Highest Hourly Vehicle Volume Between 1130h & 1330h										
OFF Peak Hr	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	Gr. Tot.
1145-1245	16	24	8	0	**48**	13	24	14	0	**51**	**99**	6	99	15	0	**120**	13	82	16	0	**111**	**231**	**330**
PM Peak Hour Factor ➡ 0.92												Highest Hourly Vehicle Volume Between 1500h & 1800h										
PM Peak Hr	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	Gr. Tot.
1515-1615	27	41	6	0	**74**	14	43	29	0	**86**	**160**	8	126	12	0	**146**	17	82	16	0	**115**	**261**	**421**

Comments:

Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All businesses open for in-person shopping and some restaurants, including patios, open for in-person dining. The bicycle total includes 3 E-scooters. School buses comprise 43.64% of the heavy vehicle total.

Notes:

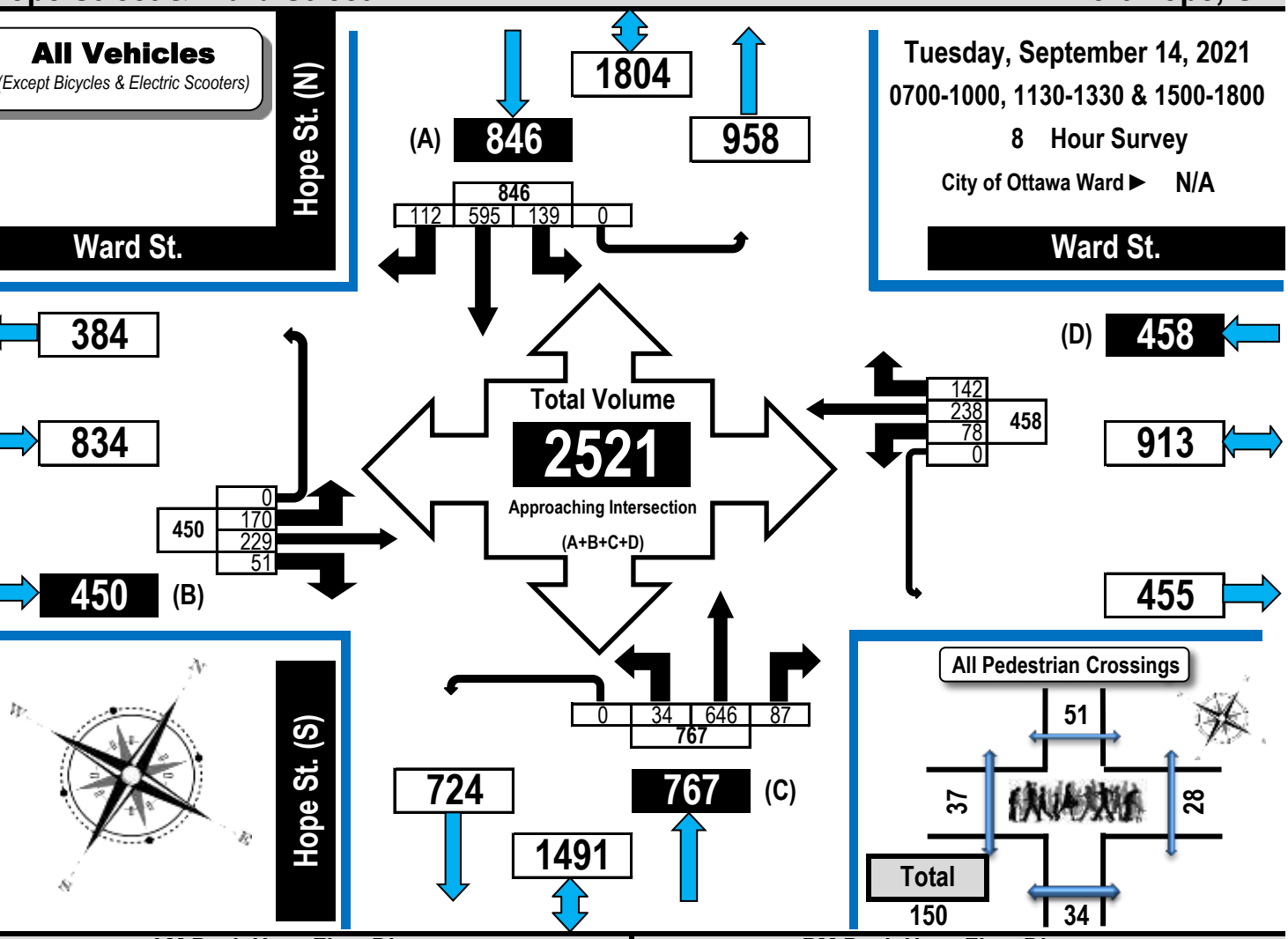
1. Includes all vehicle types except bicycles, electric bicycles, and electric scooters.
2. When expansion and AADT factors are applied, the results will differ slightly due to rounding.

Turning Movement Count
Summary, AM and PM Peak Hour Flow Diagrams
All Vehicles Except Bicycles

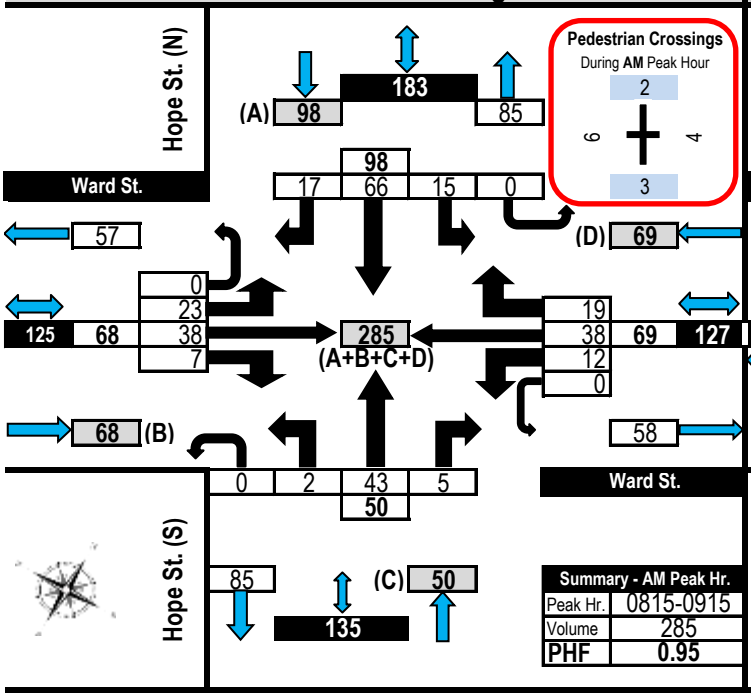
Hope Street & Ward Street — Port Hope, ON

All Vehicles
(Except Bicycles & Electric Scooters)

Tuesday, September 14, 2021
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► N/A

