



## 166 Boyd Street – Traffic Impact Study

*A & B Bulat Homes Ltd.*

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## 1. Introduction

### 1.1. Objective

EXP has been retained by A & B Bulat Homes Ltd. to prepare a traffic impact study in support of the proposed residential development located at 166 Boyd Street, within the jurisdiction of the Town of Carleton Place (herein “the Town”). Based on correspondence with the Town, this study will examine the impact of the development on the surrounding study area in both the context of nearby background developments and the expected joining of Boyd Street between Arthur Street and Taber Street.

Coordination with the Town was conducted before the study and Terms of Reference outlining the scope of work was determined, including the Towns comments. The terms of reference are provided as **Appendix A**. The proposed site plan is illustrated in **Appendix B**.

## 2. Study Area

### 2.1. Road Network

The study area is described as follows, while **Figure 1**. visualizes the lane configuration for the study area. All intersections in the study area are unsignalized. The location of the development is illustrated in **Figure 2**.

**Mississippi Road** is a two-lane, 50km/h collector road. Mississippi Road runs north/south through Carleton Place between Lake Avenue W and Highway 7.

**Boyd Street** is a two-lane, 50km/h local road. Boyd Street runs north/south is and segmented into three parts: between Morris Street and Taber Street, between Arthur Street and Woodward Street, and between Donald Street and Lake Avenue W.

**Arthur Street** is a two-lane, 50km/h local road. Arthur Street runs east/west between Boyd Street and Lansdowne Avenue, where it turns into Coleman Street and continues through Carleton Place until McNeely Street.

**Woodward Street** is a two-lane, 40km/h local road. Woodward Street runs east/west between Mississippi Road and Napoleon Street.

**Napoleon Street** is a two-lane, 50km/h local road. Napoleon Street runs north/south between Lake Avenue W and Highway 7.

**Morris Street** is a two-lane, 50km/h local road. Morris Street runs east/west between Dunham Street and Napoleon Street.

**Taber Street** is a two-lane, 50km/h local road. Taber Street runs east/west between Matthews Street and Boyd Street.

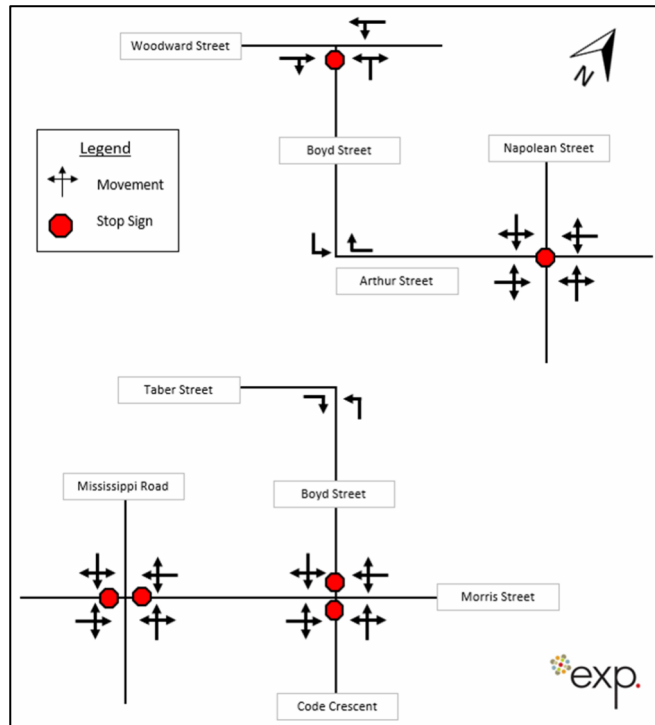


Figure 1 - Lane Configuration



Figure 2 - Study Area

### 3. Study Context and Information

#### 3.1. Assessment of Operations

The operational analysis will be conducted at indicated intersections in the study area. Analysis will be conducted with Synchro 11 using Highway Capacity Manual 6th Edition (HCM 6th) methodology. Measures of effectiveness used for the analysis will be delay (measured in seconds), volume over capacity (v/c), Level of Service (LOS), and 95<sup>th</sup> percentile queue length.

Critical movements are determined based on the following criteria:

- Reporting a v/c ratio over 1.00.
- Reporting an LOS of “F”.
- Reporting the 95th percentile queue length exceeds the storage length or obstructs an upstream intersection.

HCM 6th outputs queue length as number of vehicles; the length of the queue is determined by multiplying the number of vehicles per lane value by 7.6. When determining network settings, the storage passenger car length was set as 7.6 meters by default. This value is the average length of a passenger vehicle, measured from the front bumpers of the first vehicle to the front bumper of the second vehicle.

#### 3.2. Study Approach

As previously mentioned, Synchro 11 and HCM 6<sup>th</sup> Edition methodology will be used in the operational analysis of this study. Intersection LOS is a recognized method of quantifying the efficiency of traffic flow at intersections. It is based on the delay experienced by individual vehicles executing various movements (Left, Through, and Right) heading to a specific direction. The intersection analysis considered three separate measures of performance: the LOS for each turning movement, the volume to capacity ratio (v/c) for each turning movement and the 95<sup>th</sup> percentile queue length.

The highest possible rating is LOS A, under which the average total delay is equal or less than 10 seconds per vehicle. When the average delay exceeds 80 seconds at signalized intersections, the movement is classed as LOS F, a failed condition, and potential remedial measures are proposed. **Table 1** summarizes the HCM delay thresholds.

*Table 1 – Highway Capacity Manual (HCM) Delay Threshold*

Level of Service (LOS)	Signalized Intersection Average Total Delay (s/veh)	Unsignalized Intersection Average Total Delay (s/veh)
<b>A</b>	≤ 10	≤ 10
<b>B</b>	> 10 and ≤ 20	> 10 and ≤ 15
<b>C</b>	> 20 and ≤ 35	> 15 and ≤ 25
<b>D</b>	> 35 and ≤ 55	> 25 and ≤ 35
<b>E</b>	> 55 and ≤ 80	> 35 and ≤ 50
<b>F</b>	> 80	> 50





### 3.2.1. Horizon Years

The horizon years for the study were outlined in the Terms of Reference. The years for the study will be the existing year, the expected build out year, and the 5-year post build out horizon. The development is expected to be built out within 1 year of the existing year. **Table 2** visualizes the horizon years.

*Table 2 - Horizon Year Outline*

Year	Future Background Conditions	Future Total Conditions
<b>2024 (Existing)</b>	Collected Traffic Volumes	-
<b>2025 (Build Out Year)</b>	Existing * 2% annual growth + external background developments	2025 Background + Site Generated Trips
<b>2030 (5-Year Post Build Out)</b>	Existing * 2% annual growth + external background developments	2030 Background + Site Generated Trips

### 3.2.2. Data Collection

The time periods to be studied are the weekday AM peak hour and the weekday PM peak hour. The peak periods for this study were assumed to be between 7:00-9:00 AM and 4:00-6:00 PM.

The turning movement counts (TMCs) for all study area intersections were conducted on January 10, 2024. The traffic data collected is provided as **Appendix C**.



## 4. Existing Conditions

### 4.1. Existing Traffic Operations

Based on the TMCs, the existing traffic volumes for the study area intersections are as presented in **Exhibit 1**. The operational analysis for the existing conditions is outlined in **Table 3**. The outputs for the synchro analysis are provided in **Appendix D**.

Table 3 - Existing Traffic Operations Analysis

Intersection	Movement	AM Peak Hour				PM Peak Hour			
		v/c	Delay	LOS	95th Q (veh)	v/c	Delay	LOS	95th Q (veh)
Boyd St & Woodward St	Overall	-	3	A	-	-	4	A	-
	EB-TR <sup>1</sup>	-	-	-	-	-	-	-	-
	WB-LT	0.00	7	A	0.0	0.00	7	A	0.0
	NB-LR	0.02	9	A	0.1	0.05	9	A	0.1
Napolean St & Arthur St	Overall	-	8	A	-	-	9	A	-
	EB-LTR	0.05	8	A	0.2	0.05	8	B	0.2
	WB-LTR	0.11	8	A	0.4	0.27	9	B	1.1
	NB-LTR	0.12	7	A	0.4	0.13	8	A	0.4
	SB-LTR	0.05	8	A	0.1	0.08	8	A	0.3
Mississippi Rd & Morris St	Overall	-	3	A	-	-	3	A	-
	EB-LTR	0.01	10	A	0.2	0.01	10	A	0.0
	WB-LTR	0.04	9	A	0.1	0.10	11	B	0.3
	NB-LTR	0.00	8	A	0.0	0.00	7	A	0.0
	SB-LTR	0.00	8	A	0.1	0.01	8	A	0.0
Morris St & Code Cres/Boyd St	Overall	-	3	A	-	-	2	A	-
	EB-LTR	0.00	8	A	0.0	0.01	7	A	0.1
	WB-LTR	0.00	7	A	0.0	0.00	7	A	0.1
	NB-LTR	0.01	9	A	0.1	0.00	9	A	0.1
	SB-LTR	0.01	9	A	0.3	0.02	9	A	0.1

The operational analysis indicates that no issues arise related to traffic volumes within the study area. In both peak hours, all movements are at worse an LOS of 'B' which is considered acceptable as per the assessment of operations. No queueing issues have been identified at any locations.

Of note, the eastbound through-right movement on Woodward Street at Boyd Street returned no results; it is implied this movement is free flowing. There is no stop control for Woodward Street at the intersection and very few conflicting vehicles.

<sup>1</sup> NB: Northbound, SB: Southbound, EB: Eastbound, WB: Westbound. L: Left, T: Through, R: Right



## 5. Future Background Conditions

As per correspondence with the Town, two horizon scenarios will be analyzed: the year of the development's opening (assumed to be one year after the existing year) and five year after the development's opening (assumed to be six years after existing year). To simulate background traffic growth, a 2.00% per annum growth rate was applied to Mississippi Road's through movements.

### 5.1. External Background Developments

Three background developments were considered for the future background conditions: Jackson Ridge subdivision, the Mississippi Shores subdivision, and the Taber Street developments. The Jackson Ridge Subdivision, directly south of the proposed Site, has been fully built out as of 2023. The Taber Street development has been partially built out. EXP was provided only a site plan for this development, which indicates 19 dwelling units. Based on ITE Trip Generation 11<sup>th</sup> Edition for Low-Rise Multifamily housing, this location is expected to generate 29 AM peak hour trips and 29 PM peak hour trips.

The Mississippi Shores subdivision is currently under construction and is expected to be built out by the opening year horizon. EXP was not provided a traffic report or site plan for this subdivision, instead only receiving synchro files used to project the trip assignment. As per Carelton Place's Development Services, it is expected this development will have 560 dwelling units. Based on ITE Trip Generation 11<sup>th</sup> Edition for Single-Family Detached Housing, the subdivision is expected to generate 357 AM peak hour trips and 502 PM peak hour trips. The trips generated for the subdivision were assigned to the study area as per the provided Synchro files.

As per the Traffic Impact Statement prepared by NovaTech Engineering Consultants in December 2013, their trip distribution methodology assumed that Boyd Street between Arthur Street and Taber Street would be connected. As the connection has not been completed, the existing travel patterns for the subdivision do not reflect the proposed trip distribution.

### 5.2. Traffic Redistribution

Future traffic conditions will consider that the Boyd Street connection between Arthur Street and Taber Street will be completed. To project future traffic patterns with the connected road, existing volumes were redistributed. EXP coordinated with the Town to determine an appropriate redistribution. **Figure 3** outlines the changes in volume distribution with the extension; it is assumed that 50% of vehicles which currently travel along Napoleon Street will instead utilize Boyd Street.

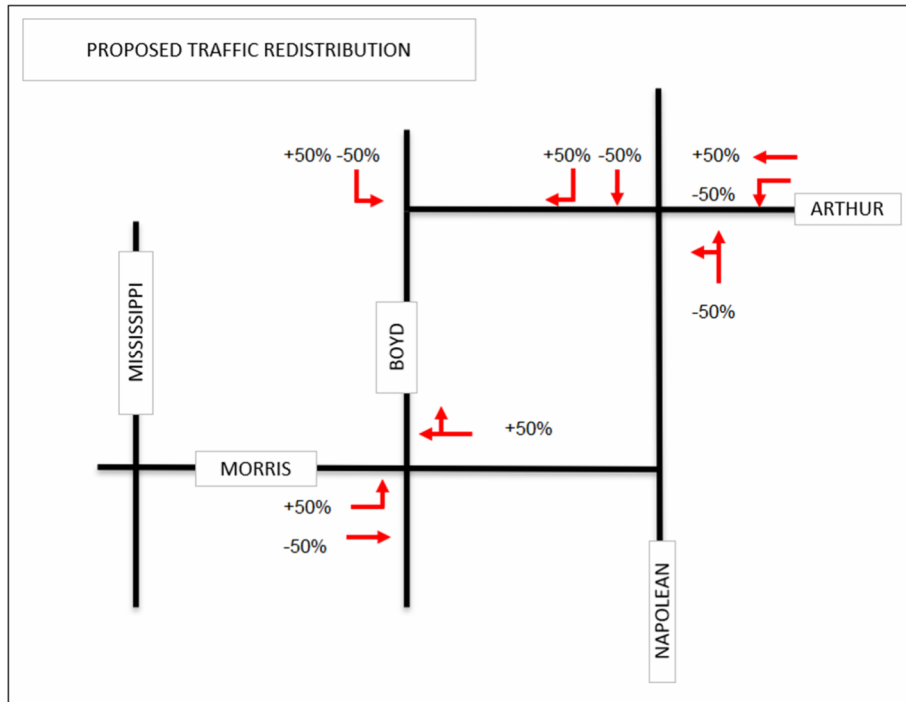


Figure 3 - Proposed Traffic Redistribution

### 5.3. Opening Year Background Traffic Operations

The future background volumes for the opening year horizon are visualized in **Exhibit 2**. The operational analysis for the future background opening year horizon is tabulated in **Table 2**. The outputs for the Synchro analysis are provided in **Appendix E**.

Table 4 - Opening Year Background Traffic Operations Analysis

Intersection	Movement	AM Peak Hour				PM Peak Hour			
		v/c	Delay	LOS	95th Q	v/c	Delay	LOS	95th Q
Boyd St & Woodward St	Overall	-	3	A	-	-	4	A	-
	EB-TR	-	-	-	-	-	-	-	-
	WB-LT	0.00	7	A	0.1	0.00	7	A	0.2
	NB-LR	0.02	9	A	0.1	0.05	9	A	0.1
Boyd St & Arthur St	Overall	-	5	A	-	-	7	A	-
	WB-LR	0.05	9	A	0.2	0.14	9	A	0.5
	NB-TR	-	-	-	-	-	-	-	-
	SB-LT	0.01	7	A	0.2	0.01	7	A	0.3
Napolean St & Arthur St	Overall	-	8	A	-	-	8	A	-
	EB-LTR	0.08	8	A	0.2	0.07	8	A	0.2
	WB-LTR	0.11	8	A	0.4	0.27	9	A	1.1
	NB-LTR	0.10	7	A	0.3	0.11	8	A	0.4
	SB-LTR	0.05	8	A	0.1	0.08	8	A	0.3
Mississippi Rd & Morris St	Overall	-	2	A	-	-	2	A	-
	EB-LTR	0.01	11	B	0.3	0.02	11	B	0.4
	WB-LTR	0.04	10	B	0.1	0.13	12	B	0.4
	NB-LTR	0.00	8	A	0.0	0.00	8	A	0.1
	SB-LTR	0.00	8	A	0.1	0.01	8	A	0.2
Morris St & Code Cres/Boyd St	Overall	-	4	A	-	-	3	A	-
	EB-LTR	0.01	8	A	0.0	0.02	7	A	0.1
	WB-LTR	0.00	7	A	0.0	0.00	7	A	0.0
	NB-LTR	0.01	9	A	0.1	0.00	8	A	0.0
	SB-LTR	0.01	9	A	0.3	0.02	9	A	0.1

The results from the opening year horizon indicate no issues regarding traffic operations within the study area. The worst LOS identified is “B”, which is considered acceptable per the assessment of operations. No queuing issues are identified to be of concern in either peak hour.

#### 5.4. Five-Year Post Opening Background Traffic Operations

The future background volumes for the five-year post-opening horizon are visualized in **Exhibit 3**. The operational analysis for the future background five-year post opening horizon is tabulated in **Table 5**. The outputs for the Synchro analysis are provided in **Appendix E**.



Table 5 - Five Year Post Opening Traffic Operations Analysis

Intersection	Movement	AM Peak Hour				PM Peak Hour			
		v/c	Delay	LOS	95th Q	v/c	Delay	LOS	95th Q
<b>Boyd St &amp; Woodward St</b>	Overall	-	3	A	-	-	4	A	-
	EB-TR	-	-	-	-	-	-	-	-
	WB-LT	0.00	7	A	0.1	0.00	7	A	0.1
	NB-LR	0.02	9	A	0.1	0.05	9	A	0.0
<b>Boyd St &amp; Arthur St</b>	Overall	-	5	A	-	-	7	A	-
	WB-LR	0.05	9	A	0.2	0.14	9	A	0.5
	NB-TR	-	-	-	-	-	-	-	-
	SB-LT	0.01	7	A	0.0	0.01	7	A	0.0
<b>Napolean St &amp; Arthur St</b>	Overall	-	8	A	-	-	8	A	-
	EB-LTR	0.08	8	A	0.2	0.07	8	A	0.2
	WB-LTR	0.11	8	A	0.4	0.27	9	A	1.1
	NB-LTR	0.10	7	A	0.3	0.11	8	A	0.4
	SB-LTR	0.05	8	A	0.1	0.08	8	A	0.3
<b>Mississippi Rd &amp; Morris St</b>	Overall	-	2	A	-	-	2	A	-
	EB-LTR	0.01	11	B	0.0	0.02	11	B	0.1
	WB-LTR	0.04	10	B	0.1	0.13	13	B	0.5
	NB-LTR	0.00	8	A	0.0	0.00	8	A	0.0
	SB-LTR	0.00	8	A	0.0	0.01	8	A	0.0
<b>Morris St &amp; Code Cres/Boyd St</b>	Overall	-	4	A	-	-	3	A	-
	EB-LTR	0.01	8	A	0.0	0.02	7	A	0.1
	WB-LTR	0.00	7	A	0.0	0.00	7	A	0.0
	NB-LTR	0.01	9	A	0.0	0.00	8	A	0.0
	SB-LTR	0.01	9	A	0.0	0.02	9	A	0.1

The results from the five year post opening horizons indicate no issues regarding traffic operations within the study area. The worst LOS identified is “B”, which is considered acceptable as per the assessment of operations. No queueing issues have been identified to be of concern.

The background developments nor the Boyd Street connection result in any adverse impacts on the neighborhood. The northbound-right on Boyd Street at Arhtur Street returned no results and is implied the movement will be free-flowing.



## 6. Site Generated Traffic

### 6.1. Development

The proposed development would consist of 71 townhouse units. The development will have two access locations, both on Boyd Street. It is noted that the south access will be offset from the existing Boyd Street and Arthur Street intersection. The town has expressed concern over the functionality of the access and the intersection when built out.

### 6.2. Trip Generation

The trip generation for the proposed development was calculated using the ITE Trip Generation Manual 11<sup>th</sup> Edition, with the land use code for multifamily low-rise units which represents the proposed townhouses. The peak hour of the adjacent street was used to demonstrate the worse-case scenario for the road network. Based on the study area and lack of available transit routes, a non-auto modal split was not applied to the trip generation. The projected vehicular trips are outlined in **Table 6**.

Table 6 - Trip Generation

Land Use	Independent Variable	Parameters	AM Peak Hour		PM Peak Hour	
			In	Out	In	Out
<b>Multifamily Housing Low-Rise (ITE #220)</b>	71 units	Total Trips	45		51	
		Distribution	24%	76%	50%	50%
		New Trips	11	34	26	25

Based on the trip generation, the development can expect to generate 45 AM peak hour trips and 51 PM peak hour trips.

### 6.3. Trip Distribution

The distribution of site traffic was derived based on information from the Town of Carleton Place Transportation Master Plan (TMP), utilizing the commuter information and land use designations provided in the plan. As per Table 12: Workplace Location of CP Residents in the TMP, 50% of residents in Carleton Place commute to and from Ottawa, 35% remain within the town, and the remaining 15% commute to the various surrounding communities.

Within Carleton Place itself, it was estimated that 40% of trips would travel to and from the downtown commercial area, 20% would travel to and from the industrial area in the north part of the town, and 40% would travel to and from the business district and retail areas along Highway 7.

For trips travelling to and from Ottawa, 50% were assigned to access Highway 7 via Mississippi Road and 50% were assigned to access Highway 7 via Franktown Road. Based on the proportioning of trips using the described origin and destination points and Google Maps for preferred routing, the trip distribution applied is summarized in **Table 7** and visualized in **Exhibit 4**.

Table 7 - Trip Distribution

Direction	Percentage	AM (In)	AM (Out)	PM (In)	PM (Out)
<b>Arthur St (east)</b>	50%	5	17	13	13
<b>Napolean St (north)</b>	15%	2	5	4	3
<b>Mississippi Rd (south)</b>	35%	4	12	9	9



## 7. Future Total Conditions

### 7.1. Opening Year Total Traffic Operations

The future total volumes for the opening year horizon are visualized in **Exhibit 5**. The operational analysis for the future background opening year horizon is tabulated in **Table 8**. The outputs for the synchro analysis are provided in **Appendix F**.

Table 8 - Opening Year Total Traffic Operations Analysis

Intersection	Movement	AM Peak Hour				PM Peak Hour			
		v/c	Delay	LOS	95th Q	v/c	Delay	LOS	95th Q
Boyd St & Woodward St	Overall	-	3	A	-	-	4	A	-
	EB-TR	-	-	-	-	-	-	-	-
	WB-LT	0.00	7	A	0.0	0.00	7	A	0.1
	NB-LR	0.02	9	A	0.1	0.05	9	A	0.0
Boyd St & Arthur St/166 Boyd	Overall	-	7	A	-	-	8	-	-
	EB-LTR	0.06	9	A	0.2	0.04	9	A	0.1
	WB-LTR	0.07	9	A	0.2	0.17	10	A	0.6
	NB-LTR	0.00	7	A	0.0	0.01	7	A	0.0
	SB-LTR	0.01	7	A	0.0	0.01	7	A	0.0
Napolean St & Arthur St	Overall	-	8	A	-	-	9	A	-
	EB-LTR	0.11	8	A	0.4	0.09	8	A	0.3
	WB-LTR	0.12	8	A	0.4	0.29	9	A	1.2
	NB-LTR	0.11	7	A	0.4	0.11	8	A	0.4
	SB-LTR	0.05	8	A	0.2	0.09	8	A	0.3
Boyd St & Taber St	Overall	-	1	A	-	-	1	A	-
	EB-LR	0.01	9	A	0.0	0.01	9	A	0.0
	NB-LT	0.00	8	A	0.0	0.01	8	A	0.0
	SB-TR	-	-	-	-	-	-	-	-
Mississippi Rd & Morris St	Overall	-	2	A	-	-	2	A	-
	EB-LTR	0.01	11	B	0.0	0.02	11	B	0.0
	WB-LTR	0.06	10	B	0.2	0.15	13	B	0.5
	NB-LTR	0.00	8	A	0.0	0.00	8	A	0.0
	SB-LTR	0.00	8	A	0.0	0.01	8	A	0.0
Morris St & Code Cres/Boyd St	Overall	-	4	A	-	-	3	A	-
	EB-LTR	0.02	8	A	0.1	0.02	7	A	0.1
	WB-LTR	0.00	7	A	0.0	0.00	7	A	0.0
	NB-LTR	0.01	9	A	0.0	0.00	8	A	0.0
	SB-LTR	0.03	9	A	0.1	0.03	9	A	0.1





The results for the opening year total traffic operations indicate no issues within the study area. The worst LOS identified is “B”, which is considered acceptable as per the assessment of operations. No queueing issues have been identified to be of concern. The only change of note is the northbound through-right movement on Boyd Street at Arthur Street is no longer free-flowing. The added delay to the movement is notably minor.

### 7.2. Five-Year Post Opening Total Traffic Operations

The future background volumes for the five-year post-opening horizon are visualized in **Exhibit 6**. The operational analysis for the future background five-year post opening horizon is tabulated in **Table 9**. The outputs for the synchro analysis are provided in **Appendix F**.

Table 9 - Five Year Post Opening Total Traffic Operations Analysis

Intersection	Movement	AM Peak Hour				PM Peak Hour			
		v/c	Delay	LOS	95th Q	v/c	Delay	LOS	95th Q
Boyd St & Woodward St	Overall	-	3	A	-	-	4	A	-
	EB-TR	-	-	-	-	-	-	-	-
	WB-LT	0.00	7	A	0.0	0.00	7	A	0.1
	NB-LR	0.02	9	A	0.1	0.05	9	A	0.0
Boyd St & Arthur St/166 Boyd	Overall	-	7	A	-	-	8	-	-
	EB-LTR	0.06	9	A	0.2	0.04	9	A	0.1
	WB-LTR	0.07	9	A	0.2	0.17	10	A	0.6
	NB-LTR	0.00	7	A	0.0	0.01	7	A	0.0
	SB-LTR	0.01	7	A	0.0	0.01	7	A	0.0
Napolean St & Arthur St	Overall	-	8	A	-	-	9	A	-
	EB-LTR	0.11	8	A	0.4	0.09	8	A	0.3
	WB-LTR	0.12	8	A	0.4	0.29	9	A	1.2
	NB-LTR	0.11	7	A	0.4	0.11	8	A	0.4
	SB-LTR	0.05	8	A	0.2	0.09	8	A	0.3
Boyd St & Taber St	Overall	-	1	A	-	-	1	A	-
	EB-LR	0.01	9	A	0	0.01	9	A	0
	NB-LT	0.00	8	A	0	0.01	8	A	0
	SB-TR	-	-	-	-	-	-	-	-
Mississippi Rd & Morris St	Overall	-	2	A	-	-	2	A	-
	EB-LTR	0.01	11	B	0.0	0.02	12	B	0.1
	WB-LTR	0.06	10	B	0.2	0.16	13	B	0.5
	NB-LTR	0.00	8	A	0.0	0.00	8	A	0.0
	SB-LTR	0.00	8	A	0.0	0.01	8	A	0.0
Morris St & Code Cres/Boyd St	Overall	-	4	A	-	-	3	A	-
	EB-LTR	0.02	8	A	0.1	0.02	7	A	0.1
	WB-LTR	0.00	7	A	0.0	0.00	7	A	0.0
	NB-LTR	0.01	9	A	0.0	0.00	8	A	0.0
	SB-LTR	0.03	9	A	0.1	0.03	9	A	0.1



The added site trips to the study area do not cause any adverse impacts on traffic conditions in the five-year post opening horizon. The worst LOS identified remains as “B” which is considered acceptable as per the assessment of operations. No issues with queueing have been identified. As mentioned for the opening year total horizon, the northbound-right movement for Boyd Street at Arthur Street is no longer free-flowing, with a minor delay being added.

It can be concluded that the 166 Boyd Street development has minimal impact regarding traffic concerns. No critical movements have been identified, nor have any movements being near a critical state. No queueing issues were identified in any scenario.

### **7.2.1. Boyd Street & Arthur Street/166 Boyd Intersection Analysis**

As per the terms of reference, the Town commented on the proposed south access of the development in relation to the future Boyd Street & Arthur Street intersection. As per the site plan, the south access is expected to be offset roughly 25 metres south of the intersection. The town raised concerns about the functionality of the access and the intersection.

During the analysis of this study, the 166 Boyd access was modelled to be apart of the Boyd Street & Arthur Street intersection during the future total scenarios. Only a single access point was modelled to determine worst-case conditions (ie everyone leaving and entering via the south access).

The operational analysis for the future total conditions at the intersection does not indicate any issues for the access and the intersection. The volume of traffic at the location is minor, even with all site trips being assigned to the singular access point.

It can be determined that there are no operational concerns regarding the site access and Boyd Street & Arthur Street intersection.

## 8. Site Plan Review

### 8.1. Vehicle Maneuverability

The site plan was assessed to determine vehicle maneuverability for site access and circulation. The assessment was completed using AutoTURN.

Passenger vehicles (PTAC), heavy single unit trucks (HSU) and waste collection vehicles (Rear-Load Garbage Truck, NCHRP Report 659 2010 (herein “WCV”)) were used to examine site access and circulation. PTAC vehicle maneuverability was examined on various driveways within the site, determining that typical vehicles are able to maneuver in and out of driveways without causing obstruction or issue.

HSU vehicle maneuverability was examined at both access points, entering and exiting from both directions, as well as turning onto Arthur Street leaving the south access. No issues were identified, determining that large trucks are able to access and depart the site without concern.

WCV maneuverability was examined to determine if a standard waste collection vehicle can access the site, circulate through the site without issue, and depart the site. The circulation was completed for a waste collection vehicle travelling both southbound and northbound; the southbound vehicle also included examining if the vehicle were to turn onto Arthur Street from the site. No issues were identified for the maneuverability.

The AutoTURN maneuverability diagrams are provided as Exhibits:

- **Exhibit 7-** PTAC parking maneuvering in and out of various driveway locations.
- **Exhibit 8–** HSU access maneuvering in and out at both access locations.
- **Exhibit 9–** WCV access and circulation maneuvering, vehicle entering and exiting northbound.
- **Exhibit 10–** WCV access and circulation maneuvering, vehicle entering southbound and exiting both southbound and onto Arthur Street.

### 8.2. Sight Distance

A review of the sight distances at the accesses was completed. The assumed posted speed along Boyd Street is 50 km/h with a design speed of 60 km/h. The design vehicle used was a passenger car per Transportation Association of Canada (TAC) standards (PTAC). Using the TAC guidelines in the Geometric Design Guide for Canadian Roads Manual, (Section 9.2.2.3), the intersection sight distance for a vehicle to make a left turn from a stopping position is 130 metres. The intersection sight distance (ISD) required to make a right-turn from a stopping position is 110 metres. **Exhibit 11** illustrates the intersection sight distance for the north access, and **Exhibit 12** illustrates the intersection sight distance for the south access. No issues are identified for either access.

A review of the roadway characteristics indicates that there is no horizontal curve or steep vertical curve. The road profile on Boyd Street is generally flat. The stopping sight distance (SSD) is the required distance for a vehicle approaching from the north or south approach to detect or observe a stopped vehicle at the site driveway. The stopping sight distance for a vehicle along Boyd Street is 85 metres. The stopping sight distances are visualized as **Exhibit 13**. Based on our review, the required stopping sight distance of 85 metres is met for vehicles approaching the proposed site access.

To allow drivers to have visibility when departing or entering the development at both access points, the visibility triangles provided in the sight distance diagrams should remain clear of any obstructions.

The sight distance around the bends of the crescent within the site plan were assessed. **Exhibit 14** illustrates the intersection sight distance around the bends, and **Exhibit 15** illustrates the stopping sight distances around the bends. The sight distances diagrams determine that vehicles can traverse the site without any issues. The visibility triangles should remain clear of obstructions as to not hinder sight distance in these areas.



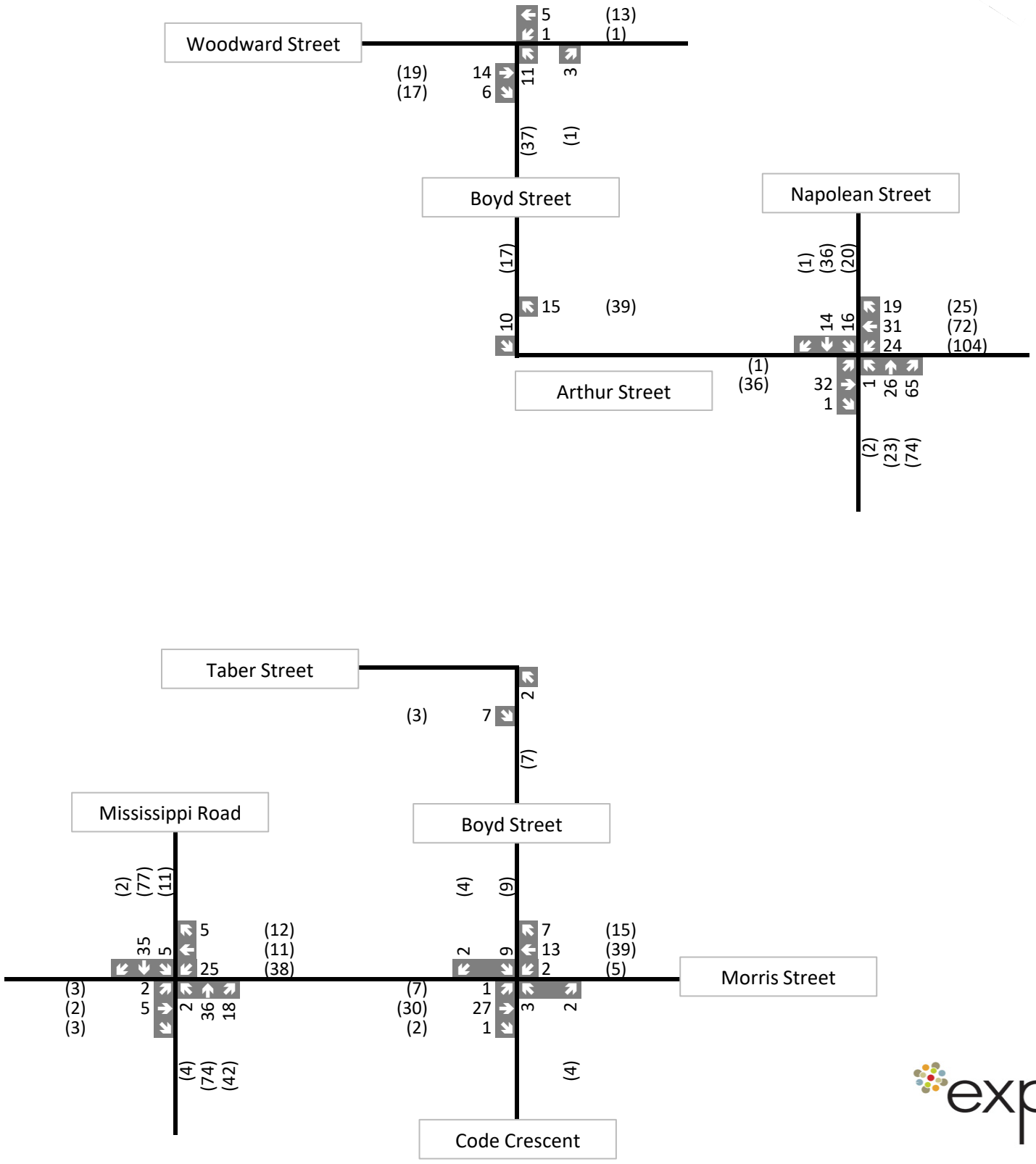
## 9. Conclusions

EXP has been retained by A & B Bulat Homes Ltd. to prepare a traffic impact study in support of the proposed residential development located at 166 Boyd Street. Based on our assessment, the following conclusions have been made:

- An operational assessment of the existing conditions did not identify any critical movements within the study area. The worst LOS identified was “B”.
- The Boyd Street connection between Arthur Street and Taber Street is assumed to be completed within the opening year horizon. Existing traffic volumes were redistributed to utilize the connection.
- The operational assessment for the background horizon years indicates acceptable traffic operations within the study area, and the Boyd Street connection resulting in no adverse effects on traffic patterns.
- The site is expected to generate 45 AM peak hour trips and 51 PM peak hour trips.
- Operation assessments for the total horizon years do not indicate any critical movements based on the addition of site trips into the network.
- The vehicle maneuverability for passenger vehicles, trucks and waste collection vehicles was verified to be acceptable in regarding to the site access and circulation.
- Both intersection sight distance and stopping sight distances for the accesses were verified to be acceptable; visibility should be kept unobstructed within the sight triangles.

It is concluded that the development of 166 Boyd Street would have a minimal impact on the overall transportation network.