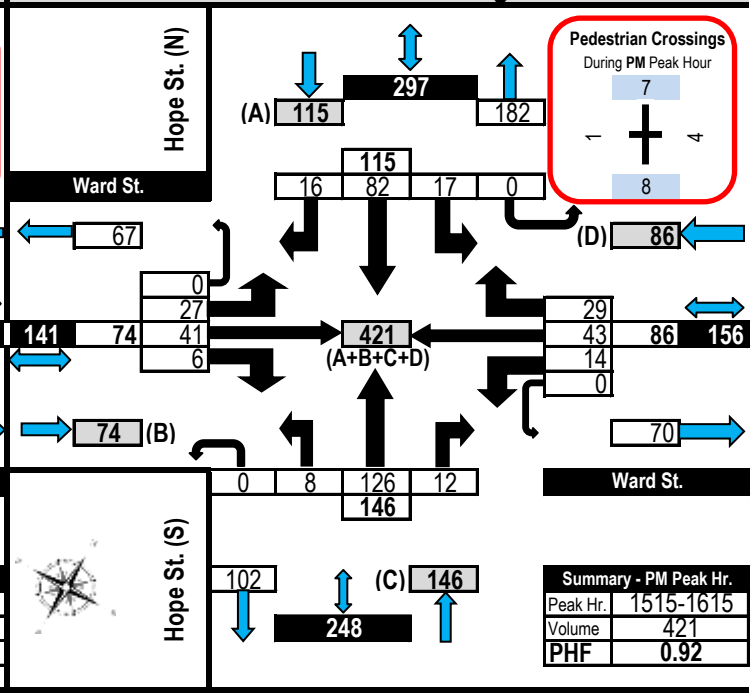


AM Peak Hour Flow Diagram



Summary - AM Peak Hr.	
Peak Hr.	0815-0915
Volume	285
PHF	0.95

PM Peak Hour Flow Diagram



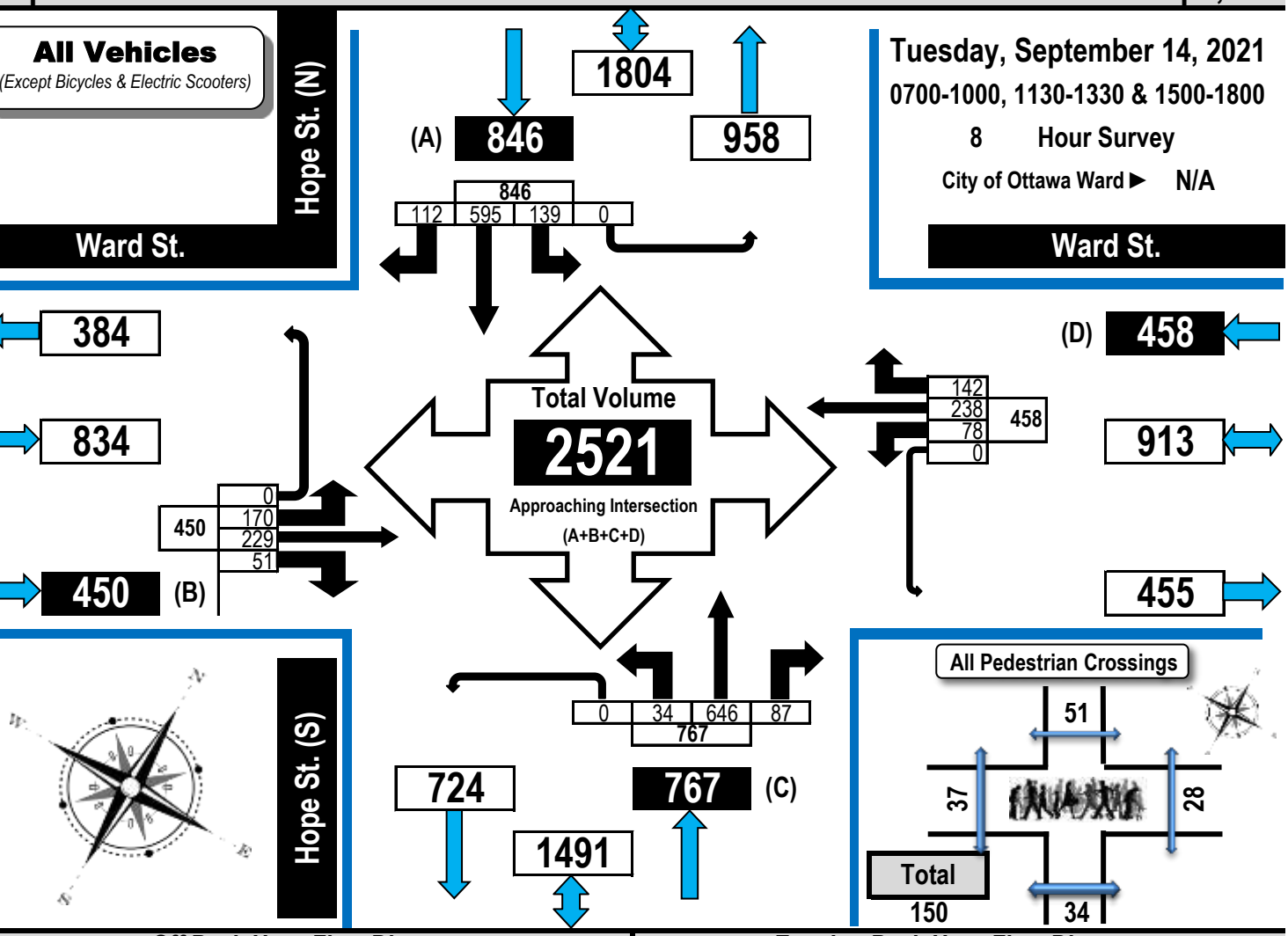
Summary - PM Peak Hr.	
Peak Hr.	1515-1615
Volume	421
PHF	0.92

Turning Movement Count
Summary, OFF and EVENING Peak Hour Flow Diagrams
All Vehicles Except Bicycles

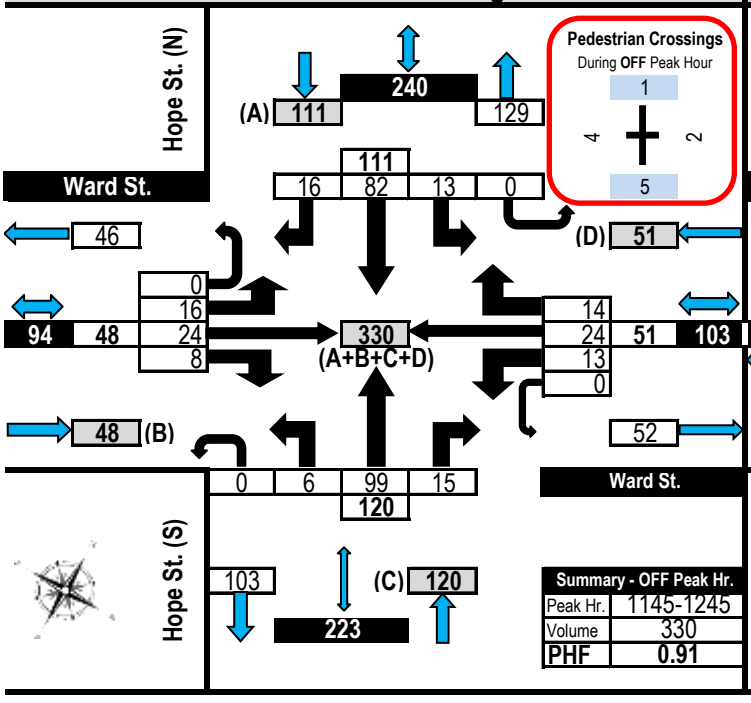
Hope Street & Ward Street — Port Hope, ON

All Vehicles
(Except Bicycles & Electric Scooters)

Tuesday, September 14, 2021
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► N/A

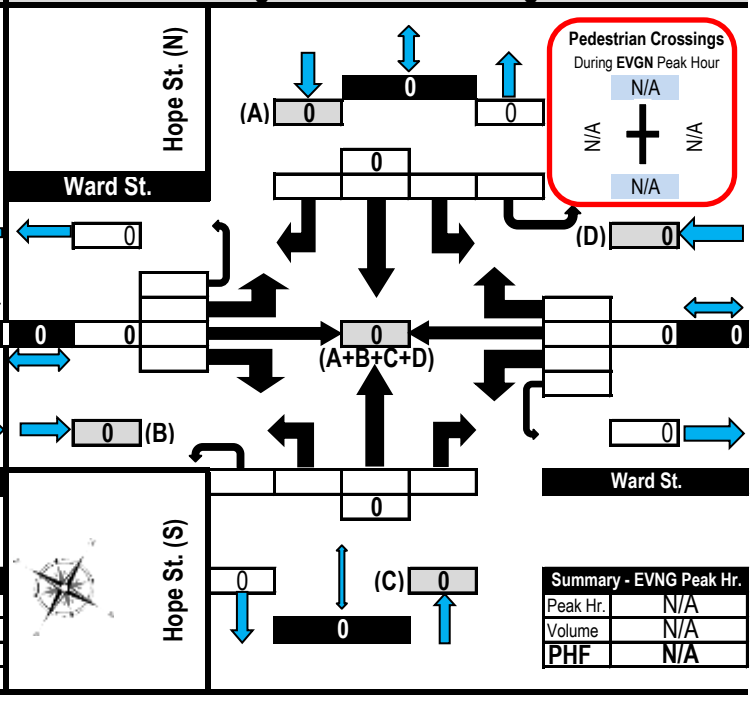


Off Peak Hour Flow Diagram



Summary - OFF Peak Hr.	
Peak Hr.	1145-1245
Volume	330
PHF	0.91

Evening Peak Hour Flow Diagram



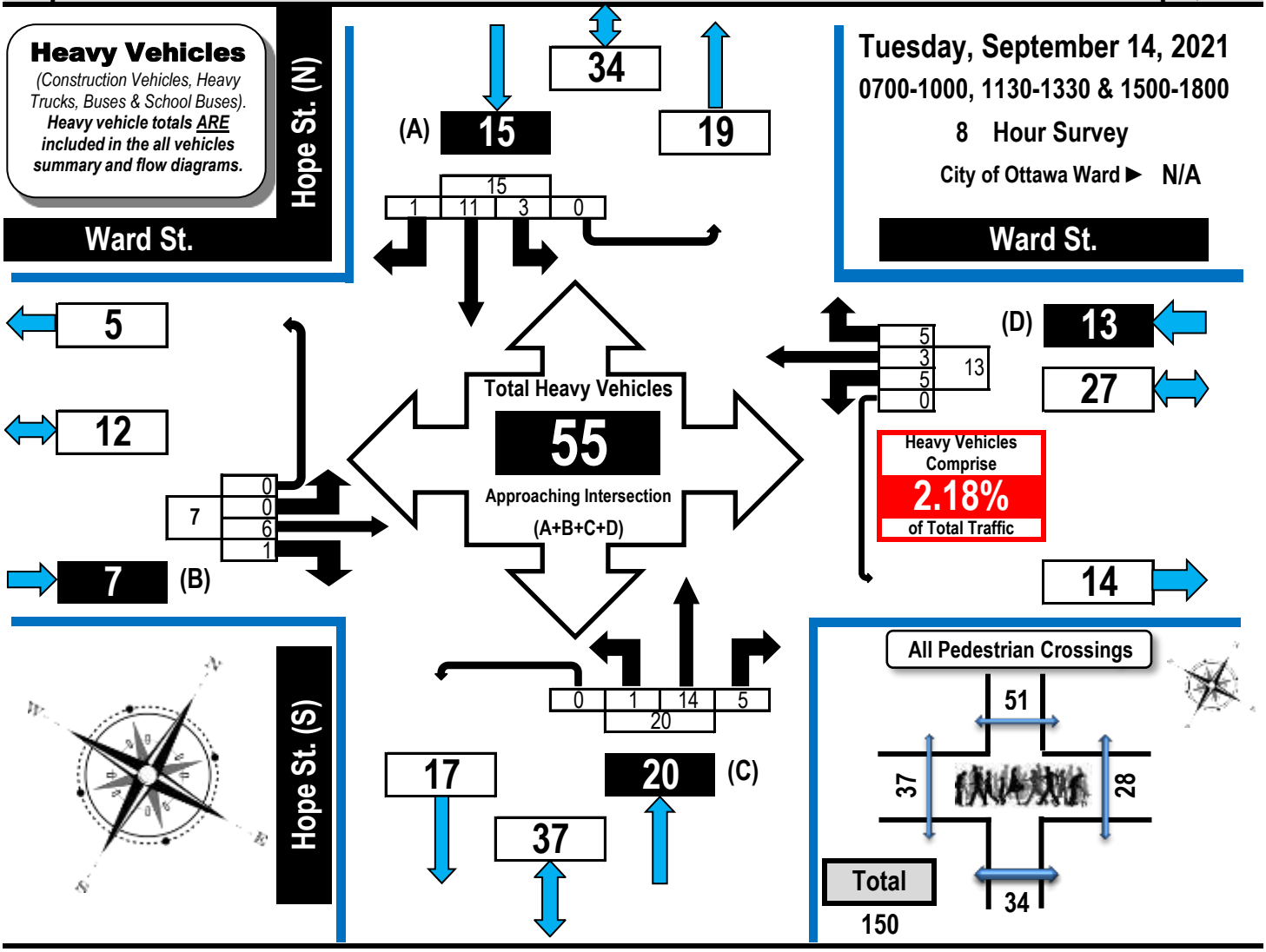
Summary - EVNG Peak Hr.	
Peak Hr.	N/A
Volume	N/A
PHF	N/A