## Exhibits

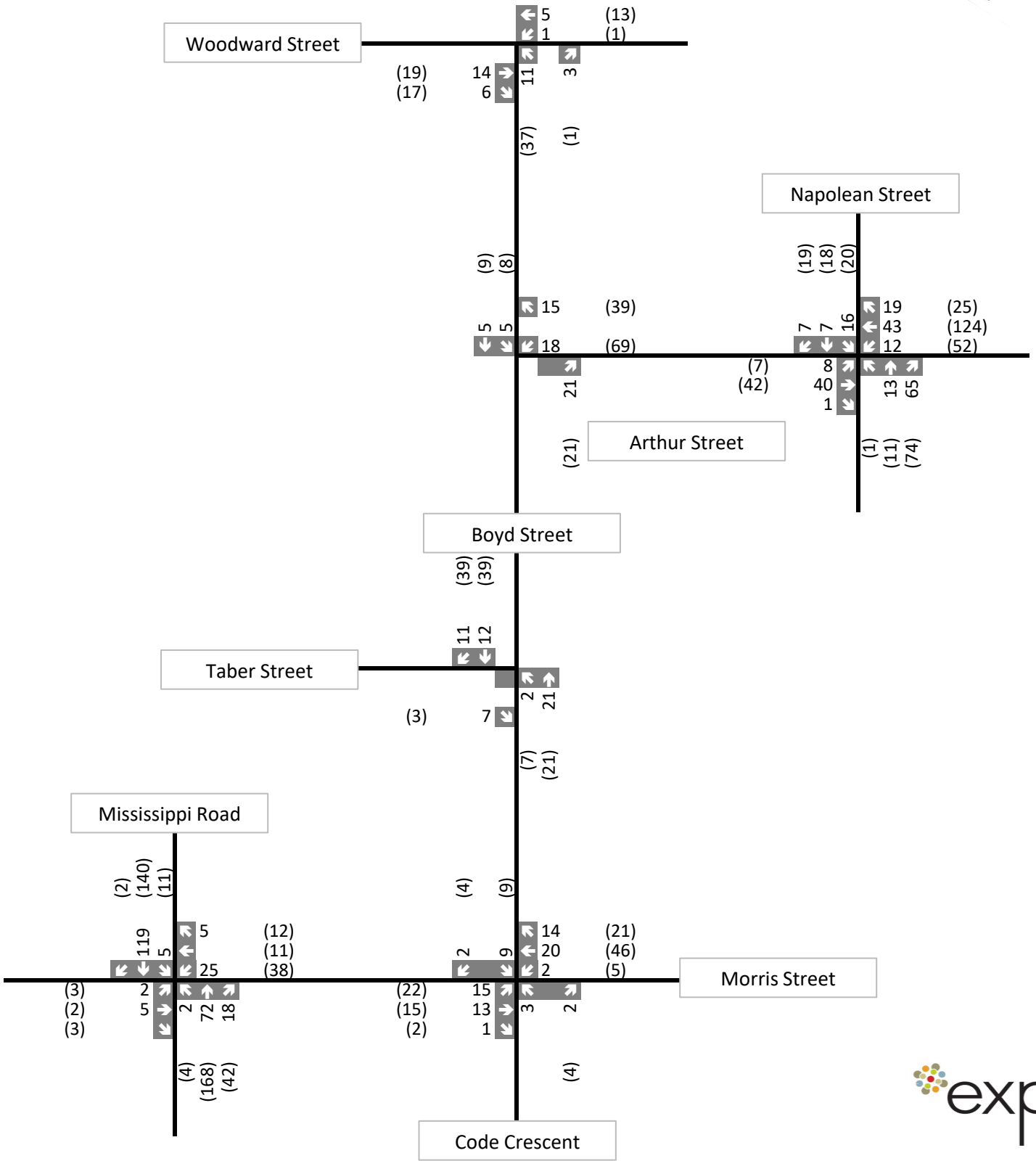


Legend

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

Exhibit 1

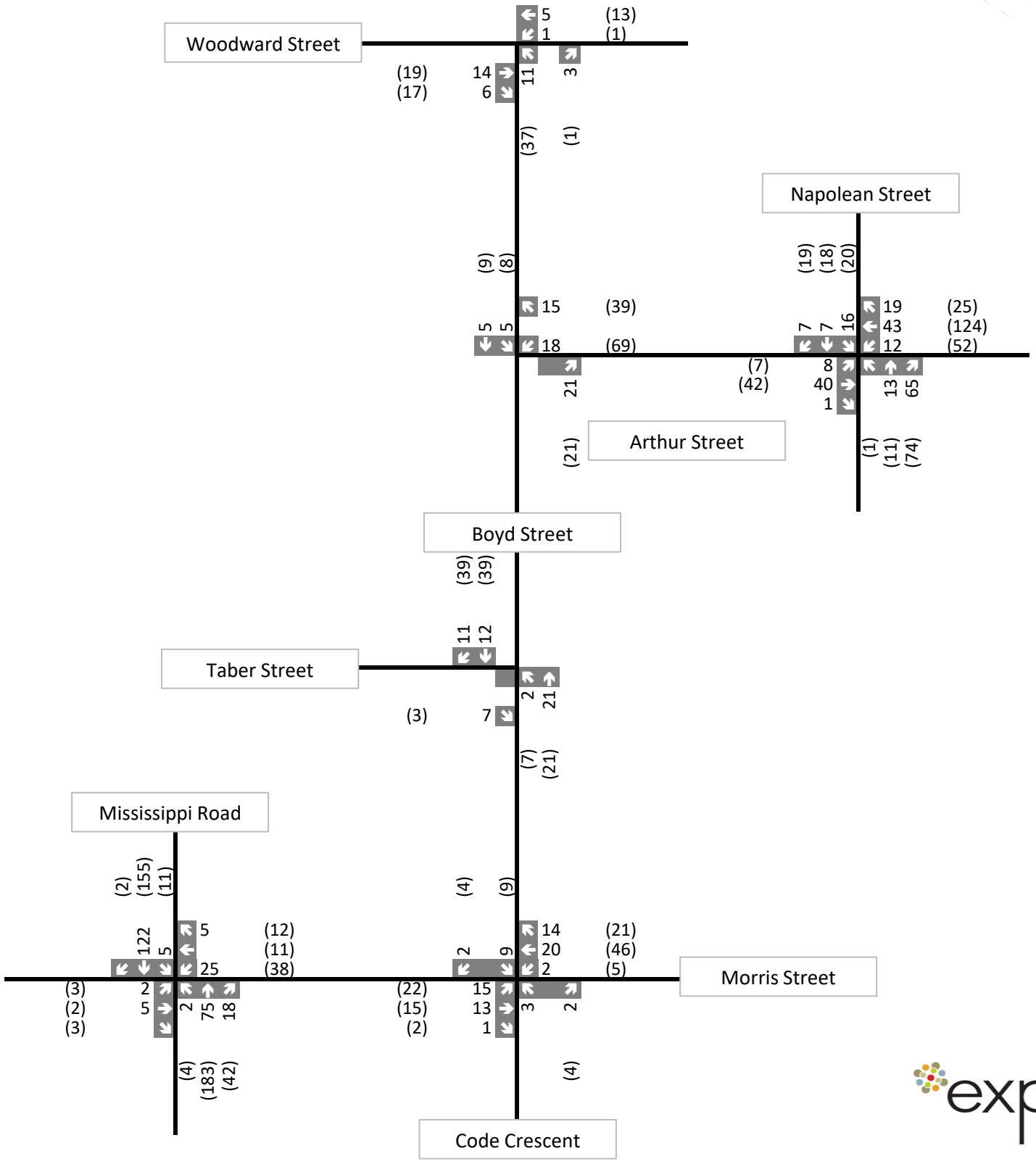
Existing Traffic Volumes



**Legend**

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

**Exhibit 2**  
Opening Year  
Background Traffic  
Volumes

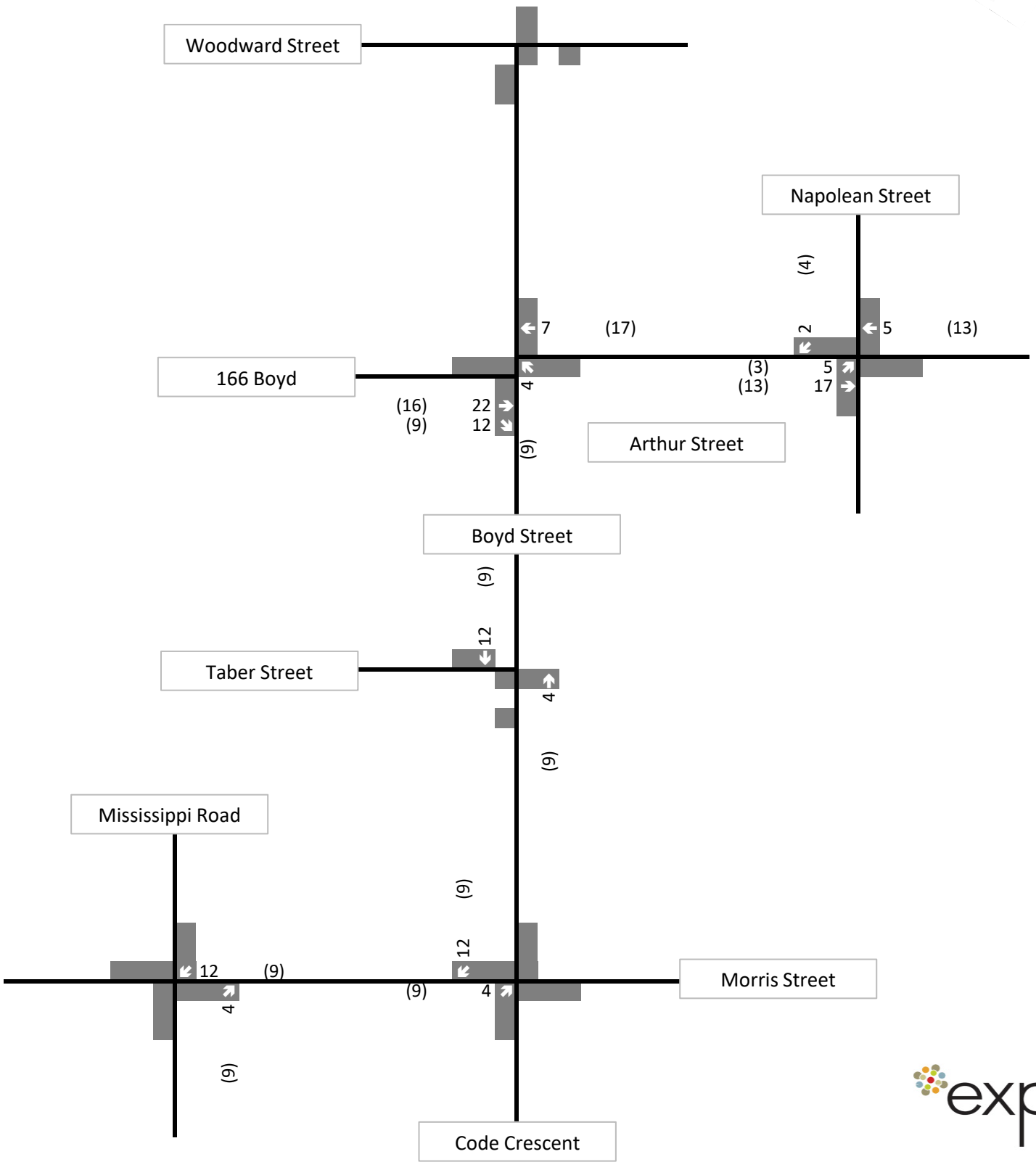


**Legend**

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

**Exhibit 3**  
Five Year Post Opening  
Background Traffic  
Volumes





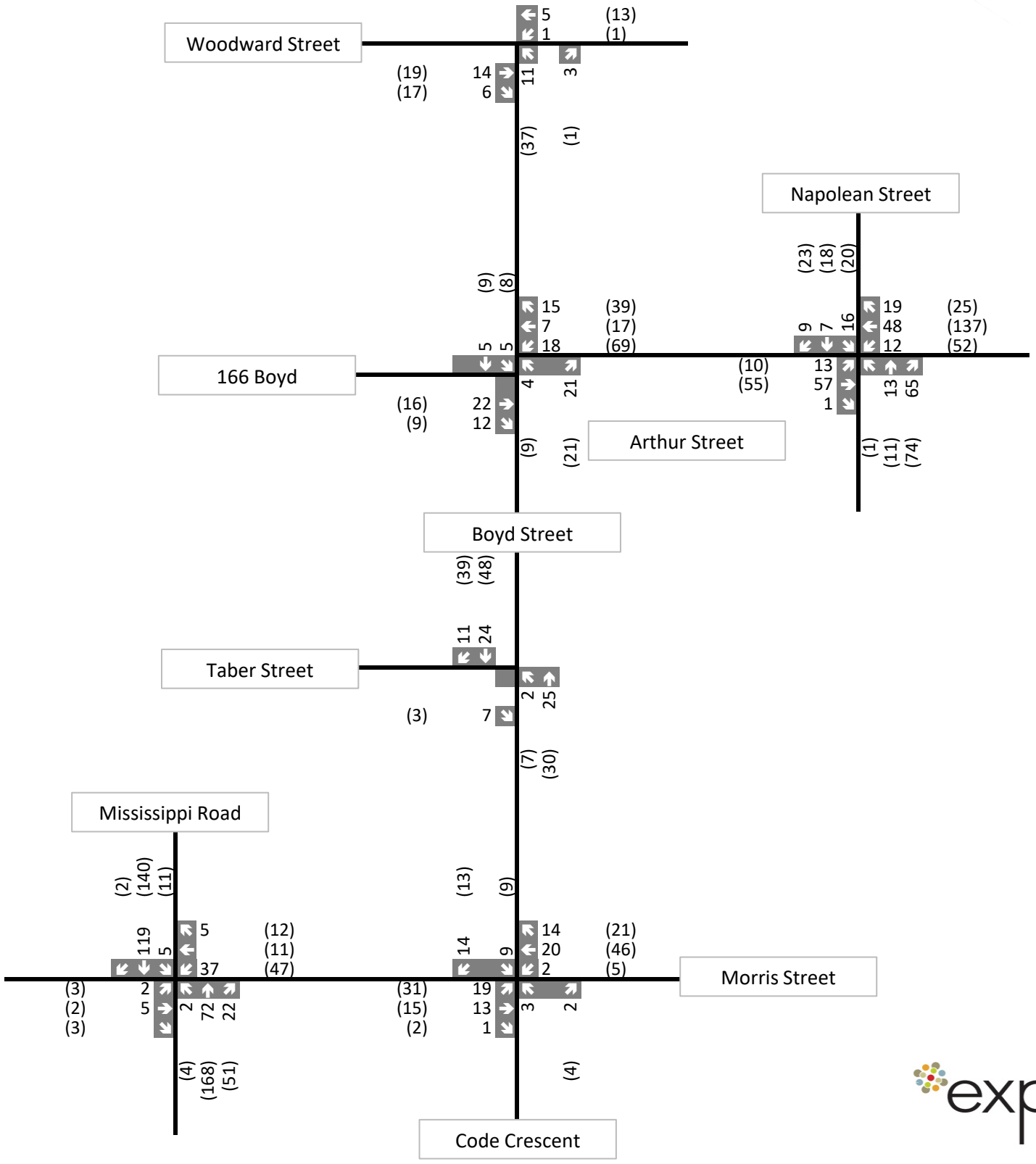
Legend

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

Exhibit 4

Site Trip Assignment





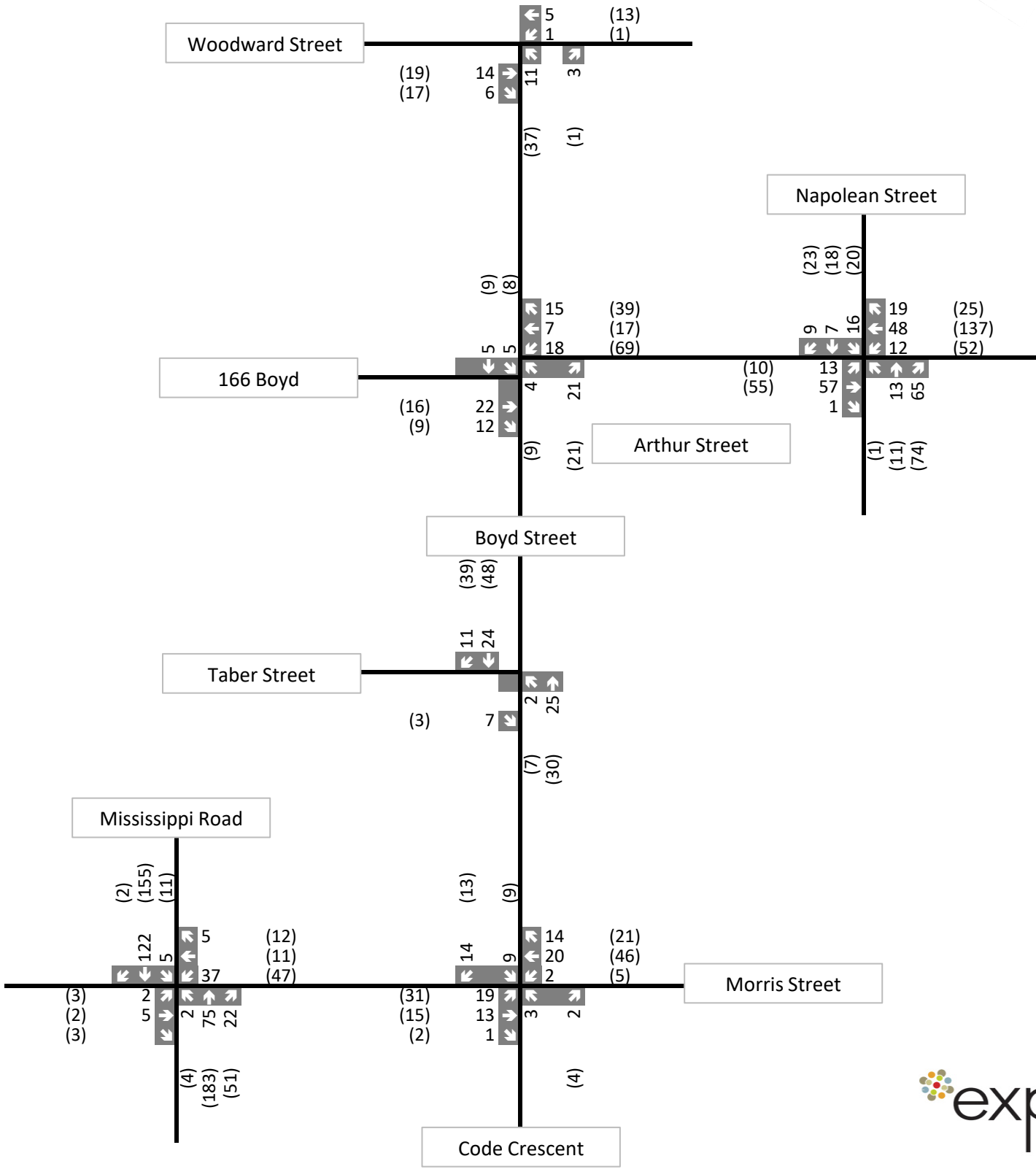
**Legend**

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

**Exhibit 5**

Opening Year Total Traffic Volumes





**Legend**

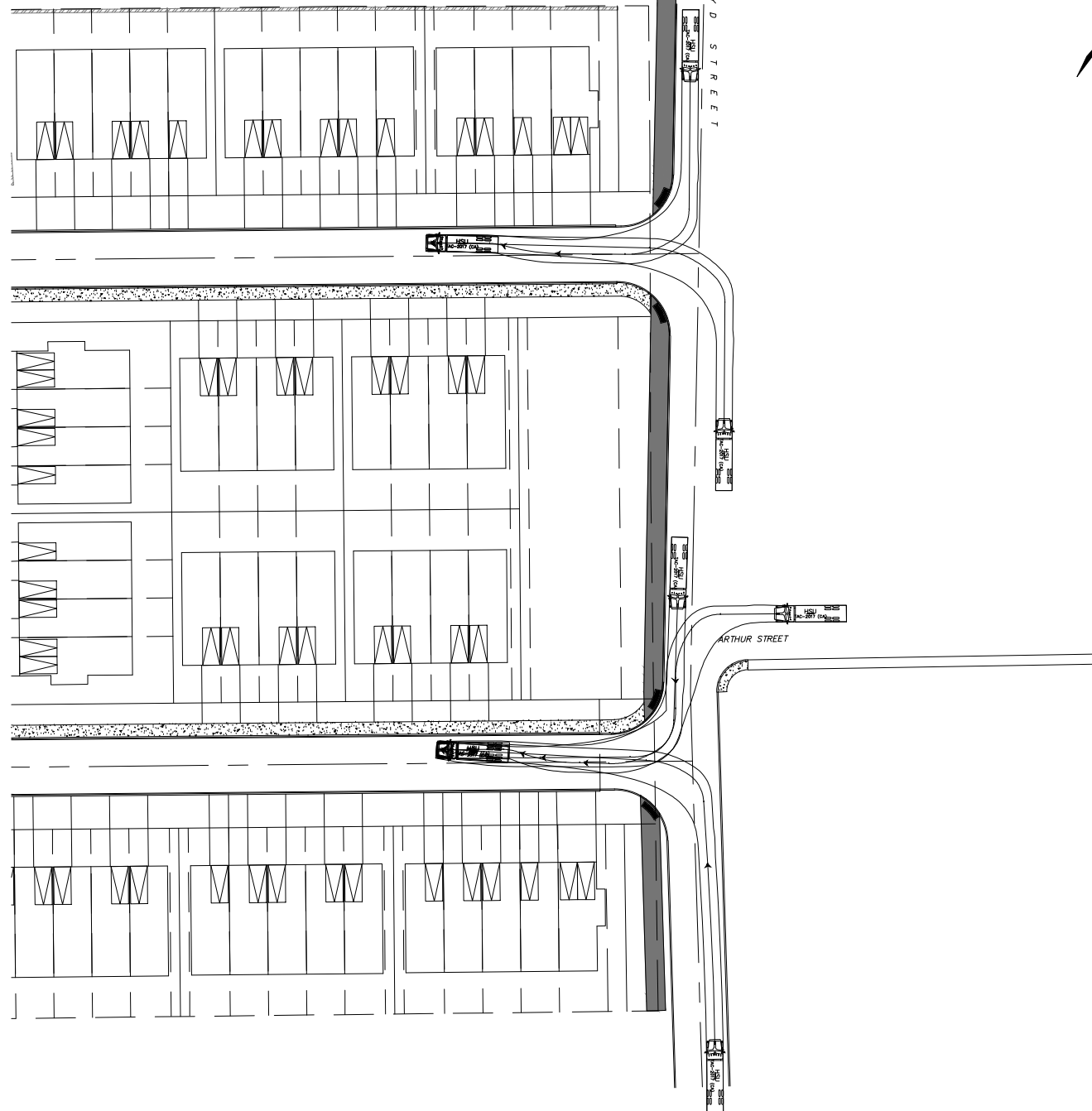
- xx A.M. Peak Hour Traffic Volumes
- (xx) P.M. Peak Hour Traffic Volumes

**Exhibit 6**

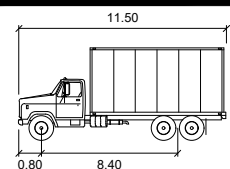
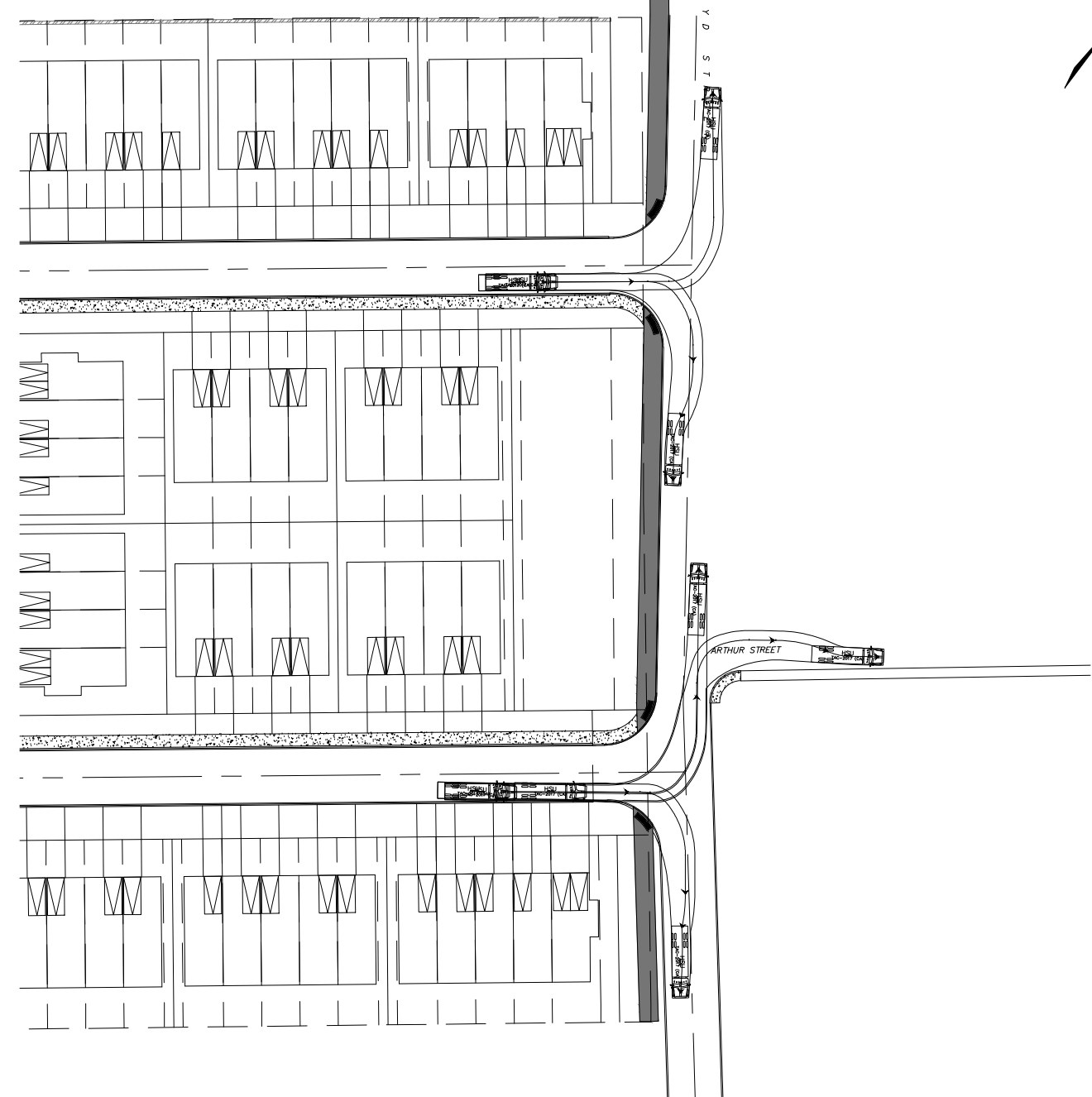
Five Year Post Opening  
Total Traffic Volumes



# HSU INBOUND



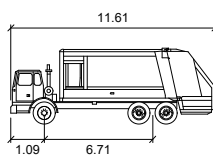
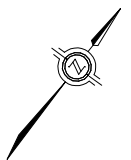
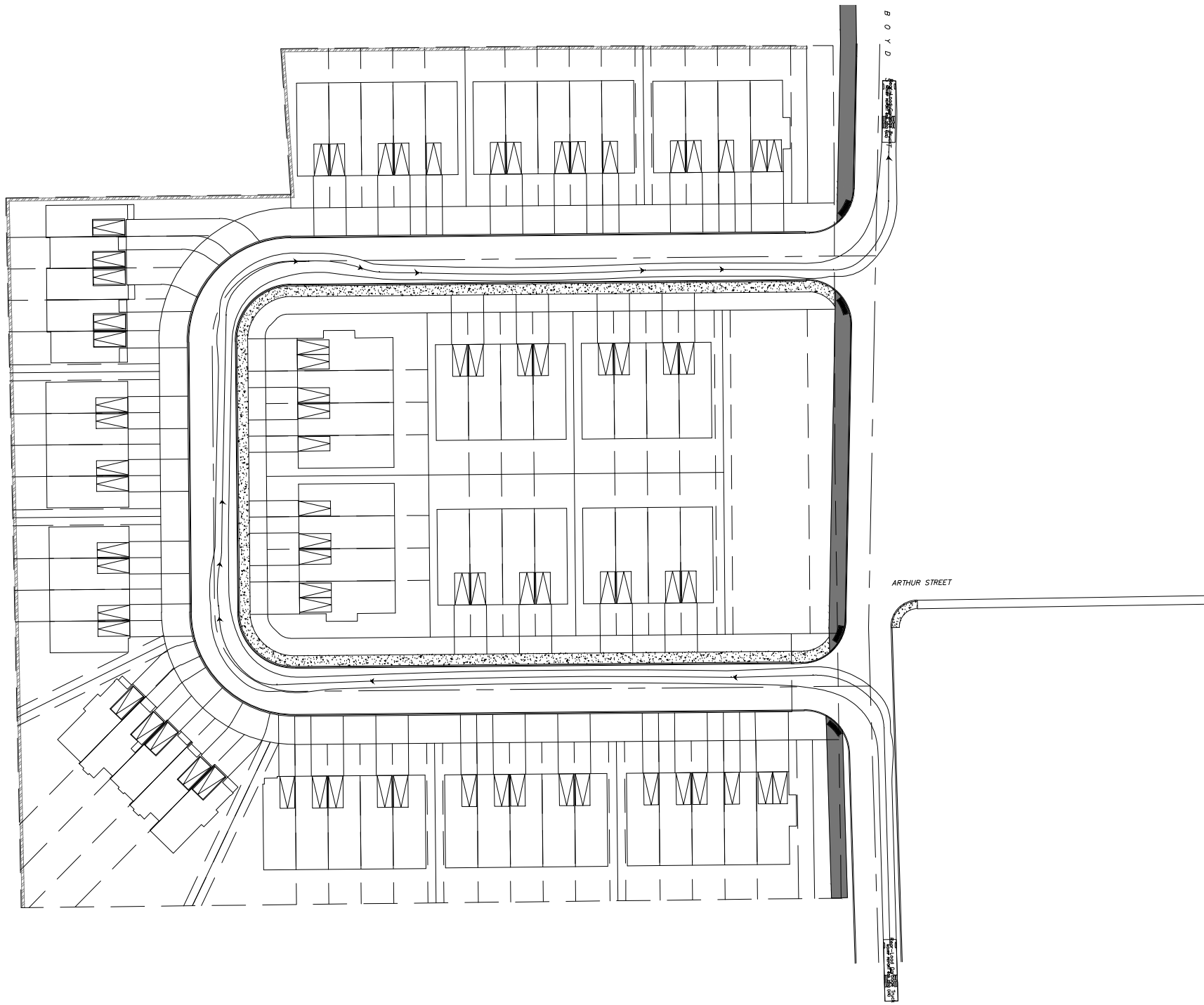
# HSU OUTBOUND



HSU	
	metres
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 40.0



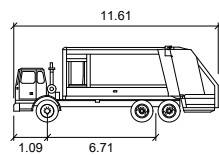
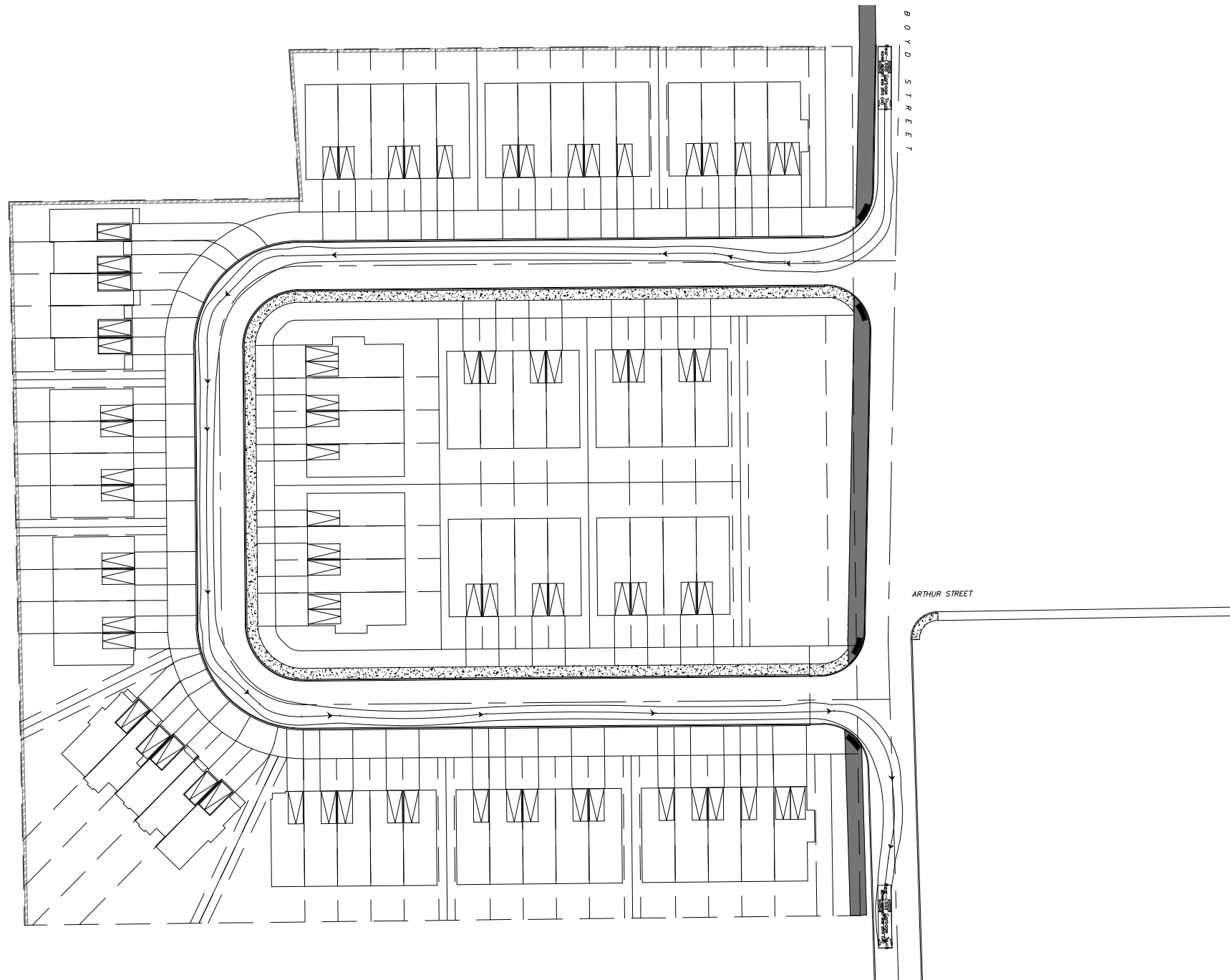
Project:		166 BOYD STREET TRAFFIC IMPACT STUDY	
Title:		HSU VEHICLE MANEUVERING	
Approved by:	D.B.	Date:	JUN 21, 2024
		Project No.:	OTT-00262415-A0
Drawn by:	M.C.	Scale:	N.T.S.
		Exhibit no.:	08



Rear-Load Garbage Truck  
 meters  
 Width : 2.44  
 Track : 2.44  
 Lock to Lock Time : 6.0  
 Steering Angle : 27.4



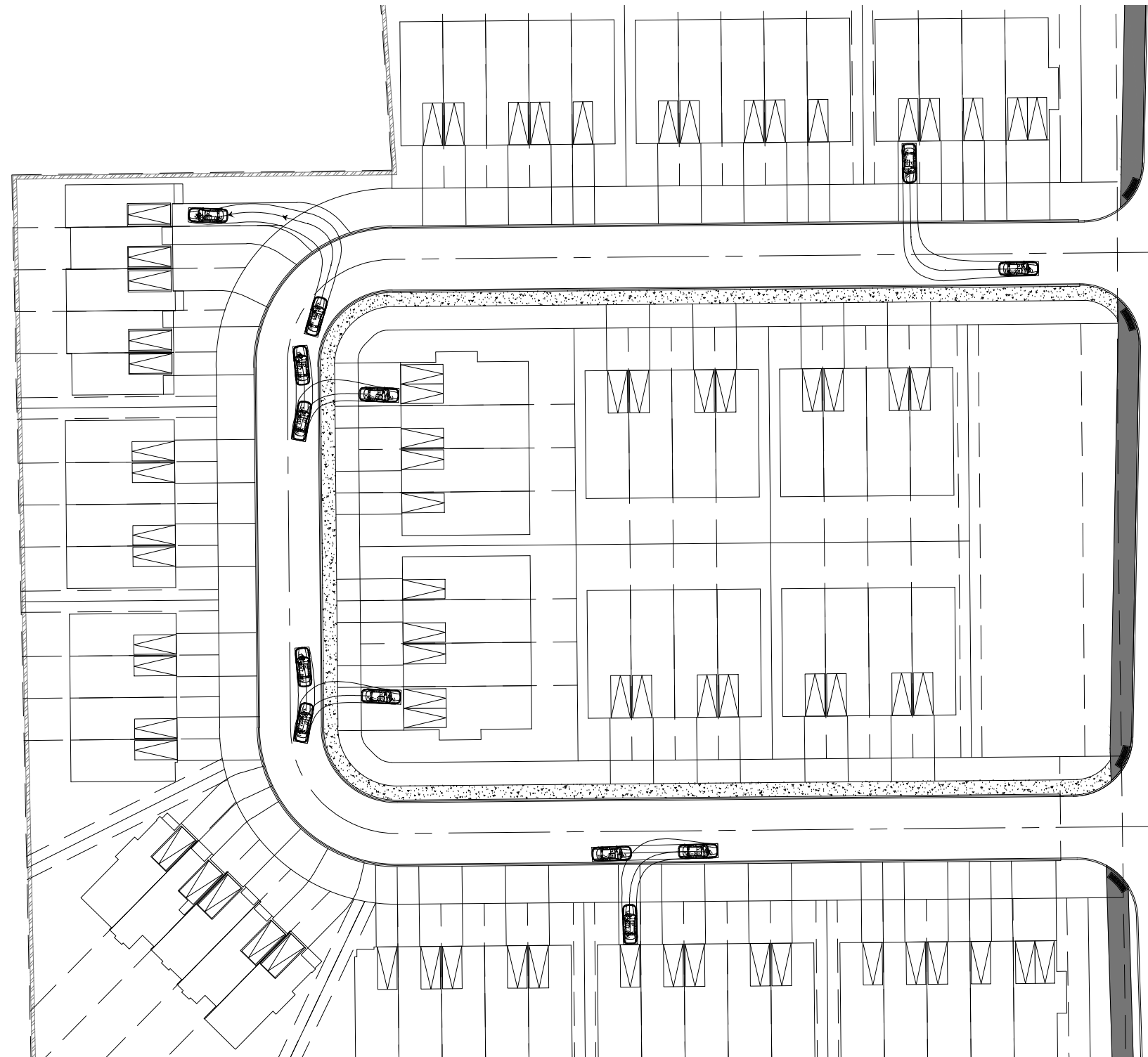
Project:		166 BOYD STREET TRAFFIC IMPACT STUDY	
Title:		WCV MANUEVERING - NORTHBOUND	
Approved by:	D.B.	Date:	JUN 21, 2024
		Project No.:	OTT-00262415-A0
Drawn by:	M.C.	Scale:	N.T.S.
		Exhibit no.:	09



Rear-Load Garbage Truck  
 meters  
 Width : 2.44  
 Track : 2.44  
 Lock to Lock Time : 6.0  
 Steering Angle : 27.4

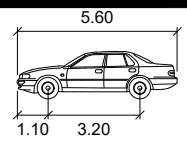


Project:		166 BOYD STREET TRAFFIC IMPACT STUDY	
Title:		WCV MANUEVERING - SOUTHBOUND	
Approved by:	D.B.	Date:	JUN 21, 2024
		Project No.:	OTT-00262415-A0
Drawn by:	M.C.	Scale:	N.T.S.
		Exhibit no.:	10



S T R E E T

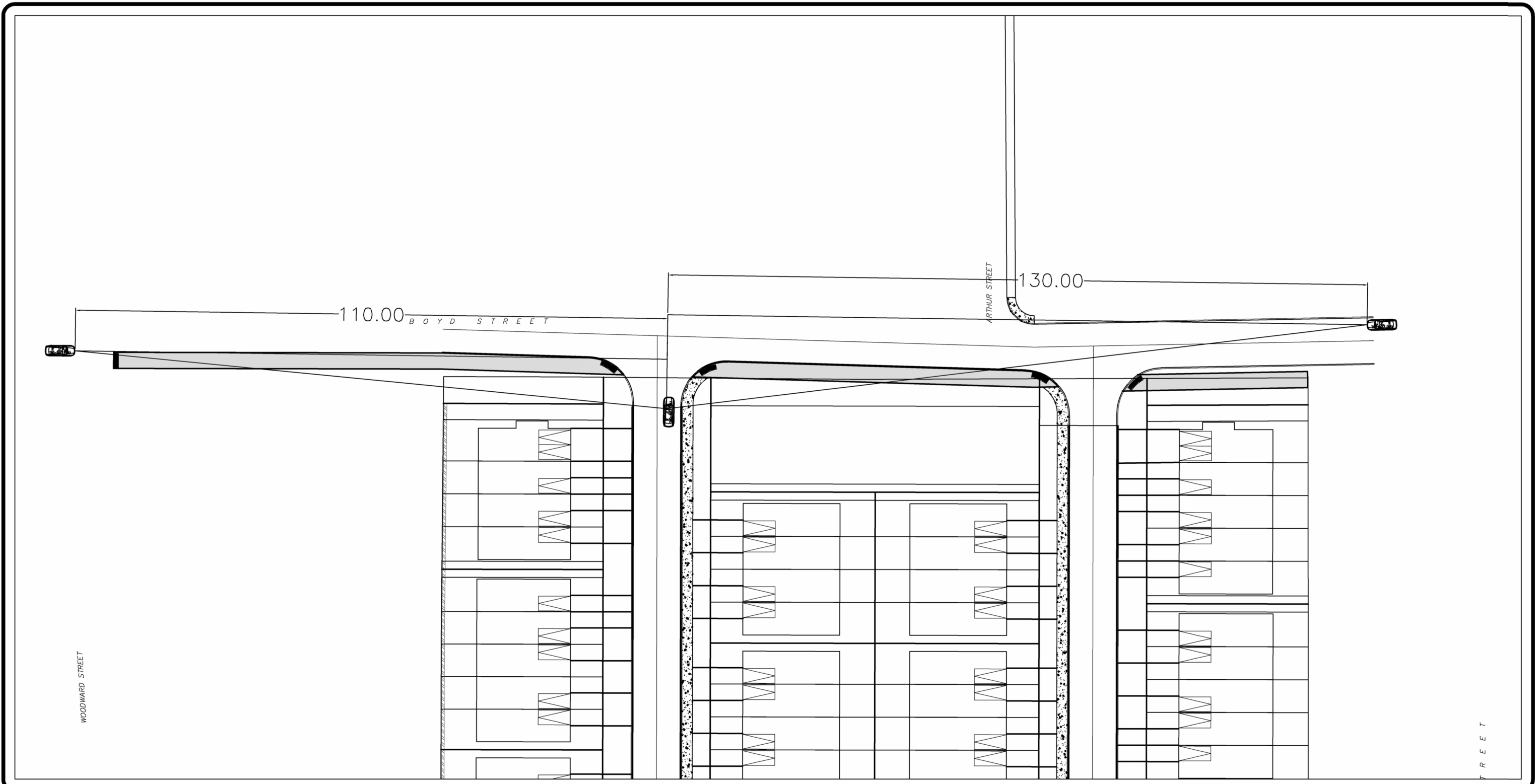
ARTHUR STREET



P  
 Width : 2.00 meters  
 Track : 2.00  
 Lock to Lock Time : 6.0  
 Steering Angle : 35.9