Turning Movement Count
Heavy Vehicle Summary
Flow Diagram

Hope Street & Ward Street — Port Hope, ON

Heavy Vehicles
(Construction Vehicles, Heavy Trucks, Buses & School Buses).
Heavy vehicle totals ARE included in the all vehicles summary and flow diagrams.

Tuesday, September 14, 2021
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► N/A



	Ward St. Eastbound					Ward St. Westbound					Hope St. (S) Northbound					Hope St. (N) Southbound					
Time Period	LT	ST	RT	UT	EB Tot	LT	ST	RT	UT	WB Tot	LT	ST	RT	UT	NB Tot	LT	ST	RT	UT	SB Tot	GR Tot
0700-0800	0	0	0	0	0	1	0	1	0	2	0	1	2	0	3	1	3	0	0	4	9
0800-0900	0	1	1	0	2	2	1	1	0	4	0	1	0	0	1	1	4	0	0	5	12
0900-1000	0	3	0	0	3	1	0	0	0	1	0	1	0	0	1	0	1	1	0	2	7
1130-1230	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
1230-1330	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	4
1500-1600	0	1	0	0	1	1	1	0	0	2	1	3	2	0	6	0	2	0	0	2	11
1600-1700	0	0	0	0	0	0	1	3	0	4	0	1	0	0	1	0	1	0	0	1	6
1700-1800	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Totals	0	6	1	0	7	5	3	5	0	13	1	14	5	0	20	3	11	1	0	15	55

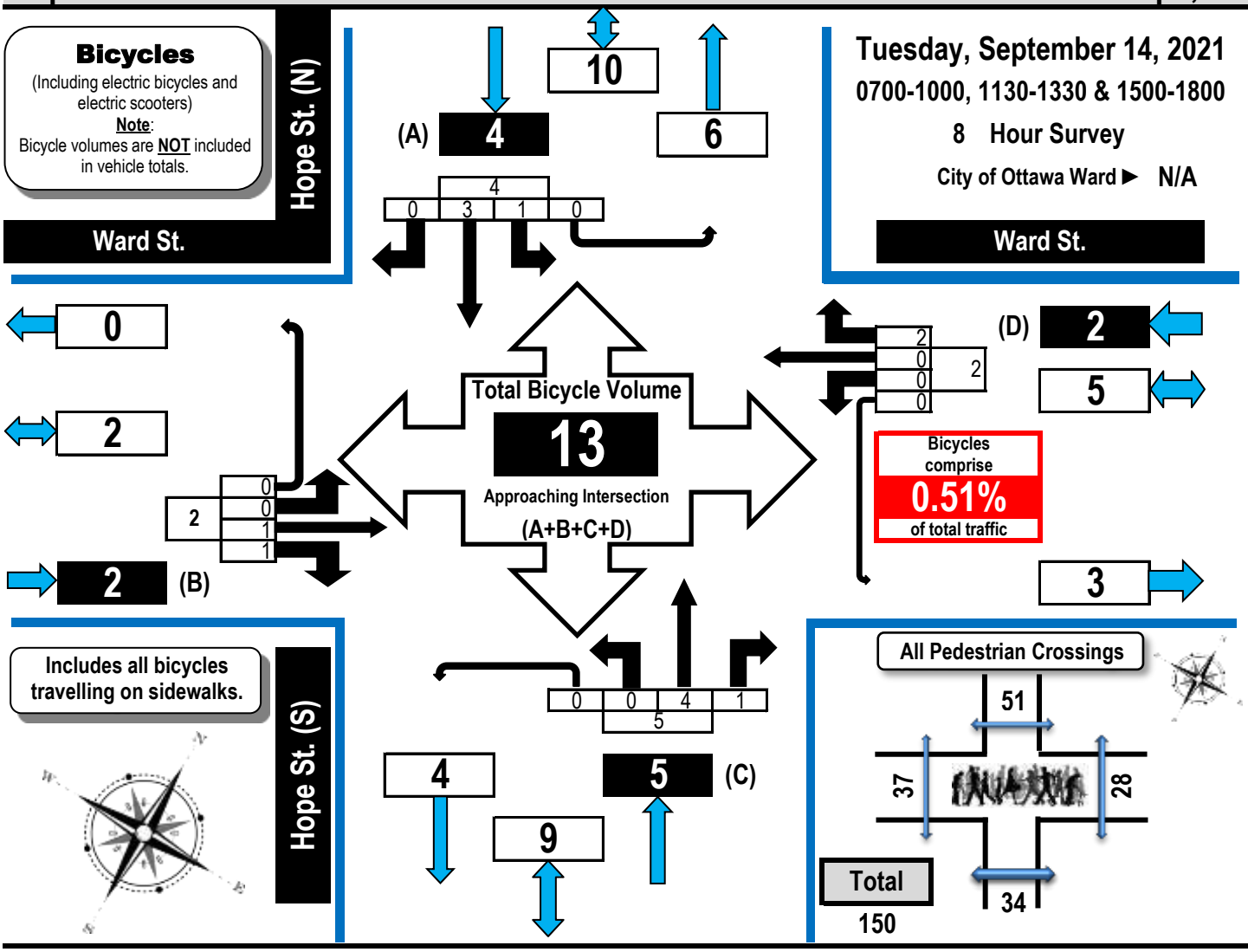
Comments:
Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All businesses open for in-person shopping and some restaurants, including patios, open for in-person dining. The bicycle total includes 3 E-scooters. School buses comprise 43.64% of the heavy vehicle total.

Turning Movement Count
Bicycle Summary
Flow Diagram

Hope Street & Ward Street — Port Hope, ON

Bicycles
(Including electric bicycles and electric scooters)
Note:
Bicycle volumes are **NOT** included in vehicle totals.

Tuesday, September 14, 2021
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► N/A



	Ward St. Eastbound					Ward St. Westbound					Hope St. (S) Northbound					Hope St. (N) Southbound					
Time Period	LT	ST	RT	UT	EB Tot	LT	ST	RT	UT	WB Tot	LT	ST	RT	UT	NB Tot	LT	ST	RT	UT	SB Tot	GR Tot
0700-0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800-0900	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
0900-1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1130-1230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1230-1330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500-1600	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	0	1	3
1600-1700	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	1	0	0	2	4
1700-1800	0	1	1	0	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	4
Totals	0	1	1	0	2	0	0	2	0	2	0	4	1	0	5	1	3	0	0	4	13

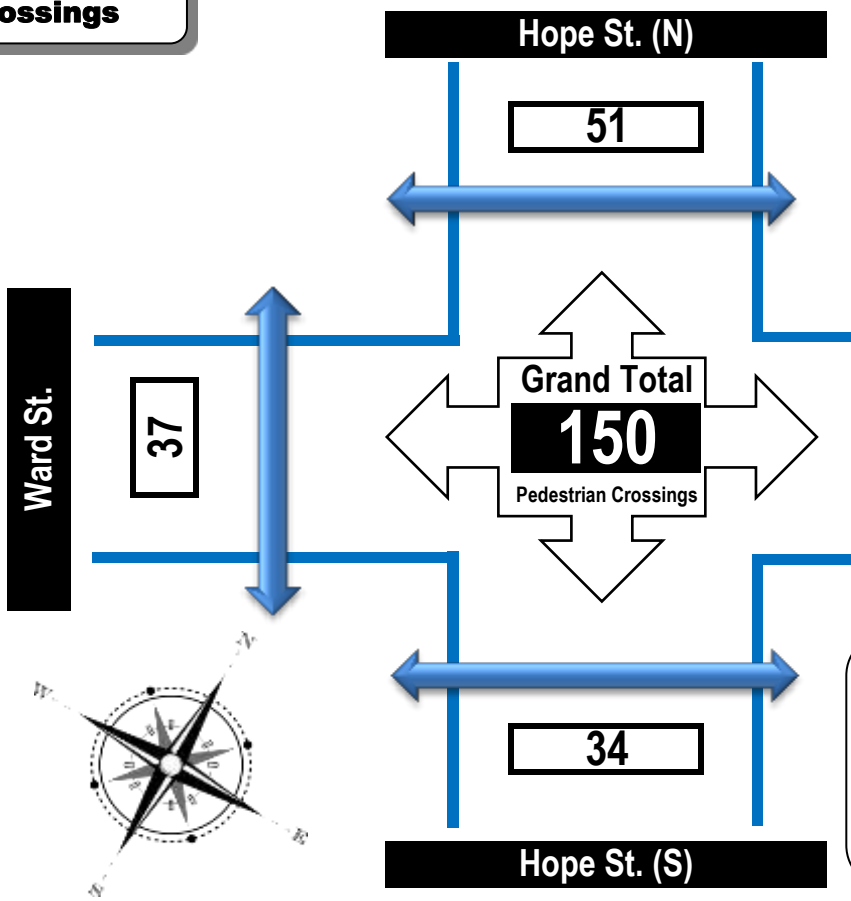
Comments:
Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All businesses open for in-person shopping and some restaurants, including patios, open for in-person dining. The bicycle total includes 3 E-scooters. School buses comprise 43.64% of the heavy vehicle total.