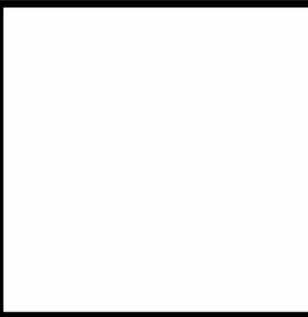
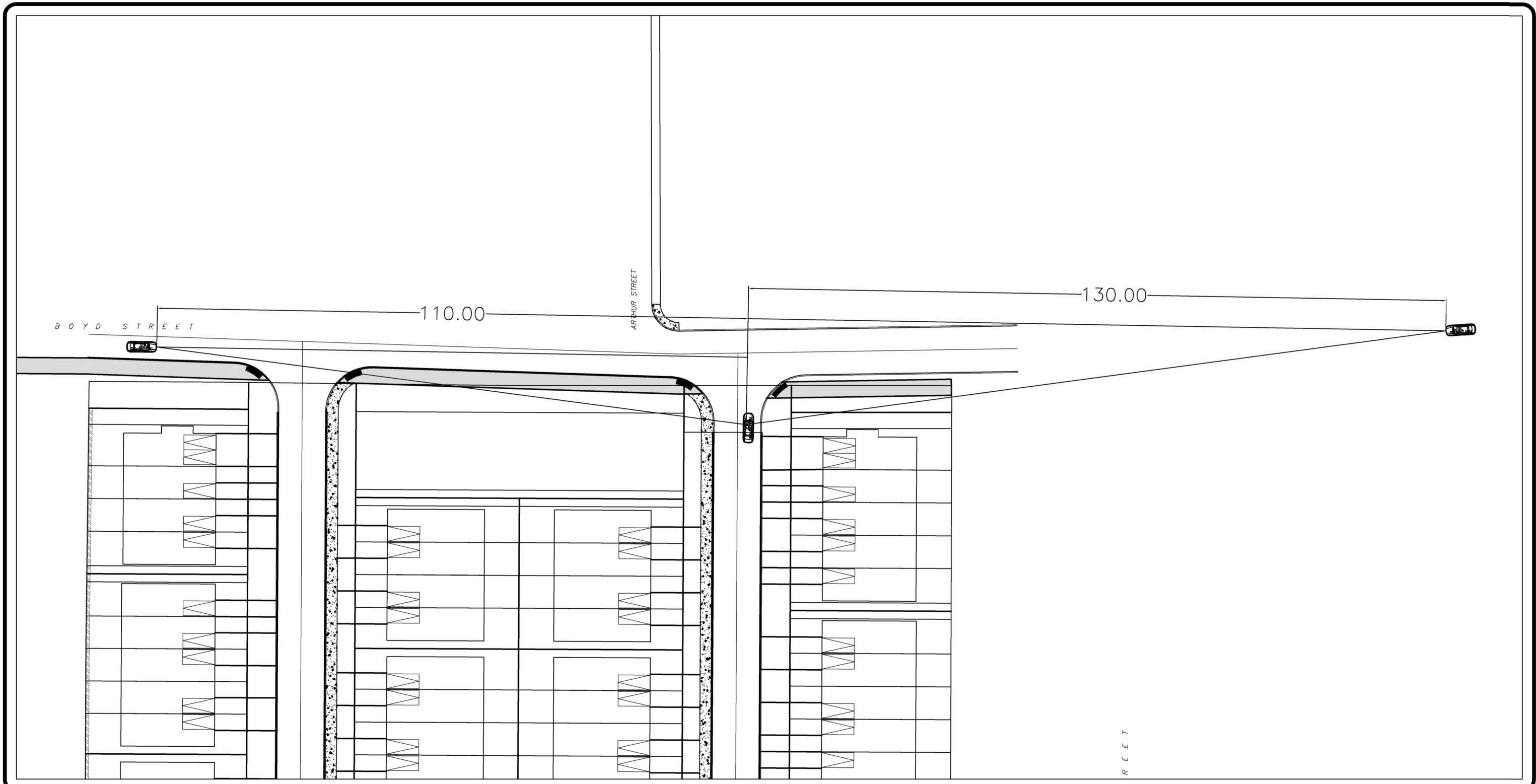


Project:			166 BOYD STREET TRAFFIC IMPACT STUDY		
Title:			PTAC PARKING MANEUVERING		
Approved by:	D.B.	Date:	JUN 21, 2024	Project No.:	OTT-00262415-A0
Drawn by:	M.C.	Scale:	N.T.S.	Exhibit no.:	07

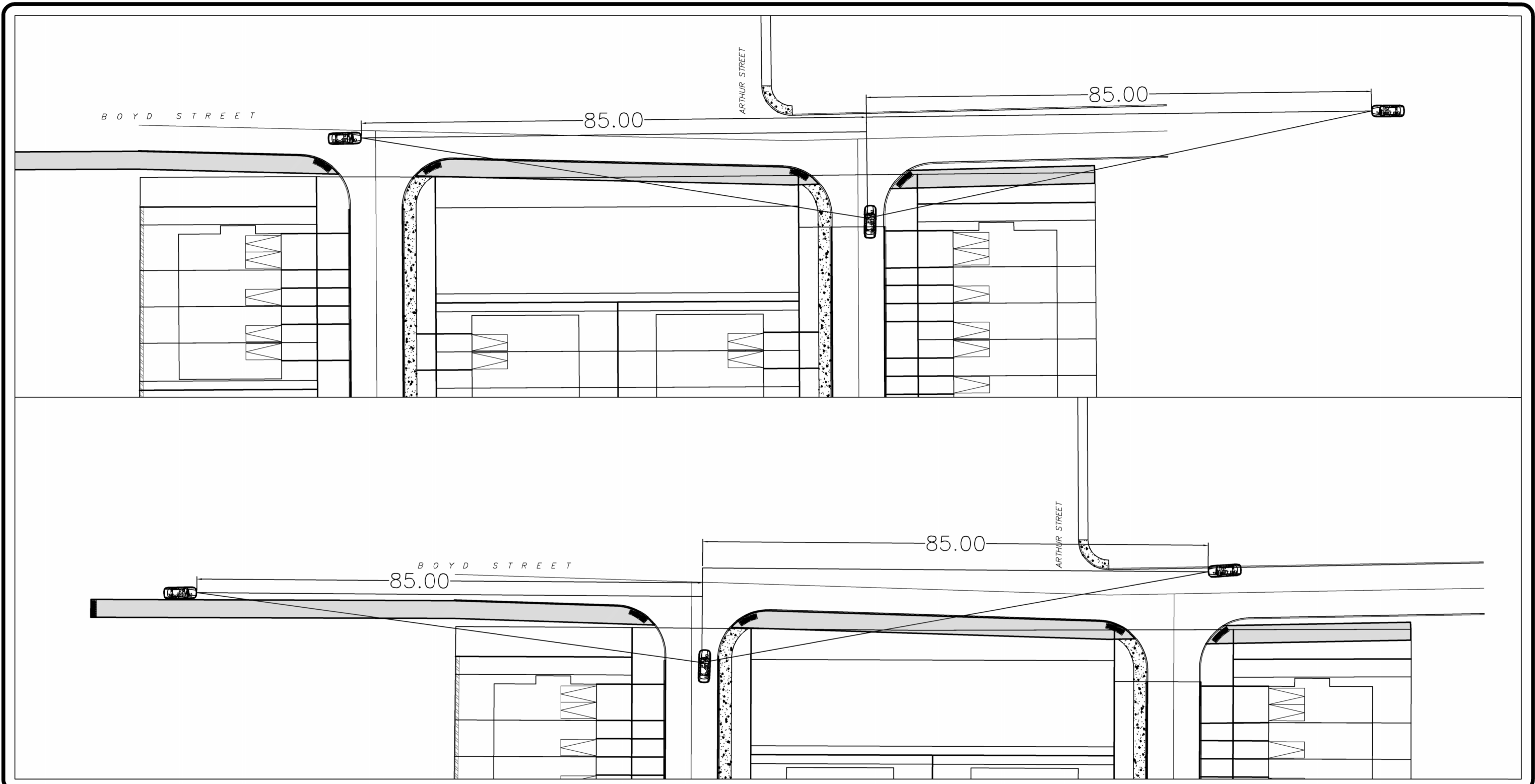


Project:			166 BOYD STREET TRAFFIC IMPACT STUDY		
Title:			INTERSECTION SIGHT DISTANCE - NORTH ACCESS		
Approved by:	D.B.	Date:	JUN 21, 2024	Project No.:	OTT-00262415-A0
Drawn by:	M.C.	Scale:	N.T.S	Exhibit no.:	11

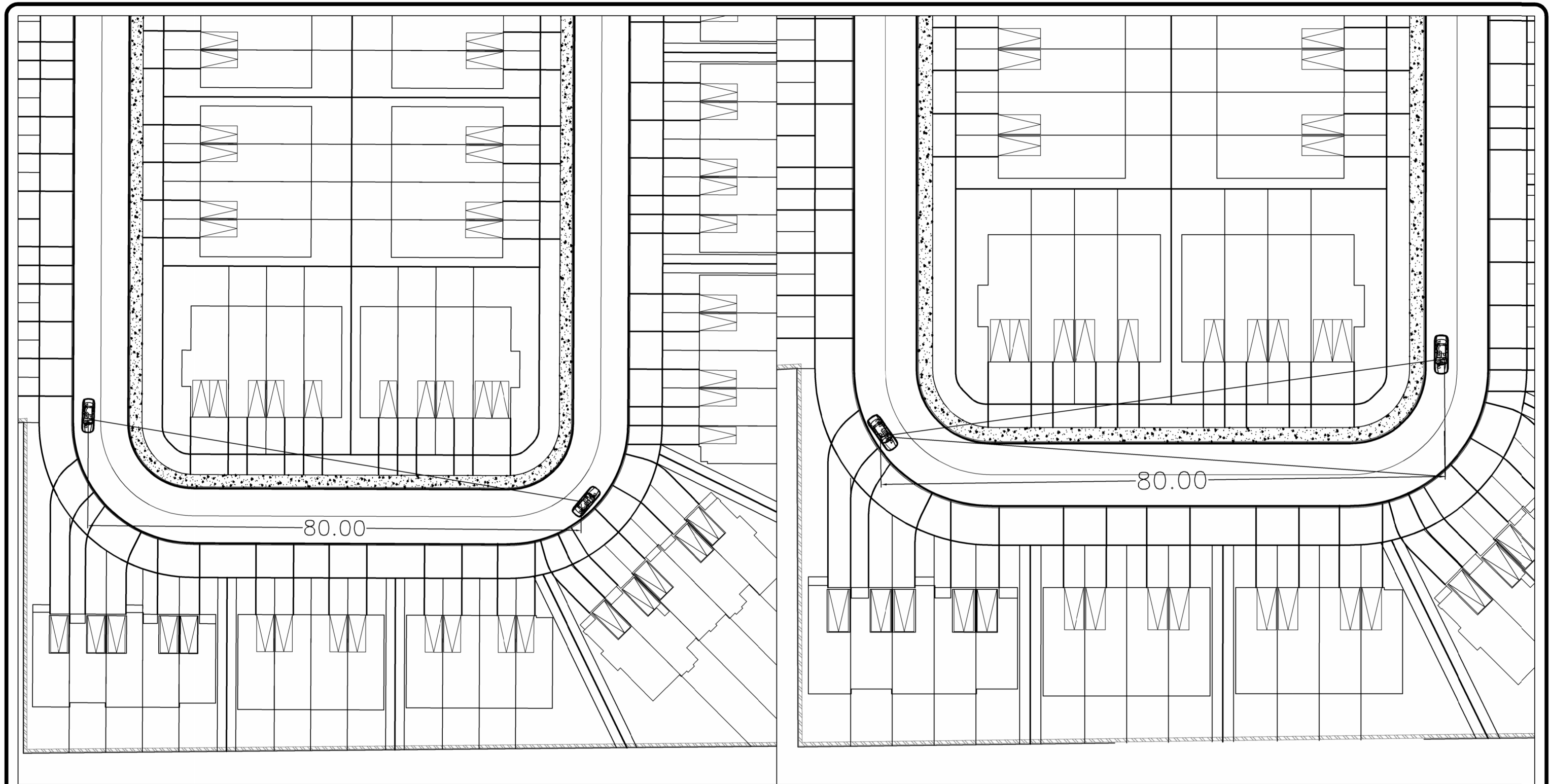




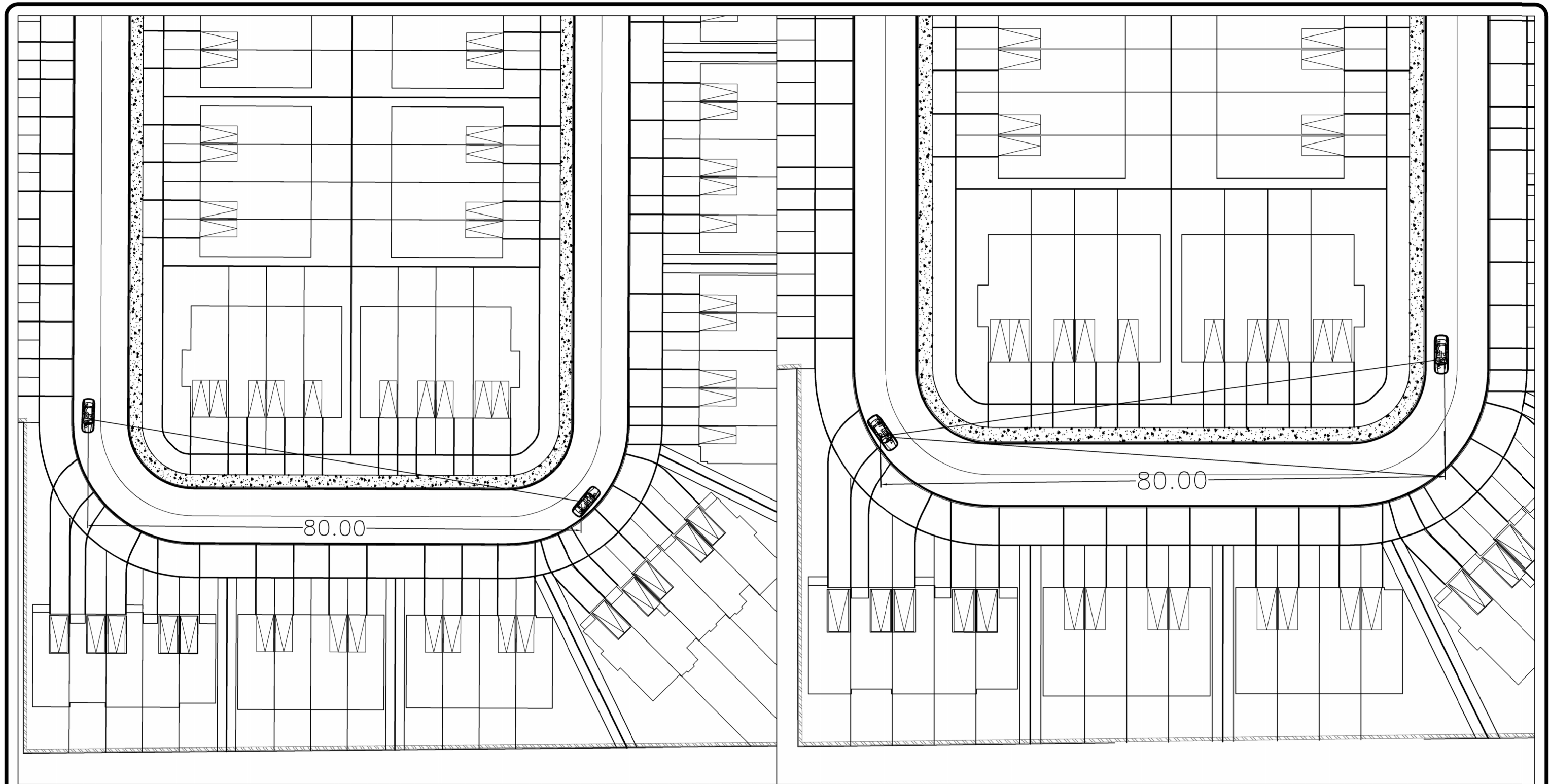
Project:			166 BOYD STREET TRAFFIC IMPACT STUDY		
Title:			INTERSECTION SIGHT DISTANCE - SOUTH ACCESS		
Approved by:	D.B.	Date:	JUN 21, 2024	Project No.:	OTT-00262415-A0
Drawn by:	M.C.	Scale:	N.T.S	Exhibit no.:	12



Project:			166 BOYD STREET TRAFFIC IMPACT STUDY		
Title:			STOPPING SIGHT DISTANCE		
Approved by:	D.B.	Date:	JUN 21, 2024	Project No.:	OTT-00262415-A0
Drawn by:	M.C.	Scale:	N.T.S	Exhibit no.:	13



Project:			166 BOYD STREET TRAFFIC IMPACT STUDY		
Title:			INTERSECTION SIGHT DISTANCE - INTERNAL SITE		
Approved by:	D.B.	Date:	JUN 21, 2024	Project No.:	OTT-00262415-A0
Drawn by:	M.C.	Scale:	N.T.S	Exhibit no.:	14








Project:			166 BOYD STREET TRAFFIC IMPACT STUDY		
Title:			STOPPING SIGHT DISTANCE - INTERNAL SITE		
Approved by:	D.B.	Date:	JUN 21, 2024	Project No.:	OTT-00262415-A0
Drawn by:	M.C.	Scale:	N.T.S	Exhibit no.:	15