Turning Movement Count
Pedestrian Crossings Summary and Flow Diagram

Hope Street & Ward Street — Port Hope, ON

Pedestrian Crossings

Tuesday, September 14, 2021
0700-1000, 1130-1330 & 1500-1800
8 Hour Survey
City of Ottawa Ward ► N/A



Note
*The values in the summary table below and the flow diagram represent the number of pedestrian crossing**s** **NOT** the number of individual pedestrian**s** crossing. For example, some pedestrians will cross one approach, then another to reach their destination. Accordingly, one pedestrian crossing two approaches will be recorded as two crossings.*

Time Period	West Side Crossing Ward St.	East Side Crossing Ward St.	Street Total	South Side Crossing Hope St. (S)	North Side Crossing Hope St. (N)	Street Total	Grand Total
0700-0800	9	8	17	6	2	8	25
0800-0900	7	4	11	1	5	6	17
0900-1000	1	1	2	5	3	8	10
1130-1230	3	2	5	3	1	4	9
1230-1330	4	2	6	3	2	5	11
1500-1600	2	5	7	8	6	14	21
1600-1700	6	0	6	6	13	19	25
1700-1800	5	6	11	2	19	21	32
Totals	37	28	65	34	51	85	150

Comments:
Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All businesses open for in-person shopping and some restaurants, including patios, open for in-person dining. The bicycle total includes 3 E-scooters. School buses comprise 43.64% of the heavy vehicle total.

ACCURATE TRUSTED TRAFFIC DATA

Turning Movement Count
Summary Report
Including OFF Peak, PM Peak and PHF
All Vehicles Except Bicycles

Hope Street & Ward Street — Port Hope, ON

Survey Date: Sunday, September 12, 2021 **Start Time:** 1100 **AADT Factor:** 1.4

Weather: AM: Cloudy 20º C **Survey Duration:** 5 Hrs. **Survey Hours:** 1100 - 1600

Weather PM: Partly Cloudy 22º C **Surveyor(s):** T. Carmody

	Ward St. Eastbound					Ward St. Westbound						Hope St. (S) Northbound					Hope St. (N) Southbound						
Time Period	LT	ST	RT	UT	E/B Tot	LT	ST	RT	UT	W/B Tot	Street Total	LT	ST	RT	UT	N/B Tot	LT	ST	RT	UT	S/B Tot	Street Total	Grand Total
1100-1200	17	24	9	0	**50**	12	34	21	0	**67**	**117**	6	107	15	0	**128**	23	86	12	0	**121**	**249**	**366**
1200-1300	20	16	2	0	**38**	10	20	27	0	**57**	**95**	4	88	11	0	**103**	19	92	12	0	**123**	**226**	**321**
1300-1400	14	16	7	0	**37**	14	26	38	0	**78**	**115**	6	103	11	0	**120**	11	82	8	0	**101**	**221**	**336**
1400-1500	14	19	7	0	**40**	9	19	22	0	**50**	**90**	6	102	12	0	**120**	16	88	19	0	**123**	**243**	**333**
1500-1600	27	20	9	0	**56**	8	27	21	0	**56**	**112**	5	100	12	0	**117**	14	70	11	0	**95**	**212**	**324**
Totals	**92**	**95**	**34**	**0**	**221**	**53**	**126**	**129**	**0**	**308**	**529**	**27**	**500**	**61**	**0**	**588**	**83**	**418**	**62**	**0**	**563**	**1151**	**1680**

Expansion factors are applied exclusively to standard weekday 8-hour turning movement counts conducted during the hours of 0700h - 1000h, 1130h - 1330h and 1500h - 1800h

OFF Peak Hour Factor ➡ 0.90												Highest Hourly Vehicle Volume Between 1100h & 1500h											
OFF Peak Hr	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	Gr. Tot.
1100-1200	17	24	9	0	**50**	12	34	21	0	**67**	**117**	6	107	15	0	**128**	23	86	12	0	**121**	**249**	**366**

PM Peak Hour Factor ➡ 0.91												Highest Hourly Vehicle Volume Between 1500h & 1900h											
PM Peak Hr	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	LT	ST	RT	UT	Total	LT	ST	RT	UT	Total	Str. Tot.	Gr. Tot.
1500-1600	27	20	9	0	**56**	8	27	21	0	**56**	**112**	5	100	12	0	**117**	14	70	11	0	**95**	**212**	**324**

Comments:

Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All businesses open for in-person shopping and some restaurants, including patios, open for in-person dining. The heavy vehicle total includes 4 school buses, 1 mini dump truck and 2, two axle/6 tire pick-up trucks. The bicycle total included 2 E-bikes and 1 stand-up E-scooter.

Notes:

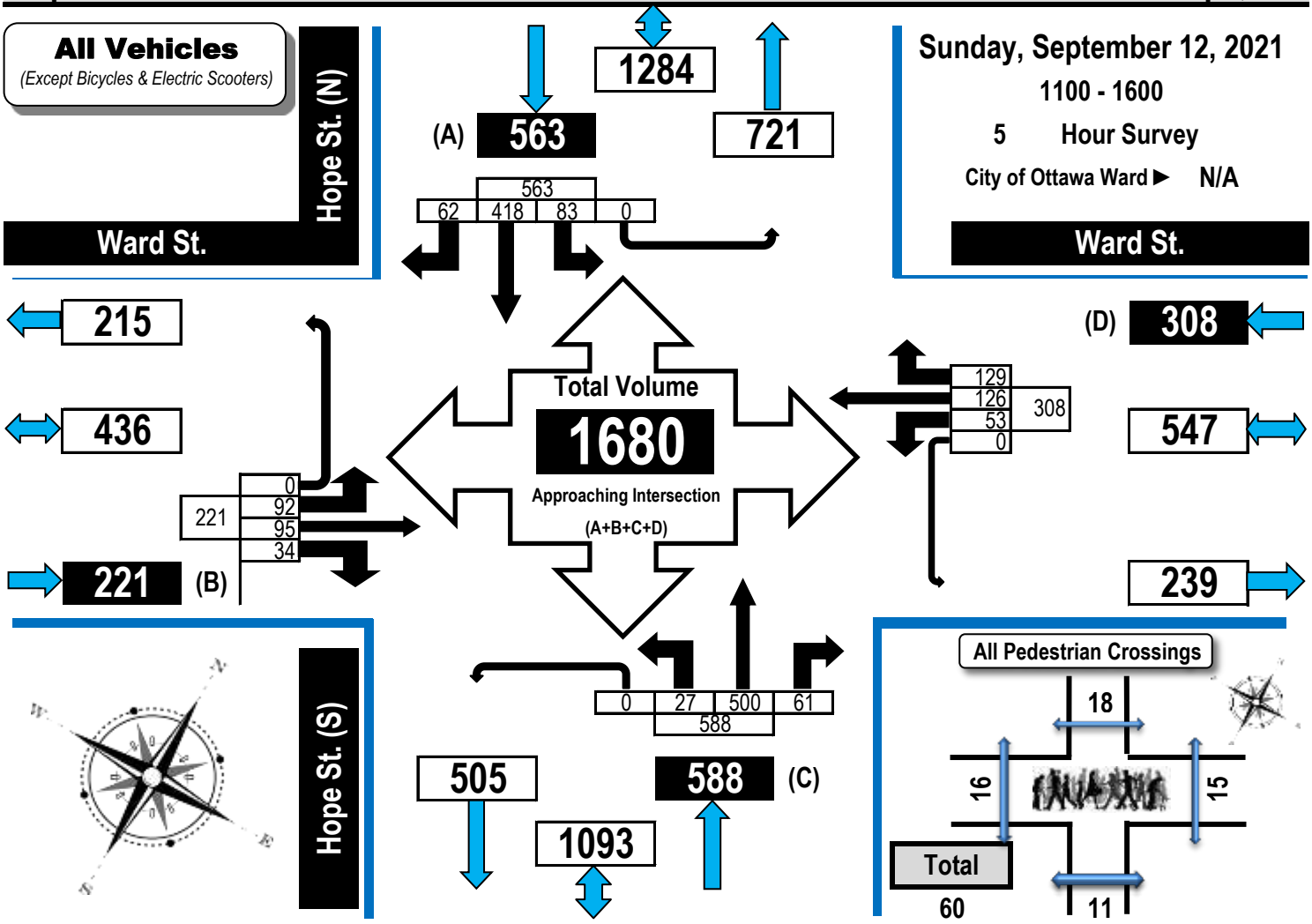
1. Includes all vehicle types except bicycles and electric scooters.
2. When expansion and AADT factors are applied, the results will differ slightly due to rounding.

Turning Movement Count
Summary, OFF and PM Peak Hour Flow Diagrams
All Vehicles Except Bicycles

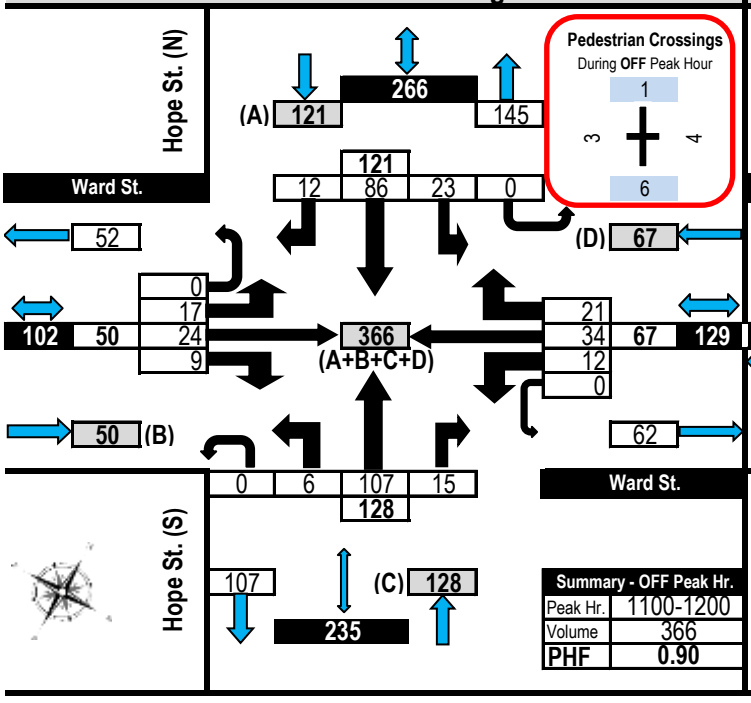
Hope Street & Ward Street — Port Hope, ON

All Vehicles
(Except Bicycles & Electric Scooters)

Sunday, September 12, 2021
1100 - 1600
5 Hour Survey
City of Ottawa Ward ► N/A

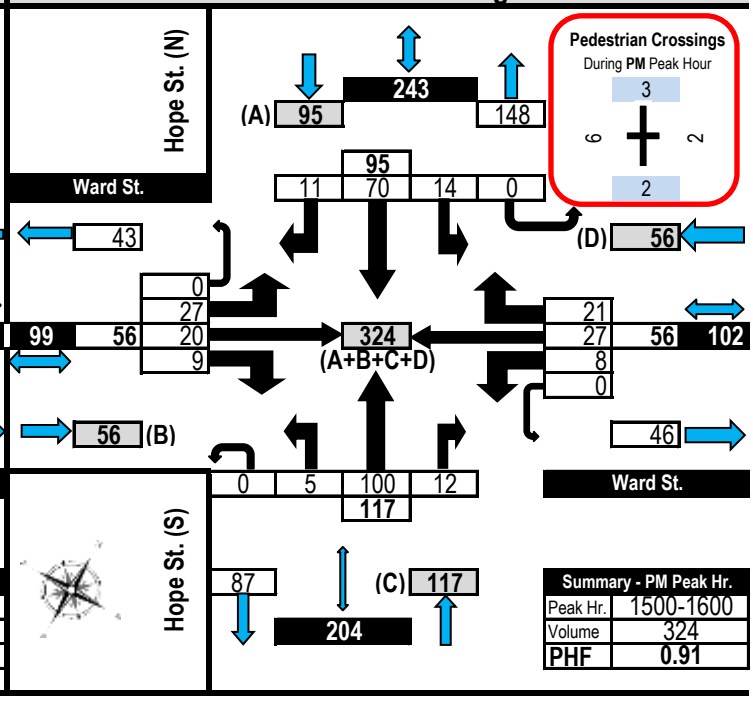


Off Peak Hour Flow Diagram



Summary - OFF Peak Hr.	
Peak Hr.	1100-1200
Volume	366
PHF	0.90

PM Peak Hour Flow Diagram



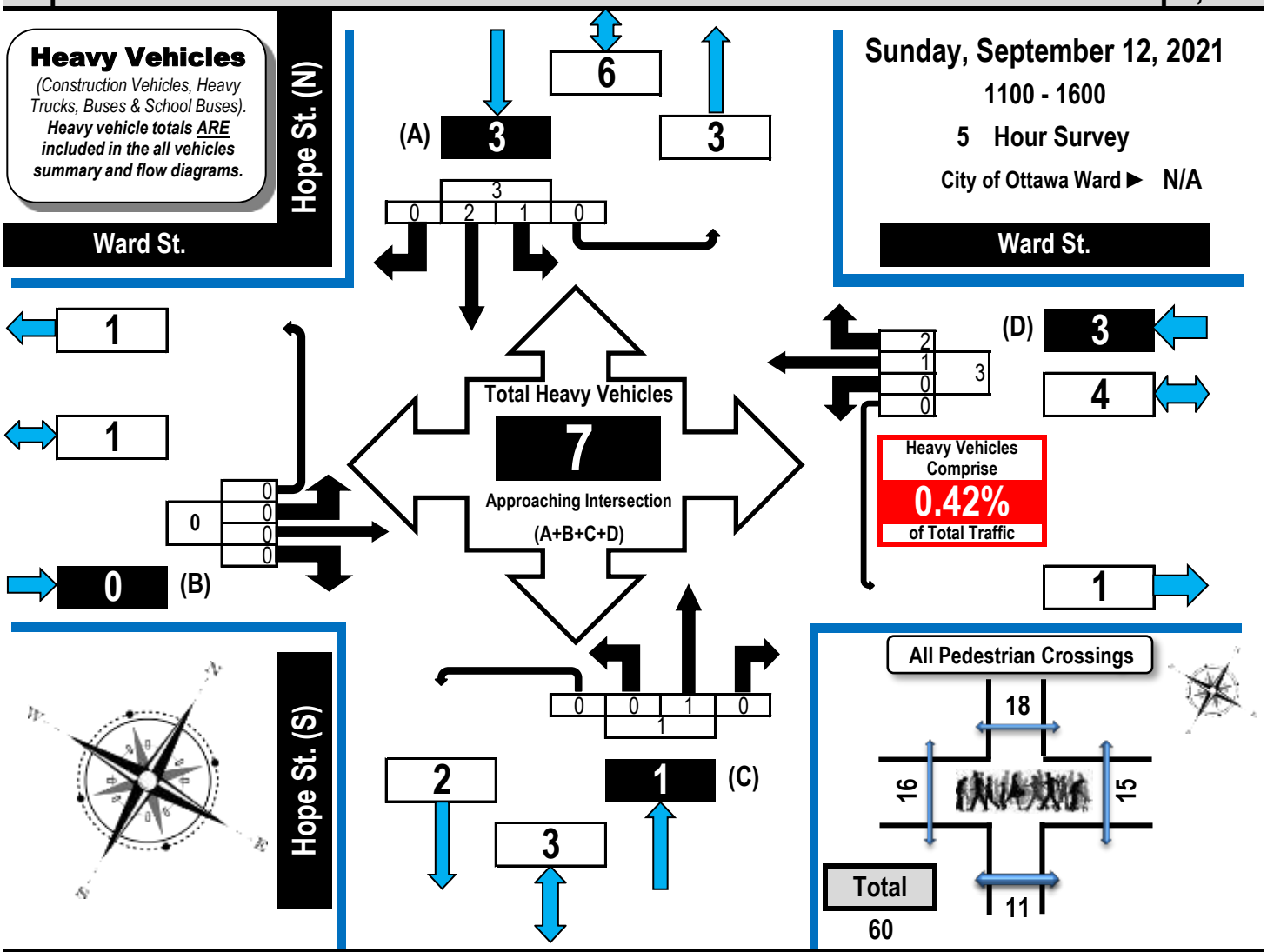
Summary - PM Peak Hr.	
Peak Hr.	1500-1600
Volume	324
PHF	0.91

Turning Movement Count
Heavy Vehicle Summary
Flow Diagram

Hope Street & Ward Street — Port Hope, ON

Heavy Vehicles
(Construction Vehicles, Heavy Trucks, Buses & School Buses).
Heavy vehicle totals ARE included in the all vehicles summary and flow diagrams.