Appendix A:  
Terms of Reference

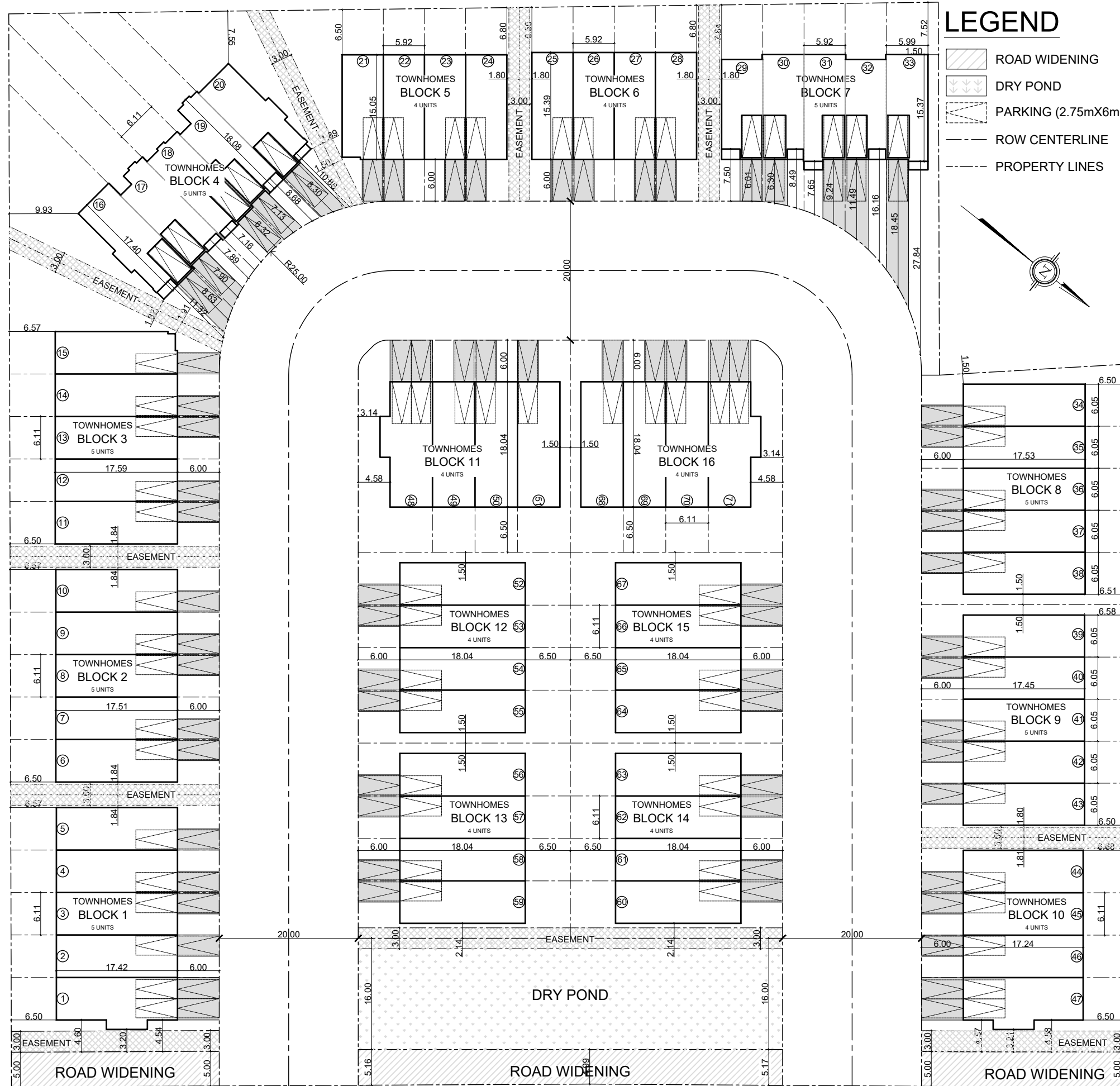
## 166 Boyd Terms of Reference

EXP has been retained to prepare a traffic study in support of the proposed residential subdivision on Boyd Street. Our proposed workplan includes the following scope:

- Traffic analysis will be conducted using Synchro 11 software, which utilizes HCM methodology for the weekday AM and weekday PM periods.
- The analysis periods will be for the existing year and five-year horizon. 
- Intersection analysis at the following locations is considered:
  - Woodward Street & Boyd Street;
  - Morris Street & Boyd Street / Code Crescent; 
  - Mississippi Road & Morris Street; and
  - Napoleon Street & Arthur Street.
- EXP will arrange for turning movement counts to be conducted.
- If any background developments should be considered for the traffic analysis, the Town should provide these to EXP. 
- For future traffic growth, EXP will assume a growth rate of 2.00% along through movements on Mississippi Road. 
- Site generated traffic will be estimated based on rates outlined in the Institute of Transportation Engineers Trip Generation Manual 11th Edition.
- Site trip assignment and distribution will be derived based on turning movement proportions of conducted turning movement counts. 
- Any improvements which may be necessary to improve traffic operations within the study area will be provided within the report, if applicable.
- A site plan review will be conducted, which will include reviewing the site circulation as well as a sightline review at the proposed site accesses. Transportation Association of Canada (TAC) Manual standards will be used.

Appendix B:  
Proposed Site Plan





### LEGEND

- ROAD WIDENING
- DRY POND
- PARKING (2.75mX6m)
- ROW CENTERLINE
- PROPERTY LINES

### SITE INFORMATION

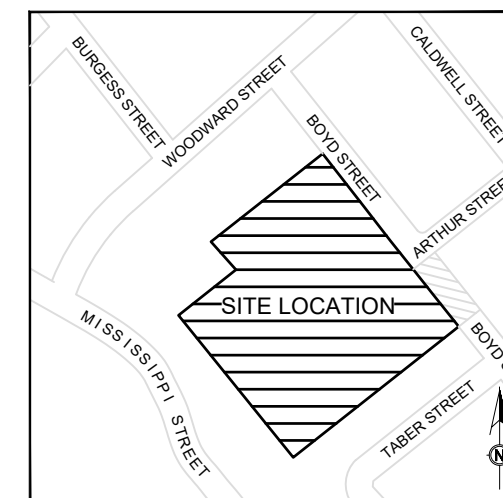
TOTAL SITE AREA	5.82 ac
TOTAL BUILDING AREA	xx
SITE COVERAGE	%
DEVELOPPED AREA	3.93 ac
ROAD AREA	1.50 ac
ROAD WIDENING AREA	0.15 ac
DRY POND AREA	0.24 ac
TOTAL NUMBER OF UNITS	71
EXISTING DISTRICT	RESIDENTIAL

### BLOCK COVERAGE INFORMATION

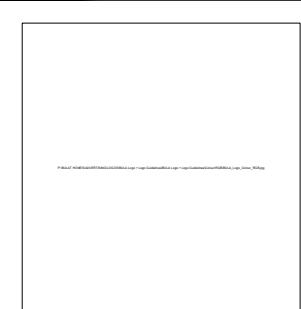
BLOCK NO.	AREA (m <sup>2</sup> )	COVERAGE (m <sup>2</sup> )	COVERAGE (%)	NO. OF DWELLINGS
1	xx	xx	xx	xx
2	xx	xx	xx	xx
3	xx	xx	xx	xx
4	xx	xx	xx	xx
5	xx	xx	xx	xx
6	xx	xx	xx	xx
7	xx	xx	xx	xx
8	xx	xx	xx	xx
9	xx	xx	xx	xx
10	xx	xx	xx	xx
11	xx	xx	xx	xx
12	xx	xx	xx	xx
13	xx	xx	xx	xx
14	xx	xx	xx	xx
15	xx	xx	xx	xx
16	xx	xx	xx	xx

### DEVELOPMENT STANDARDS - TOWNHOME DWELLINGS

SITE PROVISIONS	REQUIREMENTS	PROVIDED
LOT AREA (MIN)	NIL	
LOT COVERAGE (MAX)	60%	
LOT FRONTAGE (MIN)	5.5 M (18.04 FT)	
FRONT YARD BUILD WITHIN AREA	4.5 M, MIN (14.7 FT) 7.5 M, MAX (24.6 FT)	
EXTERIOR SIDE YARD BUILD WITHIN AREA	4.5 M, MIN (14.7 FT) 7.5 M, MAX (24.6 FT)	
INTERIOR SIDE YARD (MIN)	1.5 M (4.9 FT)	
REAR YARD DEPTH (MIN)	6.5 M (21.3 FT)	
USABLE LANDSCAPED OPEN SPACE IN THE REAR YARD (MIN)	30 SQM (538 SQFT)	
BUILDING HEIGHT (MAX)	11 M (36 FT)	
DWELLING UNIT AREA (MIN)	83.1 SQM (900 SQFT)	
NO ENCROACHMENT AREA FROM FRONT OR EXTERIOR SIDE LOT LINE	2.5 M (8.2 FT)	
PARKING SPACES	2 SPACES / DWELLING UNIT, ONE OF WHICH MAY BE PROVIDED WITH GARAGE	
GARAGE WIDTH	70% OVERALL LOT FRONTAGE (MAX)	
MAIN GARAGE FOUNDATION	SET BACK 6 M FROM FRONT OR EXT SIDE LOT (MIN)	



### KEY PLAN



202 - 11 GIFFORD STREET  
 NEPEAN, ONTARIO K2E 7S3  
 TEL: 723-1008 FAX: 727-0209  
 I HAVE REVIEWED THE PLANS AND  
 ACCEPT RESPONSIBILITY FOR THE  
 DESIGN.  
 INDIVIDUAL BCIN: 100692

X

### REVISIONS

PROJECT NAME:

**XX**  
 AREA: N/A SQFT APPROX

LOCATION:  
**BOYD STREET  
 CARLETON PLACE**

SHEET TITLE:  
**SITE PLAN**

SCALE: 3/16" = 1'-0" DWG. NO.

DRAWN: R LAROCQUE  
 DATE: 25/09/2020  
 PRINT DATE: 17/08/2023 - 8:25am

**S1.0**



Appendix C:  
Existing Traffic Data



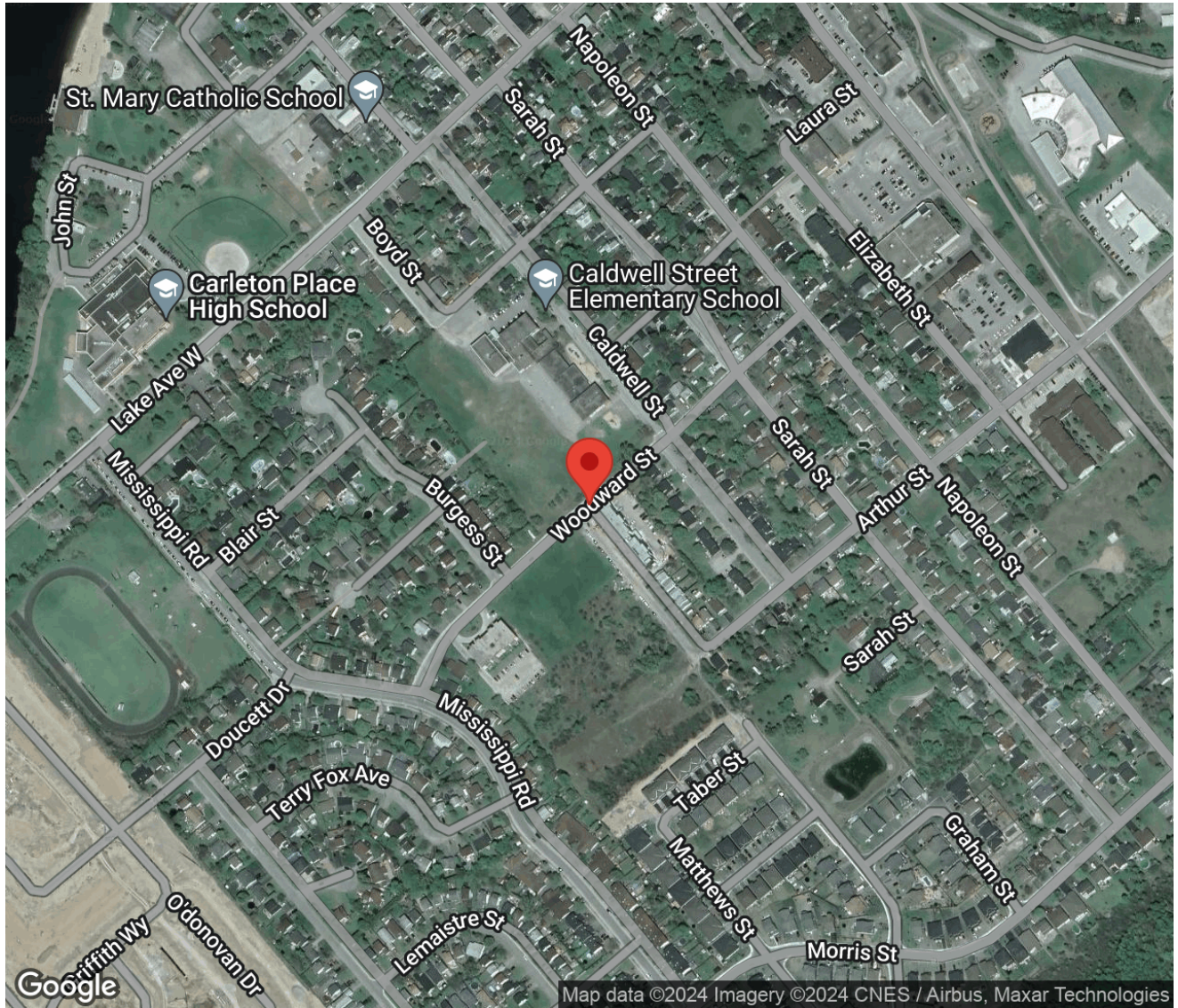
## Project #24-009 - EXP Services Inc.

### Intersection Count Report

**Intersection:** Woodward St & Boyd St  
**Municipality:** Carleton Place  
**Count Date:** Wednesday, Jan 10, 2024  
**Site Code:** 2400900001  
**Count Categories:** Cars, Trucks, Bicycles, Pedestrians  
**Count Period:** 07:00-09:00, 16:00-18:00  
**Weather:** Clear  
**Comments:**

## Traffic Count Map

Intersection: Woodward St & Boyd St  
Site Code: 2400900001  
Municipality: Carleton Place  
Count Date: Jan 10, 2024





## Traffic Count Summary

Intersection: Woodward St & Boyd St  
 Site Code: 2400900001  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### Boyd St - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	0	0	0	0	0	0	8	0	3	0	11	0	11
08:00 - 09:00	0	0	0	0	0	0	11	0	3	0	14	0	14
BREAK													
16:00 - 17:00	0	0	0	0	0	0	37	0	1	0	38	0	38
17:00 - 18:00	0	0	0	0	0	0	19	0	3	0	22	0	22
<b>GRAND TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>75</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>85</b>	<b>0</b>	<b>85</b>

## Traffic Count Summary

Intersection: Woodward St & Boyd St  
 Site Code: 2400900001  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### Woodward St - Traffic Summary

Hour	East Approach Totals						West Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	0	5	0	0	5	0	0	11	12	0	23	1	28
08:00 - 09:00	1	5	0	0	6	1	0	14	6	0	20	0	26
BREAK													
16:00 - 17:00	1	13	0	0	14	2	0	19	17	0	36	2	50
17:00 - 18:00	2	11	0	0	13	0	0	9	15	0	24	1	37
<b>GRAND TOTAL</b>	<b>4</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>3</b>	<b>0</b>	<b>53</b>	<b>50</b>	<b>0</b>	<b>103</b>	<b>4</b>	<b>141</b>



## Traffic Count Data

Intersection: Woodward St & Boyd St  
 Site Code: 2400900001  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### South Approach - Boyd St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	2	0	1	0	3	0	0	1	0	1	0	0	0	0	0	0
07:15	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
07:30	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
07:45	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
08:00	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
08:15	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
08:30	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
08:45	4	0	2	0	6	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	19	0	5	0	24	0	0	1	0	1	0	0	0	0	0	0



## Traffic Count Data

Intersection: Woodward St & Boyd St  
 Site Code: 2400900001  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### South Approach - Boyd St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
16:00	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
16:15	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
16:30	8	0	1	0	9	0	0	0	0	0	0	0	0	0	0	0	0
16:45	13	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0
17:00	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
17:15	7	0	1	0	8	0	0	0	0	0	0	0	0	0	0	0	0
17:30	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
17:45	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	56	0	4	0	60	0	0	0	0	0	0	0	0	0	0	0	0
<b>GRAND TOTAL</b>	75	0	9	0	84	0	0	1	0	1	0	0	0	0	0	0	0



## Traffic Count Data

Intersection: Woodward St & Boyd St  
 Site Code: 2400900001  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### East Approach - Woodward St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0
07:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0
08:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
08:15	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0
08:30	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
08:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
<b>SUBTOTAL</b>	1	6	0	0	7	0	4	0	0	4	0	0	0	0	0	1





## Traffic Count Data

Intersection: Woodward St & Boyd St  
 Site Code: 2400900001  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### East Approach - Woodward St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
16:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
16:15	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	1
16:30	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	1
16:45	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0
17:00	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0
17:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
17:30	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
17:45	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	3	24	0	0	27	0	0	0	0	0	0	0	0	0	0	2
<b>GRAND TOTAL</b>	4	30	0	0	34	0	4	0	0	4	0	0	0	0	0	3



## Traffic Count Data

Intersection: Woodward St & Boyd St  
 Site Code: 2400900001  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### West Approach - Woodward St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	4	3	0	7	0	0	0	0	0	0	0	0	0	0	0
07:15	0	4	1	0	5	0	0	0	0	0	0	0	0	0	0	1
07:30	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0
07:45	0	2	5	0	7	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
08:15	0	5	2	0	7	0	1	0	0	1	0	0	0	0	0	0
08:30	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
08:45	0	6	3	0	9	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	0	23	18	0	41	0	2	0	0	2	0	0	0	0	0	1



## Traffic Count Data

Intersection: Woodward St & Boyd St  
 Site Code: 2400900001  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### West Approach - Woodward St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
16:00	0	5	7	0	12	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	4	3	0	7	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	4	3	0	7	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	6	4	0	10	0	0	0	0	0	0	0	0	0	0	0	2
17:00	0	3	4	0	7	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	3	3	0	6	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	7	0	8	0	0	0	0	0	0	0	0	0	0	0	1
<b>SUBTOTAL</b>	0	28	32	0	60	0	0	0	0	0	0	0	0	0	0	0	3
<b>GRAND TOTAL</b>	0	51	50	0	101	0	2	0	0	2	0	0	0	0	0	0	4

## Peak Hour Diagram

### Specified Period

From: 07:00:00  
To: 09:00:00

### One Hour Peak

From: 08:00:00  
To: 09:00:00




**Intersection:** Woodward St & Boyd St  
**Site Code:** 2400900001  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear




**\*\* Unsignalized Intersection \*\***

**Major Road:** Woodward St runs E/W

### East Approach

	Out	In	Total
	5	15	20
	1	2	3
	0	0	0
	<b>6</b>	<b>17</b>	<b>23</b>

### Woodward St

			Totals
0	0	0	<b>0</b>
0	2	12	<b>14</b>
0	0	6	<b>6</b>

Peds: 0




Peds: 0






Peds: 1







Peds: 0

### Woodward St




Totals			
<b>0</b>	0	0	0
<b>5</b>	4	1	0
<b>1</b>	1	0	0

### West Approach

	Out	In	Total
	18	15	33
	2	1	3
	0	0	0
	<b>20</b>	<b>16</b>	<b>36</b>


Totals			
<b>11</b>	<b>3</b>	<b>0</b>	<b>0</b>
	11	3	0
	0	0	0
	0	0	0

### South Approach

	Out	In	Total
	14	7	21
	0	0	0
	0	0	0
	<b>14</b>	<b>7</b>	<b>21</b>

Boyd St

 - Cars

 - Trucks

 - Bicycles

### Comments



## Peak Hour Summary

Intersection: Woodward St & Boyd St  
 Site Code: 2400900001  
 Count Date: Jan 10, 2024  
 Period: 07:00 - 09:00

### Peak Hour Data (08:00 - 09:00)

Start Time	North Approach				South Approach Boyd St				East Approach Woodward St				West Approach Woodward St				Total Vehicles				
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻		Peds	Total		
08:00					0		4					4	0	1					1	6	
08:15					0		1					2	0	2					8	12	
08:30					0		2					2	0	2					2	6	
08:45					0		4					6	1	0					9	16	
<b>Grand Total</b>					<b>0</b>	<b>0</b>	<b>11</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>14</b>	<b>6</b>	<b>0</b>	<b>20</b>	<b>40</b>
Approach %					-		78.6	21.4	0	-		16.7	83.3	0	-		70	30	0	-	
Totals %					0		27.5	7.5	0	35		2.5	12.5	0	15		35	15	0	50	
<b>PHF</b>					<b>0</b>		<b>0.69</b>	<b>0.38</b>	<b>0</b>	<b>0.58</b>		<b>0.25</b>	<b>0.63</b>	<b>0</b>	<b>0.75</b>		<b>0.58</b>	<b>0.5</b>	<b>0</b>	<b>0.56</b>	<b>0.63</b>
Cars					0		11	3	0	14		1	4	0	5		12	6	0	18	37
% Cars					0		100	100	0	100		100	80	0	83.3		85.7	100	0	90	92.5
Trucks					0		0	0	0	0		0	1	0	1		2	0	0	2	3
% Trucks					0		0	0	0	0		0	20	0	16.7		14.3	0	0	10	7.5
Bicycles					0		0	0	0	0		0	0	0	0		0	0	0	0	0
% Bicycles					0		0	0	0	0		0	0	0	0		0	0	0	0	0
Peds					0	-				0	-				1	-			0	-	1
% Peds					0	-				0	-				100	-			0	-	