Sunday, September 12, 2021
1100 - 1600
5 Hour Survey
City of Ottawa Ward ► N/A

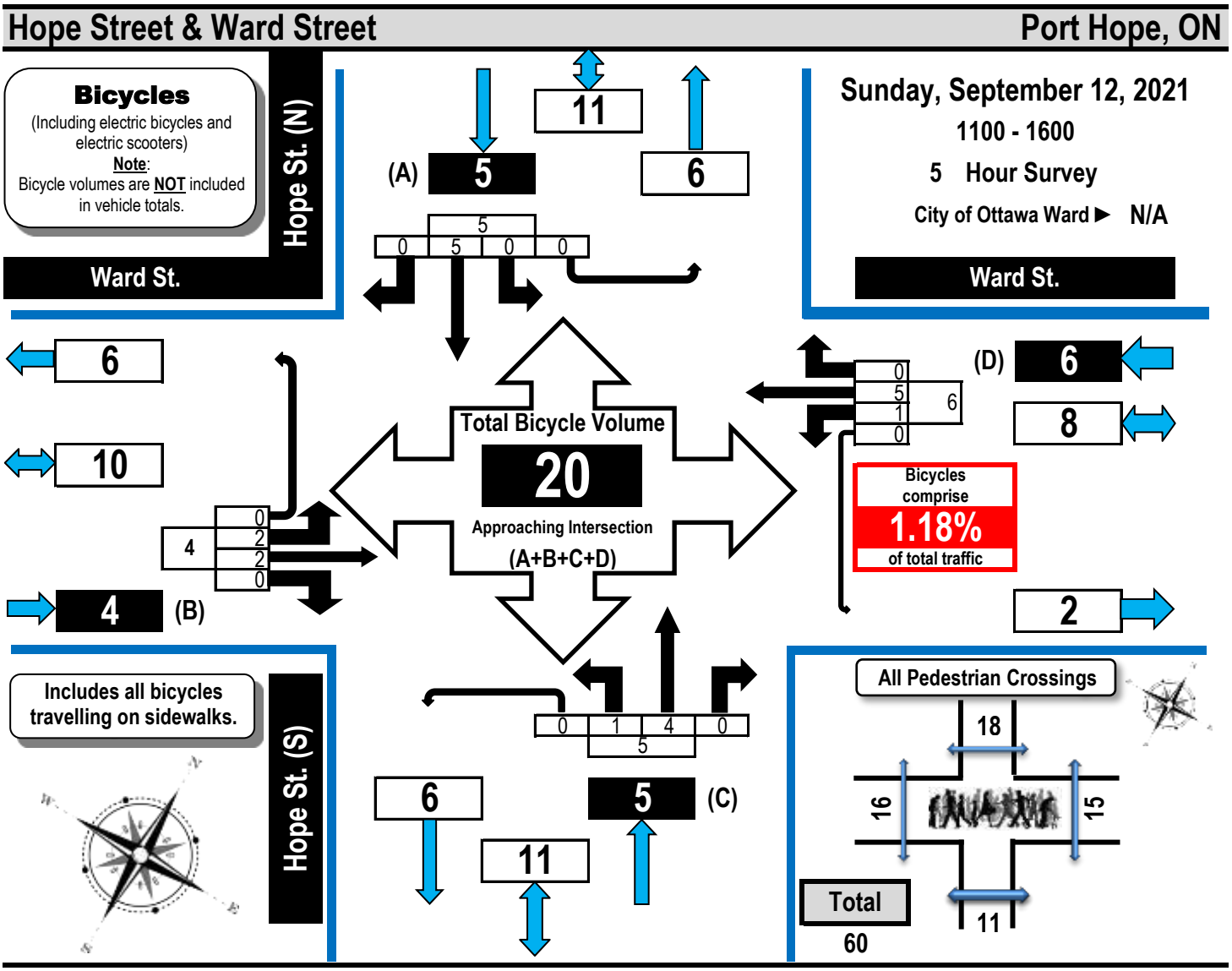


	Ward St. Eastbound					Ward St. Westbound					Hope St. (S) Northbound					Hope St. (N) Southbound					
Time Period	LT	ST	RT	UT	EB Tot	LT	ST	RT	UT	WB Tot	LT	ST	RT	UT	NB Tot	LT	ST	RT	UT	SB Tot	GR Tot
1100-1200	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
1200-1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2
1300-1400	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	1	0	0	1	4
1400-1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500-1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	0	0	0	0	0	0	1	2	0	3	0	1	0	0	1	1	2	0	0	3	7

Comments:

Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All businesses open for in-person shopping and some restaurants, including patios, open for in-person dining. The heavy vehicle total includes 4 school buses, 1 mini dump truck and 2, two axle/6 tire pick-up trucks. The bicycle total included 2 E-bikes and 1 stand-up E-scooter.

Turning Movement Count
Bicycle Summary
Flow Diagram



	Ward St. Eastbound					Ward St. Westbound					Hope St. (S) Northbound					Hope St. (N) Southbound					
Time Period	LT	ST	RT	UT	EB Tot	LT	ST	RT	UT	WB Tot	LT	ST	RT	UT	NB Tot	LT	ST	RT	UT	SB Tot	GR Tot
1100-1200	1	0	0	0	1	0	1	0	0	1	1	2	0	0	3	0	2	0	0	2	7
1200-1300	1	1	0	0	2	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	7
1300-1400	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	2
1400-1500	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1500-1600	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	3
Totals	2	2	0	0	4	1	5	0	0	6	1	4	0	0	5	0	5	0	0	5	20

Comments:

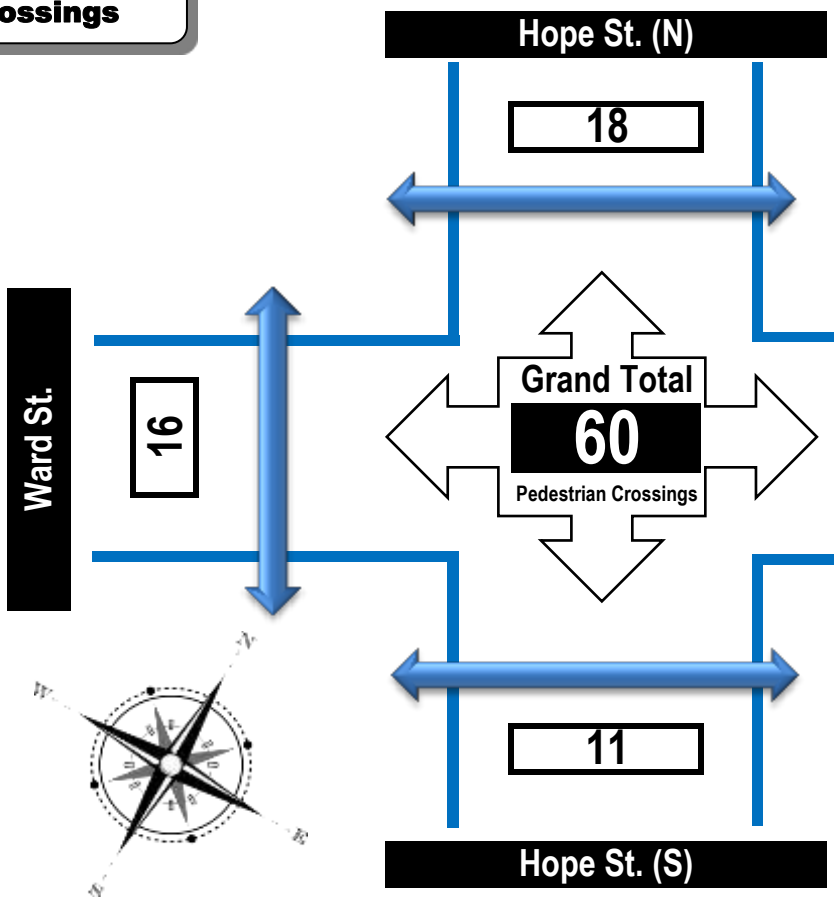
Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All businesses open for in-person shopping and some restaurants, including patios, open for in-person dining. The heavy vehicle total includes 4 school buses, 1 mini dump truck and 2, two axle/6 tire pick-up trucks. The bicycle total included 2 E-bikes and 1 stand-up E-scooter.

Turning Movement Count
Pedestrian Crossings Summary and Flow Diagram

Hope Street & Ward Street — Port Hope, ON

Pedestrian Crossings

Sunday, September 12, 2021
1100 - 1600
5 Hour Survey
City of Ottawa Ward ► N/A



Note

*The values in the summary table below and the flow diagram represent the number of pedestrian crossing**s** **NOT** the number of individual pedestrian**s** crossing. For example, some pedestrians will cross one approach, then another to reach their destination. Accordingly, one pedestrian crossing two approaches will be recorded as two crossings.*

Time Period	West Side Crossing Ward St.	East Side Crossing Ward St.	Street Total	South Side Crossing Hope St. (S)	North Side Crossing Hope St. (N)	Street Total	Grand Total
1100-1200	3	4	7	6	1	7	14
1200-1300	1	0	1	0	6	6	7
1300-1400	3	8	11	1	5	6	17
1400-1500	3	1	4	2	3	5	9
1500-1600	6	2	8	2	3	5	13
Totals	**16**	**15**	**31**	**11**	**18**	**29**	**60**

Comments:

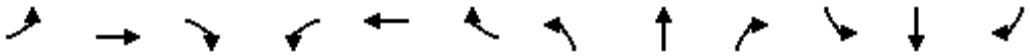
Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All businesses open for in-person shopping and some restaurants, including patios, open for in-person dining. The heavy vehicle total includes 4 school buses, 1 mini dump truck and 2, two axle/6 tire pick-up trucks. The bicycle total included 2 E-bikes and 1 stand-up E-scooter.