## Peak Hour Diagram

### Specified Period

From: 16:00:00  
To: 18:00:00

### One Hour Peak

From: 16:00:00  
To: 17:00:00

**Intersection:** Woodward St & Boyd St  
**Site Code:** 2400900001  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear

**\*\* Unsignalized Intersection \*\***

**Major Road:** Woodward St runs E/W

### East Approach

	Out	In	Total
	14	20	34
	0	0	0
	0	0	0
	<b>14</b>	<b>20</b>	<b>34</b>

### Woodward St

			Totals
0	0	0	<b>0</b>
0	0	19	<b>19</b>
0	0	17	<b>17</b>

Peds: 0

Peds: 2



Peds: 2

Peds: 0

### Woodward St

Totals			
<b>0</b>	0	0	0
<b>13</b>	13	0	0
<b>1</b>	1	0	0

### West Approach

	Out	In	Total
	36	50	86
	0	0	0
	0	0	0
	<b>36</b>	<b>50</b>	<b>86</b>

Totals	37	1	0
	37	1	0
	0	0	0
	0	0	0

Boyd St

### South Approach

	Out	In	Total
	38	18	56
	0	0	0
	0	0	0
	<b>38</b>	<b>18</b>	<b>56</b>

- Cars

- Trucks

- Bicycles

### Comments



## Peak Hour Summary

Intersection: Woodward St & Boyd St  
 Site Code: 2400900001  
 Count Date: Jan 10, 2024  
 Period: 16:00 - 18:00

### Peak Hour Data (16:00 - 17:00)

Start Time	North Approach				South Approach Boyd St				East Approach Woodward St				West Approach Woodward St				Total Vehicles								
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻		Peds	Total						
16:00					0		9		0	0	0	9	0	3		0	0	3		5	7	0	0	12	24
16:15					0		7		0	0	0	7	0	6		0	1	6		4	3	0	0	7	20
16:30					0		8		1	0	0	9	0	2		0	1	2		4	3	0	0	7	18
16:45					0		13		0	0	0	13	1	2		0	0	3		6	4	0	2	10	26
<b>Grand Total</b>					<b>0</b>	<b>0</b>	<b>37</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>1</b>	<b>13</b>	<b>0</b>	<b>2</b>	<b>14</b>	<b>19</b>	<b>17</b>	<b>0</b>	<b>2</b>	<b>36</b>	<b>88</b>			
Approach %					-		97.4	2.6	0	-		7.1	92.9	0	-		52.8	47.2	0	-					
Totals %					0		42	1.1	0	43.2	1.1	14.8	0	15.9		21.6	19.3	0	40.9						
<b>PHF</b>					<b>0</b>		<b>0.71</b>	<b>0.25</b>	<b>0</b>	<b>0.73</b>	<b>0.25</b>	<b>0.54</b>	<b>0</b>	<b>0.58</b>		<b>0.79</b>	<b>0.61</b>	<b>0</b>	<b>0.75</b>				<b>0.85</b>		
Cars					0		37	1	0	38	1	13	0	14		19	17	0	36				88		
% Cars					0		100	100	0	100	100	100	0	100		100	100	0	100				100		
Trucks					0		0	0	0	0	0	0	0	0		0	0	0	0				0		
% Trucks					0		0	0	0	0	0	0	0	0		0	0	0	0				0		
Bicycles					0		0	0	0	0	0	0	0	0		0	0	0	0				0		
% Bicycles					0		0	0	0	0	0	0	0	0		0	0	0	0				0		
Peds					0	-			0	-				2	-			2	-				4		
% Peds					0	-			0	-				50	-			50	-						



## Project #24-009 - EXP Services Inc.

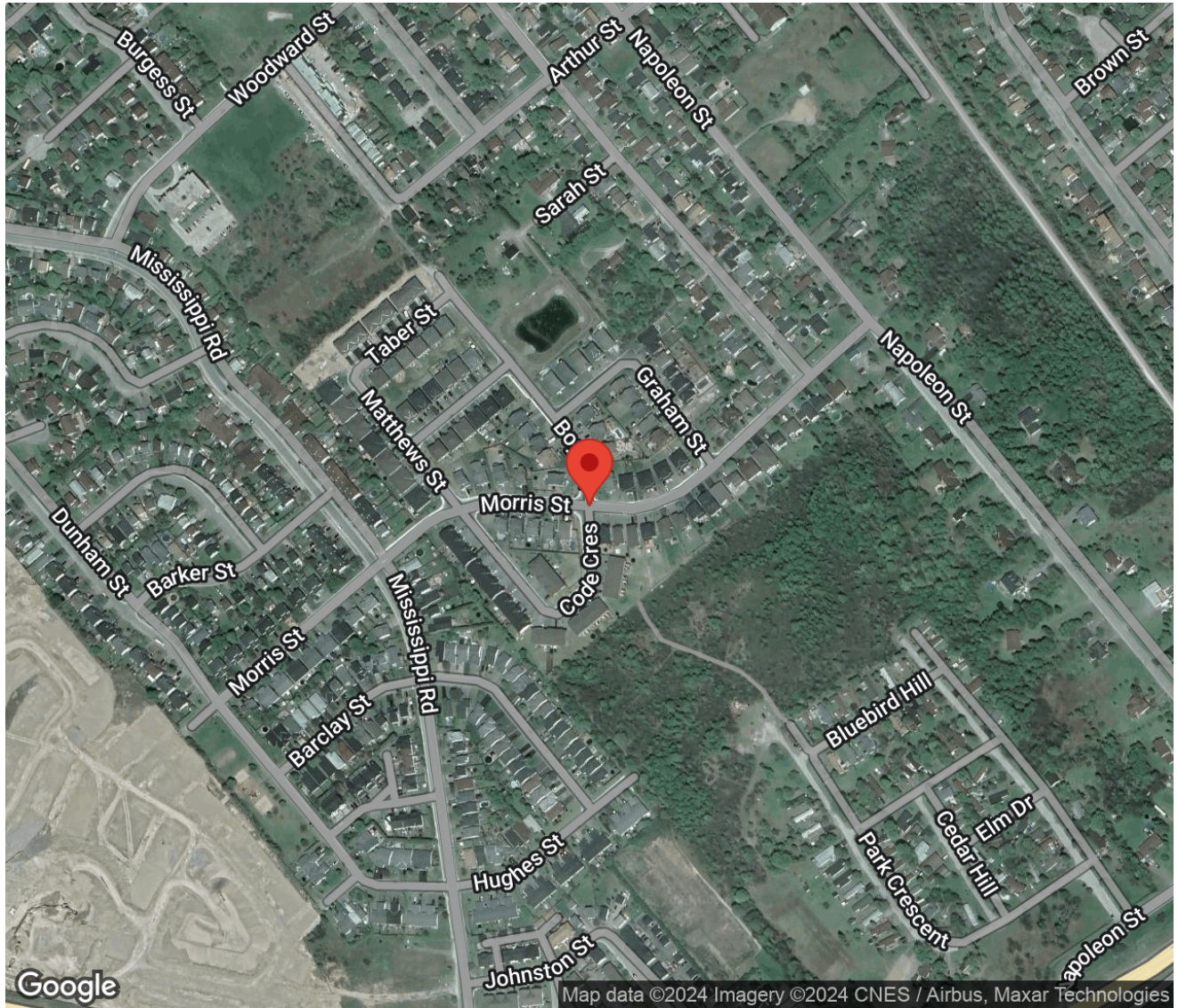
### Intersection Count Report

**Intersection:** Morris St & Boyd St - Code Cres  
**Municipality:** Carleton Place  
**Count Date:** Wednesday, Jan 10, 2024  
**Site Code:** 2400900002  
**Count Categories:** Cars, Trucks, Bicycles, Pedestrians  
**Count Period:** 07:00-09:00, 16:00-18:00  
**Weather:** Clear  
**Comments:**



## Traffic Count Map

Intersection: Morris St & Boyd St - Code Cres  
Site Code: 2400900002  
Municipality: Carleton Place  
Count Date: Jan 10, 2024





## Traffic Count Summary

Intersection: Morris St & Boyd St - Code Cres  
 Site Code: 2400900002  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### Boyd St - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	5	0	2	0	7	1	0	0	4	0	4	0	11
08:00 - 09:00	9	0	2	0	11	2	3	0	2	0	5	0	16
BREAK													
16:00 - 17:00	9	0	4	0	13	8	0	0	4	0	4	2	17
17:00 - 18:00	5	0	1	0	6	5	1	1	4	0	6	0	12
<b>GRAND TOTAL</b>	<b>28</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>37</b>	<b>16</b>	<b>4</b>	<b>1</b>	<b>14</b>	<b>0</b>	<b>19</b>	<b>2</b>	<b>56</b>



## Traffic Count Summary

Intersection: Morris St & Boyd St - Code Cres  
 Site Code: 2400900002  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### Morris St - Traffic Summary

Hour	East Approach Totals						West Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	2	5	2	1	10	0	4	21	1	0	26	1	36
08:00 - 09:00	2	13	7	0	22	0	1	27	1	0	29	0	51
BREAK													
16:00 - 17:00	5	39	15	1	60	0	7	30	2	0	39	0	99
17:00 - 18:00	7	38	9	0	54	0	0	30	1	0	31	0	85
<b>GRAND TOTAL</b>	<b>16</b>	<b>95</b>	<b>33</b>	<b>2</b>	<b>146</b>	<b>0</b>	<b>12</b>	<b>108</b>	<b>5</b>	<b>0</b>	<b>125</b>	<b>1</b>	<b>271</b>



## Traffic Count Data

Intersection: Morris St & Boyd St - Code Cres  
 Site Code: 2400900002  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### North Approach - Boyd St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
07:00	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	1
07:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0
07:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
08:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
08:15	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	1
08:30	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0
08:45	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1
<b>SUBTOTAL</b>	13	0	4	0	17	1	0	0	0	1	0	0	0	0	0	0	3



## Traffic Count Data

Intersection: Morris St & Boyd St - Code Cres  
 Site Code: 2400900002  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### North Approach - Boyd St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
16:00	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
16:15	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	4
16:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
16:45	3	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	3
17:00	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
17:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
17:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
17:45	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
<b>SUBTOTAL</b>	14	0	5	0	19	0	0	0	0	0	0	0	0	0	0	0	13
<b>GRAND TOTAL</b>	27	0	9	0	36	1	0	0	0	1	0	0	0	0	0	0	16







## Traffic Count Data

Intersection: Morris St & Boyd St - Code Cres  
 Site Code: 2400900002  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### East Approach - Morris St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0
07:45	1	2	0	0	3	0	0	1	0	1	0	0	0	0	0	0
08:00	1	3	1	0	5	0	0	0	0	0	0	0	0	0	0	0
08:15	0	3	3	0	6	0	0	0	0	0	0	0	0	0	0	0
08:30	1	3	1	0	5	0	0	0	0	0	0	0	0	0	0	0
08:45	0	4	1	0	5	0	0	1	0	1	0	0	0	0	0	0
<b>SUBTOTAL</b>	4	17	7	1	29	0	1	2	0	3	0	0	0	0	0	0





## Traffic Count Data

Intersection: Morris St & Boyd St - Code Cres  
 Site Code: 2400900002  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### East Approach - Morris St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
16:00	0	8	2	0	10	0	0	0	0	0	0	0	0	0	0	0	0
16:15	1	8	4	0	13	0	0	0	0	0	0	0	0	0	0	0	0
16:30	2	13	7	1	23	0	0	0	0	0	0	0	0	0	0	0	0
16:45	2	10	2	0	14	0	0	0	0	0	0	0	0	0	0	0	0
17:00	1	13	1	0	15	0	0	0	0	0	0	0	0	0	0	0	0
17:15	2	11	3	0	16	0	0	0	0	0	0	0	0	0	0	0	0
17:30	2	9	1	0	12	0	0	0	0	0	0	0	0	0	0	0	0
17:45	2	5	4	0	11	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	12	77	24	1	114	0	0	0	0	0	0	0	0	0	0	0	0
<b>GRAND TOTAL</b>	16	94	31	2	143	0	1	2	0	3	0	0	0	0	0	0	0



## Traffic Count Data

Intersection: Morris St & Boyd St - Code Cres  
 Site Code: 2400900002  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### West Approach - Morris St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	4	0	0	4	0	1	0	0	1	0	0	0	0	0	1
07:15	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0
07:30	2	4	0	0	6	0	1	0	0	1	0	0	0	0	0	0
07:45	1	6	1	0	8	0	1	0	0	1	0	0	0	0	0	0
08:00	0	7	1	0	8	1	0	0	0	1	0	0	0	0	0	0
08:15	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0
08:30	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0
08:45	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	4	45	2	0	51	1	3	0	0	4	0	0	0	0	0	1



## Traffic Count Data

Intersection: Morris St & Boyd St - Code Cres  
 Site Code: 2400900002  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### West Approach - Morris St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
16:00	2	10	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
16:15	1	9	1	0	11	0	0	0	0	0	0	0	0	0	0	0	0
16:30	2	5	1	0	8	0	0	0	0	0	0	0	0	0	0	0	0
16:45	2	6	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	6	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	7	60	3	0	70	0	0	0	0	0	0	0	0	0	0	0	0
<b>GRAND TOTAL</b>	11	105	5	0	121	1	3	0	0	4	0	0	0	0	0	0	1

## Peak Hour Diagram

### Specified Period

From: 07:00:00  
To: 09:00:00

### One Hour Peak

From: 08:00:00  
To: 09:00:00

**Intersection:** Morris St & Boyd St - Code Cres  
**Site Code:** 2400900002  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear

**\*\* Unsignalized Intersection \*\***

**Major Road:** Morris St runs E/W

### North Approach

	Out	In	Total
	11	6	17
	0	2	2
	0	0	0
<b>Totals</b>	<b>11</b>	<b>8</b>	<b>19</b>

### Boyd St

	0	0	0	0
	0	0	0	0
	2	0	9	0
<b>Totals</b>	<b>2</b>	<b>0</b>	<b>9</b>	<b>0</b>

### East Approach

	Out	In	Total
	21	38	59
	1	0	1
	0	0	0
<b>Totals</b>	<b>22</b>	<b>38</b>	<b>60</b>

### Morris St

				Totals	
0	0	0	0	0	
0	1	0	1	1	
0	0	27	27	27	
0	0	1	1	1	

Peds: 2

Peds: 0



Peds: 0

Peds: 0

### Morris St

Totals			
0	0	0	0
7	6	1	0
13	13	0	0
2	2	0	0

### West Approach

	Out	In	Total
	28	18	46
	1	0	1
	0	0	0
<b>Totals</b>	<b>29</b>	<b>18</b>	<b>47</b>

Totals				
3	0	2	0	
3	0	2	0	
0	0	0	0	
0	0	0	0	

Code Cres

### South Approach

Out	In	Total
5	3	8
0	0	0
0	0	0
<b>5</b>	<b>3</b>	<b>8</b>

- Cars

- Trucks

- Bicycles

### Comments



## Peak Hour Summary

Intersection: Morris St & Boyd St - Code Cres  
 Site Code: 2400900002  
 Count Date: Jan 10, 2024  
 Period: 07:00 - 09:00

### Peak Hour Data (08:00 - 09:00)

Start Time	North Approach Boyd St						South Approach Code Cres						East Approach Morris St						West Approach Morris St						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
08:00	1	0	0	0	0	1	2	0	0	0	0	2	1	3	1	0	0	5	1	7	1	0	0	9	17
08:15	2	0	1	0	1	3	0	0	1	0	0	1	0	3	3	0	0	6	0	7	0	0	0	7	17
08:30	2	0	1	0	0	3	0	0	1	0	0	1	1	3	1	0	0	5	0	6	0	0	0	6	15
08:45	4	0	0	0	1	4	1	0	0	0	0	1	0	4	2	0	0	6	0	7	0	0	0	7	18
<b>Grand Total</b>	<b>9</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>11</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>13</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>1</b>	<b>27</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>67</b>
Approach %	81.8	0	18.2	0	-	-	60	0	40	0	-	-	9.1	59.1	31.8	0	-	-	3.4	93.1	3.4	0	-	-	-
Totals %	13.4	0	3	0	16.4	-	4.5	0	3	0	7.5	-	3	19.4	10.4	0	32.8	-	1.5	40.3	1.5	0	43.3	-	-
<b>PHF</b>	<b>0.56</b>	<b>0</b>	<b>0.5</b>	<b>0</b>	<b>0.69</b>	<b>-</b>	<b>0.38</b>	<b>0</b>	<b>0.5</b>	<b>0</b>	<b>0.63</b>	<b>-</b>	<b>0.5</b>	<b>0.81</b>	<b>0.58</b>	<b>0</b>	<b>0.92</b>	<b>-</b>	<b>0.25</b>	<b>0.96</b>	<b>0.25</b>	<b>0</b>	<b>0.81</b>	<b>0.93</b>	<b>-</b>
Cars	9	0	2	0	-	11	3	0	2	0	-	5	2	13	6	0	-	21	0	27	1	0	-	28	65
% Cars	100	0	100	0	-	100	100	0	100	0	-	100	100	100	85.7	0	-	95.5	0	100	100	0	-	96.6	97
Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	1	0	0	0	-	1	2
% Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	14.3	0	-	4.5	100	0	0	0	-	3.4	3
Bicycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
Peds	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	2
% Peds	-	-	-	-	100	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-

## Peak Hour Diagram

### Specified Period

From: 16:00:00  
To: 18:00:00

### One Hour Peak

From: 16:00:00  
To: 17:00:00

**Intersection:** Morris St & Boyd St - Code Cres  
**Site Code:** 2400900002  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear

**\*\* Unsignalized Intersection \*\***

**Major Road:** Morris St runs E/W

### North Approach

	Out	In	Total
	13	22	35
	0	0	0
	0	0	0
<b>Totals</b>	<b>13</b>	<b>22</b>	<b>35</b>

### Boyd St

	0	0	0	0
	0	0	0	0
	4	0	9	0
<b>Totals</b>	<b>4</b>	<b>0</b>	<b>9</b>	<b>0</b>

### East Approach

	Out	In	Total
	60	44	104
	0	0	0
	0	0	0
<b>Totals</b>	<b>60</b>	<b>44</b>	<b>104</b>

### Morris St

				Totals	
0	0	0	0	<b>0</b>	
0	0	7	7	<b>7</b>	
0	0	30	30	<b>30</b>	
0	0	2	2	<b>2</b>	

**Peds: 8**

**Peds: 0**



**Peds: 0**

**Peds: 2**

### Morris St

Totals			
<b>1</b>	1	0	0
<b>15</b>	15	0	0
<b>39</b>	39	0	0
<b>5</b>	5	0	0

### West Approach

	Out	In	Total
	39	43	82
	0	0	0
	0	0	0
<b>Totals</b>	<b>39</b>	<b>43</b>	<b>82</b>

Totals				
<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>
	0	0	4	0
	0	0	0	0
	0	0	0	0

**Code Cres**

### South Approach

Out	In	Total
4	7	11
0	0	0
0	0	0
<b>4</b>	<b>7</b>	<b>11</b>

- Cars

- Trucks

- Bicycles

### Comments



## Peak Hour Summary

Intersection: Morris St & Boyd St - Code Cres  
 Site Code: 2400900002  
 Count Date: Jan 10, 2024  
 Period: 16:00 - 18:00