DATE	# Days	LOCATION	TUBE/RADAR	NB	SB	EB	WB	AADT	KPH	CLASS
Mar 15/16 - Mar 22/16	7	#38 John St	R	-	5943	-	-	847	50	4
Mar 29/16 - April 5/16	7	#10 Shortt St	R	326	265	-	-	84	50	5
June 8/16 - June 15/16	7	77 Augusta	R	-	-	1587	2815	627	50	4
June 8/16 - June 15/16	7	Augusta St between John St and Pine St S	T	-	-	3647	6175	1399	50	4
June 16/16 - June 23/16	7	#38 John St	R	-	5357	-	-	763	50	4
June 16/16 - June 23/16	7	Barrett St - East of one way bridge	T	-	-	12441		1772	50	4
July 11/16 - July 18/16	7	#10 Shortt St	R	436	161	-	-	85	50	5
July 19/16-July 26/16	7	#25 Ravine Dr		-	-					
July 27/16 - Aug 4/16	7	Barrett St - East of one way bridge	T			10468		1491	50	4
Aug 5/16 - Aug 12/16	7	30/32 Ravine Dr	R			779	617	198	50	5
Aug 17/16 - Aug 24/16	7	40 Sherbourne St	R	-	-	395	1149	220	50	5
Sept 6/16 - Sept 8/16	2	#64 John St	R	-	2070	-	-	1035	50	4
Sept 12/16 - Sept 14/16	2	Ontario St Bridge	R	2325	3194			2759	50	4
Sept 14/16 - Sept 16/16	2	Walton St Bridge	R	-	-	6266	6350	6308	50	3
Sept 14/16 - Sept 21/16	7	Barrett St Brdge	T			16366		2331	50	4
Sept 19/16 - Sept 21/16	2	Molson St Bridge	R	-	-	7172	7227	7199	50	3
Sept 22/16 - Sept 26/16	4	11 Scriven Blvd	R	1136	968	-	-	526	50	4
Sept 21/16 - Sept 28/16	7	Barrett St Bridge	T	-	-	21541		3068	50	4
Sept 27/16 - Sept 29/16	2	Robertson St Bridge	R	-	-	4448	3263	3855	50	4
Sept 29/16 - Oct 4/16	4	78 Cavan St	R	3671	3888	-	-	1915	50	4
Oct 4/16 - Oct 6/16	2	33 Cavan St (south of Barrett St)	R	1424	893	-	-	1158	50	4
Oct 28/16 - Oct 4/16	7	Barrett St Bridge	T	-	-	25567		3642	50	4
Oct 11/16 - Oct 13/16	2	Molson St Bridge	R	-	-	7618	7269	7443	50	3
Ont 14/16 - Oct 17/16	3	Ontario St Bridge	R	3508	4288	-	-	2598	50	4
Oct 18/16	1	Barrett St Bridge	T	-	-	2381		2381	50	4
Oct 18/16 - Oct 24/16	6	Walton St Bridge	R	-	-	18510	17895	6072	50	3
Oct 24/16 - Oct 27/16	3	Robertson St Bridge	R	-	-	6659	4487	3715	50	4
Oct 18/16 - Nov 1/16	14	Barrett St Bridge	T	-	-	32124		2294	50	4
Oct 27/16 - Nov 1/16	5	54 Hope St S	R	5238	6427	-	-	2333	50	4
Dec 3016 - Jan 6/167	7	38 John St	R	-	5425	-	-	775	50	4

Average Annual Daily Traffic (number of motor vehicles)		Posted or Statutory Speed Limit (kilometres per hour)							
		91 - 100		81 - 90	71 - 80	61 - 70	51 - 60	41 - 50	0 - 40
15,000 or more		1		1	1	2	2	2	2
12,000 - 14,999		1		1	1	2	2	3	3
10,000 - 11,999		1		1	2	2	3	3	3
8,000 - 9,999		1		1	2	3	3	3	3
6,000 - 7,999		1		2	2	3	3	3	3
5,000 - 5,999		1		2	2	3	3	3	3
4,000 - 4,999		1		2	3	3	3	3	4
3,000 - 3,999		1		2	3	3	3	4	4
2,000 - 2,999		1		2	3	3	4	4	4
1,000 - 1,999		1		3	3	3	4	4	5
500 - 999		1		3	4	4	4	4	5
200 - 499		1		3	4	4	5	5	5
50 - 199		1		3	4	5	5	5	5
0 - 49		1		3	6	6	6	6	6

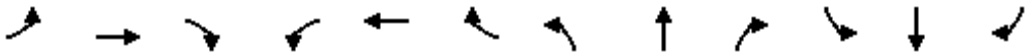
APPENDIX C

Synchro Analysis



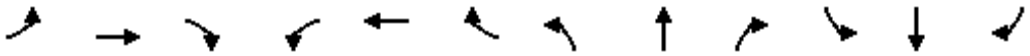
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	38	7	12	38	19	2	43	5	15	66	17
Future Volume (vph)	23	38	7	12	38	19	2	43	5	15	66	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.987			0.963			0.987			0.976	
Flt Protected		0.983			0.991			0.998			0.992	
Satd. Flow (prot)	0	1771	0	0	1698	0	0	1803	0	0	1734	0
Flt Permitted		0.983			0.991			0.998			0.992	
Satd. Flow (perm)	0	1771	0	0	1698	0	0	1803	0	0	1734	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	2		3	3		2	6		4	4		6
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 (%)	1%	3%	10%	15%	3%	5%	1%	3%	1%	5%	6%	1%
Adj. Flow (vph)	24	40	7	13	40	20	2	45	5	16	69	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	0	0	73	0	0	52	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.3%		ICU Level of Service A	
Analysis Period (min) 15			



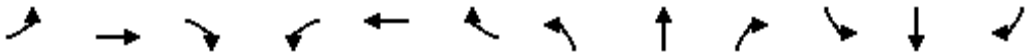
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	41	6	14	43	29	8	126	12	17	82	16
Future Volume (vph)	27	41	6	14	43	29	8	126	12	17	82	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.988			0.954			0.989			0.981	
Flt Protected		0.982			0.992			0.997			0.993	
Satd. Flow (prot)	0	1786	0	0	1725	0	0	1789	0	0	1788	0
Flt Permitted		0.982			0.992			0.997			0.993	
Satd. Flow (perm)	0	1786	0	0	1725	0	0	1789	0	0	1788	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	7		8	8		7	1		4	4		1
Confl. Bikes (#/hr)									2			1
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 (%)	1%	3%	1%	8%	3%	1%	12%	2%	15%	1%	3%	1%
Adj. Flow (vph)	29	45	7	15	47	32	9	137	13	18	89	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	81	0	0	94	0	0	159	0	0	124	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.2%		ICU Level of Service A	
Analysis Period (min) 15			



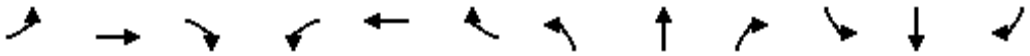
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	24	9	12	34	21	6	107	15	23	86	12
Future Volume (vph)	17	24	9	12	34	21	6	107	15	23	86	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.976			0.958			0.984			0.987	
Flt Protected		0.983			0.991			0.998			0.990	
Satd. Flow (prot)	0	1786	0	0	1767	0	0	1828	0	0	1819	0
Flt Permitted		0.983			0.991			0.998			0.990	
Satd. Flow (perm)	0	1786	0	0	1767	0	0	1828	0	0	1819	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	1		6	6		1	3		4	4		3
Confl. Bikes (#/hr)			1			1			2			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 (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	19	27	10	13	38	23	7	119	17	26	96	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	56	0	0	74	0	0	143	0	0	135	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.7%		ICU Level of Service A	
Analysis Period (min) 15			



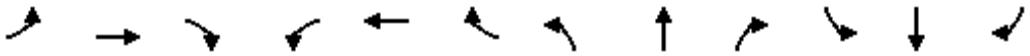
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	44	8	14	44	22	2	49	6	17	76	20
Future Volume (vph)	26	44	8	14	44	22	2	49	6	17	76	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.987			0.963			0.986			0.976	
Flt Protected		0.984			0.991			0.998			0.992	
Satd. Flow (prot)	0	1772	0	0	1698	0	0	1801	0	0	1734	0
Flt Permitted		0.984			0.991			0.998			0.992	
Satd. Flow (perm)	0	1772	0	0	1698	0	0	1801	0	0	1734	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	2		3	3		2	6		4	4		6
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 (%)	1%	3%	10%	15%	3%	5%	1%	3%	1%	5%	6%	1%
Adj. Flow (vph)	27	46	8	15	46	23	2	52	6	18	80	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	81	0	0	84	0	0	60	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.5%		ICU Level of Service A	
Analysis Period (min) 15			



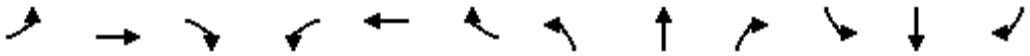
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	47	7	16	49	33	9	145	14	20	94	18
Future Volume (vph)	31	47	7	16	49	33	9	145	14	20	94	18
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.988			0.954			0.989			0.981	
Flt Protected		0.982			0.992			0.997			0.992	
Satd. Flow (prot)	0	1787	0	0	1725	0	0	1789	0	0	1786	0
Flt Permitted		0.982			0.992			0.997			0.992	
Satd. Flow (perm)	0	1787	0	0	1725	0	0	1789	0	0	1786	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	7		8	8		7	1		4	4		1
Confl. Bikes (#/hr)									2			1
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 (%)	1%	3%	1%	8%	3%	1%	12%	2%	15%	1%	3%	1%
Adj. Flow (vph)	34	51	8	17	53	36	10	158	15	22	102	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	93	0	0	106	0	0	183	0	0	144	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.2%		ICU Level of Service A	
Analysis Period (min) 15			



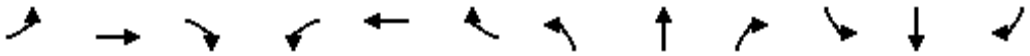
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	28	10	14	39	24	7	123	17	26	99	14
Future Volume (vph)	20	28	10	14	39	24	7	123	17	26	99	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.977			0.958			0.984			0.986	
Flt Protected		0.983			0.991			0.998			0.991	
Satd. Flow (prot)	0	1788	0	0	1767	0	0	1828	0	0	1819	0
Flt Permitted		0.983			0.991			0.998			0.991	
Satd. Flow (perm)	0	1788	0	0	1767	0	0	1828	0	0	1819	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	1		6	6		1	3		4	4		3
Confl. Bikes (#/hr)			1			1			2			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 (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	22	31	11	16	43	27	8	137	19	29	110	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	64	0	0	86	0	0	164	0	0	155	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.4%		ICU Level of Service A	
Analysis Period (min) 15			



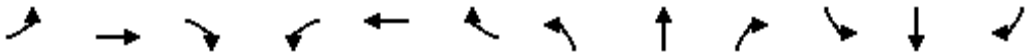
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	53	10	17	53	27	3	60	7	21	92	24
Future Volume (vph)	32	53	10	17	53	27	3	60	7	21	92	24
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.985			0.963			0.987			0.977	
Flt Protected		0.983			0.991			0.998			0.992	
Satd. Flow (prot)	0	1766	0	0	1698	0	0	1803	0	0	1736	0
Flt Permitted		0.983			0.991			0.998			0.992	
Satd. Flow (perm)	0	1766	0	0	1698	0	0	1803	0	0	1736	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	2		3	3		2	6		4	4		6
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 (%)	1%	3%	10%	15%	3%	5%	1%	3%	1%	5%	6%	1%
Adj. Flow (vph)	34	56	11	18	56	28	3	63	7	22	97	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	101	0	0	102	0	0	73	0	0	144	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.5%		ICU Level of Service A	
Analysis Period (min) 15			



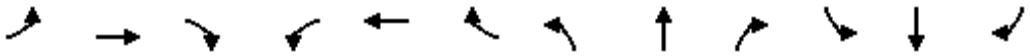
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	57	8	20	60	41	11	176	17	24	115	22
Future Volume (vph)	38	57	8	20	60	41	11	176	17	24	115	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.989			0.954			0.989			0.981	
Flt Protected		0.982			0.992			0.997			0.993	
Satd. Flow (prot)	0	1788	0	0	1725	0	0	1789	0	0	1788	0
Flt Permitted		0.982			0.992			0.997			0.993	
Satd. Flow (perm)	0	1788	0	0	1725	0	0	1789	0	0	1788	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	7		8	8		7	1		4	4		1
Confl. Bikes (#/hr)									2			1
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 (%)	1%	3%	1%	8%	3%	1%	12%	2%	15%	1%	3%	1%
Adj. Flow (vph)	41	62	9	22	65	45	12	191	18	26	125	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	112	0	0	132	0	0	221	0	0	175	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.6%		ICU Level of Service A	
Analysis Period (min) 15			



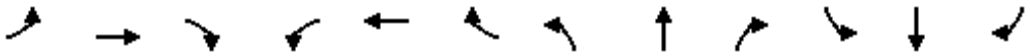
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	34	13	17	48	29	8	150	21	32	120	17
Future Volume (vph)	24	34	13	17	48	29	8	150	21	32	120	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.976			0.958			0.984			0.986	
Flt Protected		0.983			0.991			0.998			0.991	
Satd. Flow (prot)	0	1786	0	0	1767	0	0	1828	0	0	1819	0
Flt Permitted		0.983			0.991			0.998			0.991	
Satd. Flow (perm)	0	1786	0	0	1767	0	0	1828	0	0	1819	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	1		6	6		1	3		4	4		3
Confl. Bikes (#/hr)			1			1			2			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 (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	27	38	14	19	53	32	9	167	23	36	133	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	79	0	0	104	0	0	199	0	0	188	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.8%		ICU Level of Service A	
Analysis Period (min) 15			



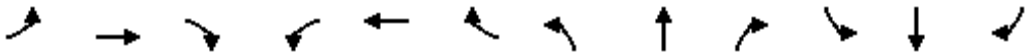
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	44	8	16	45	22	2	50	7	17	78	22
Future Volume (vph)	26	44	8	16	45	22	2	50	7	17	78	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.987			0.964			0.985			0.975	
Flt Protected		0.984			0.990			0.998			0.993	
Satd. Flow (prot)	0	1772	0	0	1695	0	0	1799	0	0	1735	0
Flt Permitted		0.984			0.990			0.998			0.993	
Satd. Flow (perm)	0	1772	0	0	1695	0	0	1799	0	0	1735	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	2		3	3		2	6		4	4		6
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 (%)	1%	3%	10%	15%	3%	5%	1%	3%	1%	5%	6%	1%
Adj. Flow (vph)	27	46	8	17	47	23	2	53	7	18	82	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	81	0	0	87	0	0	62	0	0	123	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.4%		ICU Level of Service A	
Analysis Period (min) 15			



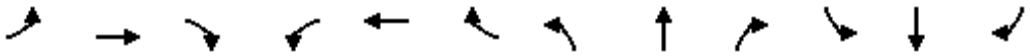
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	47	7	17	50	33	10	150	17	20	95	19
Future Volume (vph)	31	47	7	17	50	33	10	150	17	20	95	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.988			0.955			0.987			0.981	
Flt Protected		0.982			0.992			0.997			0.993	
Satd. Flow (prot)	0	1787	0	0	1726	0	0	1782	0	0	1788	0
Flt Permitted		0.982			0.992			0.997			0.993	
Satd. Flow (perm)	0	1787	0	0	1726	0	0	1782	0	0	1788	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	7		8	8		7	1		4	4		1
Confl. Bikes (#/hr)									2			1
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 (%)	1%	3%	1%	8%	3%	1%	12%	2%	15%	1%	3%	1%
Adj. Flow (vph)	34	51	8	18	54	36	11	163	18	22	103	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	93	0	0	108	0	0	192	0	0	146	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.9%		ICU Level of Service A	
Analysis Period (min) 15			



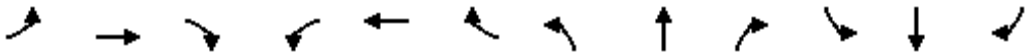
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	28	10	17	41	24	8	129	21	26	103	18
Future Volume (vph)	20	28	10	17	41	24	8	129	21	26	103	18
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.977			0.960			0.982			0.983	
Flt Protected		0.983			0.990			0.997			0.991	
Satd. Flow (prot)	0	1788	0	0	1769	0	0	1822	0	0	1813	0
Flt Permitted		0.983			0.990			0.997			0.991	
Satd. Flow (perm)	0	1788	0	0	1769	0	0	1822	0	0	1813	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	1		6	6		1	3		4	4		3
Confl. Bikes (#/hr)			1			1			2			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 (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	22	31	11	19	46	27	9	143	23	29	114	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	64	0	0	92	0	0	175	0	0	163	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.2%		ICU Level of Service A	
Analysis Period (min) 15			



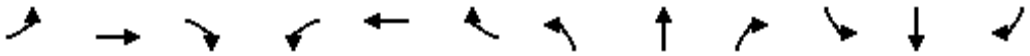
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	53	10	19	54	27	3	61	8	21	94	26
Future Volume (vph)	32	53	10	19	54	27	3	61	8	21	94	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.985			0.964			0.986			0.975	
Flt Protected		0.983			0.991			0.998			0.993	
Satd. Flow (prot)	0	1766	0	0	1697	0	0	1801	0	0	1734	0
Flt Permitted		0.983			0.991			0.998			0.993	
Satd. Flow (perm)	0	1766	0	0	1697	0	0	1801	0	0	1734	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	2		3	3		2	6		4	4		6
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 (%)	1%	3%	10%	15%	3%	5%	1%	3%	1%	5%	6%	1%
Adj. Flow (vph)	34	56	11	20	57	28	3	64	8	22	99	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	101	0	0	105	0	0	75	0	0	148	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.4%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	57	8	21	61	41	12	181	20	24	116	23
Future Volume (vph)	38	57	8	21	61	41	12	181	20	24	116	23
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
Ped Bike Factor												
Frt		0.989			0.955			0.987			0.981	
Flt Protected		0.982			0.991			0.997			0.993	
Satd. Flow (prot)	0	1788	0	0	1724	0	0	1782	0	0	1788	0
Flt Permitted		0.982			0.991			0.997			0.993	
Satd. Flow (perm)	0	1788	0	0	1724	0	0	1782	0	0	1788	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	7		8	8		7	1		4	4		1
Confl. Bikes (#/hr)									2			1
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 (%)	1%	3%	1%	8%	3%	1%	12%	2%	15%	1%	3%	1%
Adj. Flow (vph)	41	62	9	23	66	45	13	197	22	26	126	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	112	0	0	134	0	0	232	0	0	177	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	34	13	20	50	29	9	156	25	32	124	21
Future Volume (vph)	24	34	13	20	50	29	9	156	25	32	124	21
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
Ped Bike Factor												
Frt		0.976			0.961			0.982			0.984	
Flt Protected		0.983			0.990			0.998			0.991	
Satd. Flow (prot)	0	1786	0	0	1771	0	0	1824	0	0	1815	0
Flt Permitted		0.983			0.990			0.998			0.991	
Satd. Flow (perm)	0	1786	0	0	1771	0	0	1824	0	0	1815	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		177.9			213.5			205.7			163.9	
Travel Time (s)		12.8			15.4			14.8			11.8	
Confl. Peds. (#/hr)	1		6	6		1	3		4	4		3
Confl. Bikes (#/hr)			1			1			2			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 (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	27	38	14	22	56	32	10	173	28	36	138	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	79	0	0	110	0	0	211	0	0	197	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)		5.0			5.0			5.0			5.0	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.5%		ICU Level of Service A	
Analysis Period (min) 15			