### Peak Hour Data (16:00 - 17:00)

Start Time	North Approach Boyd St						South Approach Code Cres						East Approach Morris St						West Approach Morris St						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
16:00	1	0	1	0	1	2	0	0	1	0	0	1	0	8	2	0	0	10	2	10	0	0	0	12	25
16:15	5	0	0	0	4	5	0	0	2	0	2	2	1	8	4	0	0	13	1	9	1	0	0	11	31
16:30	0	0	1	0	0	1	0	0	1	0	0	1	2	13	7	1	0	23	2	5	1	0	0	8	33
16:45	3	0	2	0	3	5	0	0	0	0	0	0	2	10	2	0	0	14	2	6	0	0	0	8	27
<b>Grand Total</b>	<b>9</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>8</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>39</b>	<b>15</b>	<b>1</b>	<b>0</b>	<b>60</b>	<b>7</b>	<b>30</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>116</b>
Approach %	69.2	0	30.8	0	-	-	0	0	100	0	-	-	8.3	65	25	1.7	-	-	17.9	76.9	5.1	0	-	-	-
Totals %	7.8	0	3.4	0	11.2	-	0	0	3.4	0	3.4	-	4.3	33.6	12.9	0.9	51.7	-	6	25.9	1.7	0	-	33.6	-
<b>PHF</b>	<b>0.45</b>	<b>0</b>	<b>0.5</b>	<b>0</b>	<b>0.65</b>	<b>0.65</b>	<b>0</b>	<b>0</b>	<b>0.5</b>	<b>0</b>	<b>0.5</b>	<b>0.5</b>	<b>0.63</b>	<b>0.75</b>	<b>0.54</b>	<b>0.25</b>	<b>0.65</b>	<b>0.65</b>	<b>0.88</b>	<b>0.75</b>	<b>0.5</b>	<b>0</b>	<b>0.81</b>	<b>0.88</b>	<b>0.88</b>
Cars	9	0	4	0	13	13	0	0	4	0	4	4	5	39	15	1	60	60	7	30	2	0	39	39	116
% Cars	100	0	100	0	100	100	0	0	100	0	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds					8	-					2	-					0	-					0	-	10
% Peds					80	-					20	-					0	-					0	-	-



## Project #24-009 - EXP Services Inc.

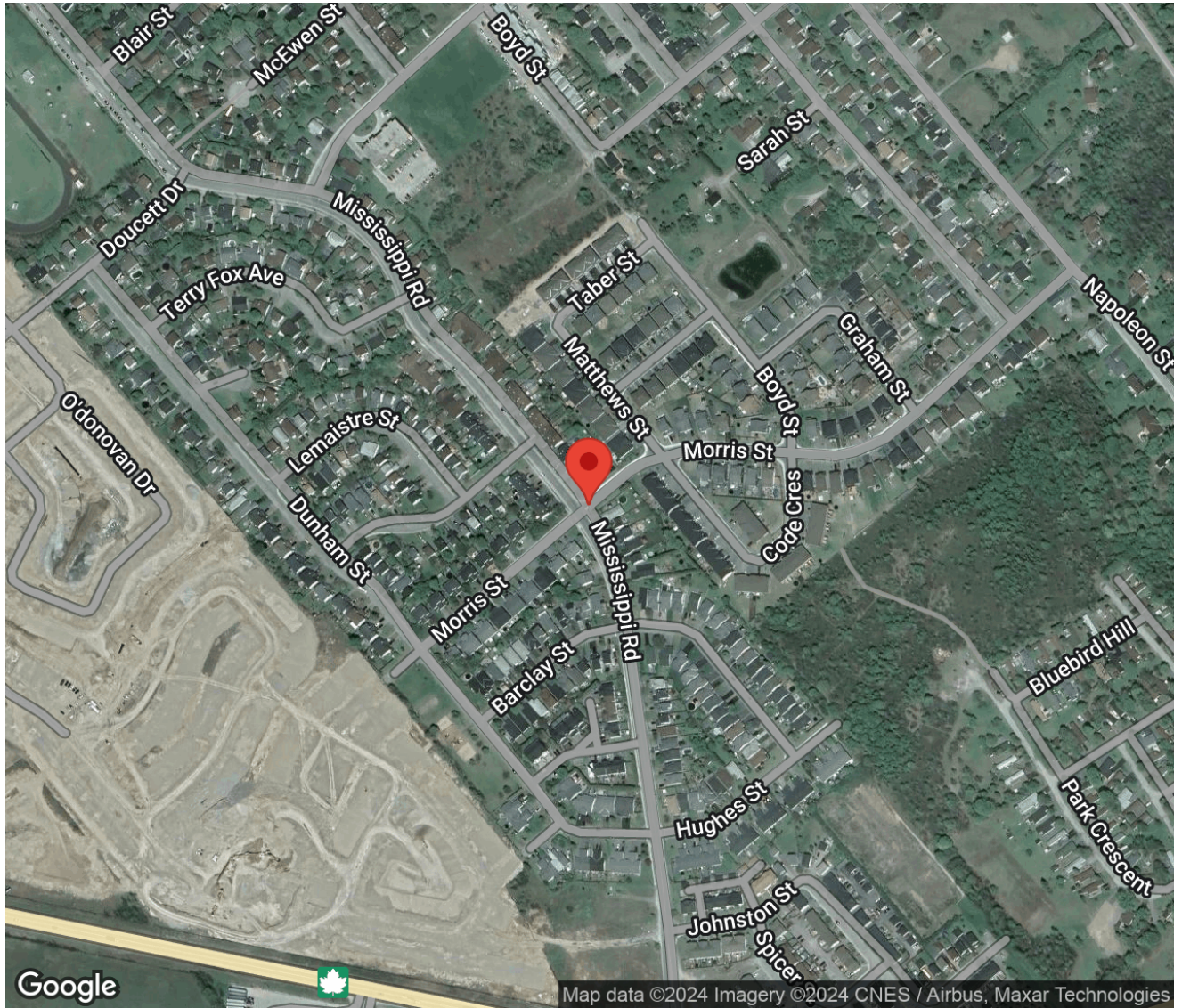
### Intersection Count Report

**Intersection:** Mississippi Rd & Morris St  
**Municipality:** Carleton Place  
**Count Date:** Wednesday, Jan 10, 2024  
**Site Code:** 2400900003  
**Count Categories:** Cars, Trucks, Bicycles, Pedestrians  
**Count Period:** 07:00-09:00, 16:00-18:00  
**Weather:** Clear  
**Comments:**



## Traffic Count Map

Intersection: Mississippi Rd & Morris St  
Site Code: 2400900003  
Municipality: Carleton Place  
Count Date: Jan 10, 2024





## Traffic Count Summary

Intersection: Mississippi Rd & Morris St  
 Site Code: 2400900003  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### Mississippi Rd - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
<b>07:00 - 08:00</b>	5	36	0	0	41	1	0	31	13	0	44	0	85
<b>08:00 - 09:00</b>	4	28	0	0	32	4	3	40	20	0	63	0	95
BREAK													
<b>16:00 - 17:00</b>	6	84	4	1	95	7	3	69	40	0	112	0	207
<b>17:00 - 18:00</b>	7	57	5	0	69	5	1	63	39	0	103	0	172
<b>GRAND TOTAL</b>	<b>22</b>	<b>205</b>	<b>9</b>	<b>1</b>	<b>237</b>	<b>17</b>	<b>7</b>	<b>203</b>	<b>112</b>	<b>0</b>	<b>322</b>	<b>0</b>	<b>559</b>



## Traffic Count Summary

Intersection: Mississippi Rd & Morris St  
 Site Code: 2400900003  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### Morris St - Traffic Summary

Hour	East Approach Totals						West Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
<b>07:00 - 08:00</b>	20	0	2	1	23	1	2	6	3	0	11	2	34
<b>08:00 - 09:00</b>	21	1	5	0	27	0	0	4	1	0	5	2	32
BREAK													
<b>16:00 - 17:00</b>	34	5	12	0	51	0	4	3	3	0	10	7	61
<b>17:00 - 18:00</b>	31	10	8	0	49	0	0	3	4	0	7	0	56
<b>GRAND TOTAL</b>	<b>106</b>	<b>16</b>	<b>27</b>	<b>1</b>	<b>150</b>	<b>1</b>	<b>6</b>	<b>16</b>	<b>11</b>	<b>0</b>	<b>33</b>	<b>11</b>	<b>183</b>



## Traffic Count Data

Intersection: Mississippi Rd & Morris St  
 Site Code: 2400900003  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### North Approach - Mississippi Rd

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	1	7	0	0	8	1	0	0	0	1	0	0	0	0	0	1
07:15	1	9	0	0	10	0	1	0	0	1	0	0	0	0	0	0
07:30	0	9	0	0	9	1	0	0	0	1	0	0	0	0	0	0
07:45	1	10	0	0	11	0	0	0	0	0	0	0	0	0	0	0
08:00	1	6	0	0	7	1	0	0	0	1	0	0	0	0	0	0
08:15	1	10	0	0	11	0	0	0	0	0	0	0	0	0	0	4
08:30	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
08:45	1	9	0	0	10	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	6	63	0	0	69	3	1	0	0	4	0	0	0	0	0	5



## Traffic Count Data

Intersection: Mississippi Rd & Morris St  
 Site Code: 2400900003  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### North Approach - Mississippi Rd

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
16:00	1	18	2	1	22	0	0	0	0	0	0	0	0	0	0	0	0
16:15	1	17	1	0	19	0	1	0	0	1	0	0	0	0	0	0	1
16:30	4	27	0	0	31	0	0	0	0	0	0	0	0	0	0	0	4
16:45	0	21	1	0	22	0	0	0	0	0	0	0	0	0	0	0	2
17:00	6	14	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0
17:15	1	15	1	0	17	0	0	0	0	0	0	0	0	0	0	0	1
17:30	0	15	3	0	18	0	0	0	0	0	0	0	0	0	0	0	4
17:45	0	13	1	0	14	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	13	140	9	1	163	0	1	0	0	1	0	0	0	0	0	0	12
<b>GRAND TOTAL</b>	19	203	9	1	232	3	2	0	0	5	0	0	0	0	0	0	17



## Traffic Count Data

Intersection: Mississippi Rd & Morris St  
 Site Code: 2400900003  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### South Approach - Mississippi Rd

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
07:00	0	8	1	0	9	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	11	3	0	14	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	3	4	0	7	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	9	5	0	14	0	0	0	0	0	0	0	0	0	0	0	0
08:00	1	9	5	0	15	1	2	0	0	3	0	0	0	0	0	0	0
08:15	0	12	4	0	16	0	1	0	0	1	0	0	0	0	0	0	0
08:30	1	4	6	0	11	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	12	5	0	17	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	2	68	33	0	103	1	3	0	0	4	0	0	0	0	0	0	0



## Traffic Count Data

Intersection: Mississippi Rd & Morris St  
 Site Code: 2400900003  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### South Approach - Mississippi Rd

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
16:00	0	14	11	0	25	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	16	8	0	24	0	0	0	0	0	0	0	0	0	0	0	0
16:30	2	18	12	0	32	0	0	0	0	0	0	0	0	0	0	0	0
16:45	1	21	9	0	31	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	17	6	0	23	0	1	0	0	1	0	0	0	0	0	0	0
17:15	1	17	15	0	33	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	10	10	0	20	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	18	8	0	26	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	4	131	79	0	214	0	1	0	0	1	0	0	0	0	0	0	0
<b>GRAND TOTAL</b>	6	199	112	0	317	1	4	0	0	5	0	0	0	0	0	0	0



## Traffic Count Data

Intersection: Mississippi Rd & Morris St  
 Site Code: 2400900003  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### East Approach - Morris St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
07:00	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
07:15	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1
07:30	5	0	1	0	6	0	0	0	1	1	0	0	0	0	0	0	0
07:45	7	0	1	0	8	0	0	0	0	0	0	0	0	0	0	0	0
08:00	7	0	2	0	9	0	0	0	0	0	0	0	0	0	0	0	0
08:15	6	0	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0
08:30	5	1	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0
08:45	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	41	1	7	0	49	0	0	0	1	1	0	0	0	0	0	0	1







## Traffic Count Data

Intersection: Mississippi Rd & Morris St  
 Site Code: 2400900003  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### West Approach - Morris St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
07:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0
07:30	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	0	1
07:45	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
08:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
08:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	1	10	4	0	15	1	0	0	0	1	0	0	0	0	0	0	4



## Traffic Count Data

Intersection: Mississippi Rd & Morris St  
 Site Code: 2400900003  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### West Approach - Morris St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
16:00	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	2
16:15	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
16:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
16:45	2	1	1	0	4	0	0	0	0	0	0	0	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	4	6	7	0	17	0	0	0	0	0	0	0	0	0	0	0	7
<b>GRAND TOTAL</b>	5	16	11	0	32	1	0	0	0	1	0	0	0	0	0	0	11

## Peak Hour Diagram

### Specified Period

From: 07:00:00  
To: 09:00:00

### One Hour Peak

From: 07:30:00  
To: 08:30:00

**Intersection:** Mississippi Rd & Morris St  
**Site Code:** 2400900003  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear

**\*\* Unsignalized Intersection \*\***

**Major Road:** Mississippi Rd runs N/S

### North Approach

	Out	In	Total
	38	39	77
	2	4	6
	0	0	0
<b>Totals</b>	<b>40</b>	<b>43</b>	<b>83</b>

### Mississippi Rd

	0	0	0	0
	0	0	2	0
	0	35	3	0
<b>Totals</b>	<b>0</b>	<b>35</b>	<b>5</b>	<b>0</b>

### East Approach

	Out	In	Total
	30	26	56
	1	3	4
	0	0	0
<b>Totals</b>	<b>31</b>	<b>29</b>	<b>60</b>

### Morris St

				Totals
	0	0	0	0
	0	1	1	2
	0	0	5	5
	0	0	0	0

Peds: 4

Peds: 3



Peds: 0

Peds: 0

### Morris St

Totals			
	1	0	1
	5	5	0
	0	0	0
	25	25	0

### West Approach

	Out	In	Total
	6	1	7
	1	1	2
	0	0	0
<b>Totals</b>	<b>7</b>	<b>2</b>	<b>9</b>

Totals				
	2	36	18	0
	1	3	0	0
	0	0	0	0

### Mississippi Rd

### South Approach

	Out	In	Total
	52	60	112
	4	0	4
	0	0	0
<b>Totals</b>	<b>56</b>	<b>60</b>	<b>116</b>

- Cars

- Trucks

- Bicycles

### Comments



## Peak Hour Summary

Intersection: Mississippi Rd & Morris St  
 Site Code: 2400900003  
 Count Date: Jan 10, 2024  
 Period: 07:00 - 09:00

### Peak Hour Data (07:30 - 08:30)

Start Time	North Approach Mississippi Rd						South Approach Mississippi Rd						East Approach Morris St						West Approach Morris St						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
07:30	1	9	0	0	0	10	0	3	4	0	0	7	5	0	1	1	0	7	2	1	0	0	1	3	27
07:45	1	10	0	0	0	11	0	9	5	0	0	14	7	0	1	0	0	8	0	2	0	0	0	2	35
08:00	2	6	0	0	0	8	2	11	5	0	0	18	7	0	2	0	0	9	0	1	0	0	1	1	36
08:15	1	10	0	0	4	11	0	13	4	0	0	17	6	0	1	0	0	7	0	1	0	0	1	1	36
<b>Grand Total</b>	<b>5</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>40</b>	<b>2</b>	<b>36</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>25</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>31</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>7</b>	<b>134</b>
Approach %	12.5	87.5	0	0	-	-	3.6	64.3	32.1	0	-	-	80.6	0	16.1	3.2	-	-	28.6	71.4	0	0	-	-	-
Totals %	3.7	26.1	0	0	29.9	-	1.5	26.9	13.4	0	41.8	-	18.7	0	3.7	0.7	23.1	-	1.5	3.7	0	0	5.2	-	-
<b>PHF</b>	<b>0.63</b>	<b>0.88</b>	<b>0</b>	<b>0</b>	<b>0.91</b>	<b>-</b>	<b>0.25</b>	<b>0.69</b>	<b>0.9</b>	<b>0</b>	<b>0.78</b>	<b>-</b>	<b>0.89</b>	<b>0</b>	<b>0.63</b>	<b>0.25</b>	<b>0.86</b>	<b>-</b>	<b>0.25</b>	<b>0.63</b>	<b>0</b>	<b>0</b>	<b>0.58</b>	<b>0.93</b>	<b>-</b>
Cars	3	35	0	0	0	38	1	33	18	0	52	25	0	5	0	30	1	5	0	0	0	6	126		
% Cars	60	100	0	0	0	95	50	91.7	100	0	92.9	100	0	100	0	96.8	50	100	0	0	0	85.7	94		
Trucks	2	0	0	0	0	2	1	3	0	0	4	0	0	0	1	1	1	0	0	0	0	1	8		
% Trucks	40	0	0	0	0	5	50	8.3	0	0	7.1	0	0	0	100	3.2	50	0	0	0	0	14.3	6		
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Peds					4	-					0	-					0	-					3	-	7
% Peds					57.1	-					0	-					0	-					42.9	-	-

## Peak Hour Diagram

### Specified Period

From: 16:00:00  
To: 18:00:00

### One Hour Peak

From: 16:30:00  
To: 17:30:00

**Intersection:** Mississippi Rd & Morris St  
**Site Code:** 2400900003  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear

**\*\* Unsignalized Intersection \*\***

**Major Road:** Mississippi Rd runs N/S

### North Approach

	Out	In	Total
	90	88	178
	0	1	1
	0	0	0
<b>Totals</b>	<b>90</b>	<b>89</b>	<b>179</b>

### Mississippi Rd

	0	0	0	0
	0	0	0	0
	2	77	11	0
<b>Totals</b>	<b>2</b>	<b>77</b>	<b>11</b>	<b>0</b>

### East Approach

	Out	In	Total
	61	55	116
	0	0	0
	0	0	0
<b>Totals</b>	<b>61</b>	<b>55</b>	<b>116</b>

### Morris St

				Totals	
	0	0	0	0	
	0	0	3	3	
	0	0	2	2	
	0	0	3	3	

Peds: 7

Peds: 2



Peds: 0

Peds: 0

### Morris St

Totals			
0	0	0	0
12	12	0	0
11	11	0	0
38	38	0	0

### West Approach

	Out	In	Total
	8	17	25
	0	0	0
	0	0	0
<b>Totals</b>	<b>8</b>	<b>17</b>	<b>25</b>

Totals				
4	74	42	0	
	4	73	42	0
	0	1	0	0
	0	0	0	0

### Mississippi Rd

### South Approach

Out	In	Total	
	119	118	237
	1	0	1
	0	0	0
<b>Totals</b>	<b>120</b>	<b>118</b>	<b>238</b>

- Cars

- Trucks

- Bicycles

### Comments



## Peak Hour Summary

Intersection: Mississippi Rd & Morris St  
 Site Code: 2400900003  
 Count Date: Jan 10, 2024  
 Period: 16:00 - 18:00

### Peak Hour Data (16:30 - 17:30)

Start Time	North Approach Mississippi Rd						South Approach Mississippi Rd						East Approach Morris St						West Approach Morris St						Total Vehic es
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
16:30	4	27	0	0	4	31	2	18	12	0	0	32	13	2	3	0	0	18	1	0	0	0	0	1	82
16:45	0	21	1	0	2	22	1	21	9	0	0	31	5	2	5	0	0	12	2	1	1	0	2	4	69
17:00	6	14	0	0	0	20	0	18	6	0	0	24	12	4	2	0	0	18	0	0	0	0	0	0	62
17:15	1	15	1	0	1	17	1	17	15	0	0	33	8	3	2	0	0	13	0	1	2	0	0	3	66
<b>Grand Total</b>	<b>11</b>	<b>77</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>90</b>	<b>4</b>	<b>74</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>120</b>	<b>38</b>	<b>11</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>61</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>279</b>
<b>Approach %</b>	12.2	85.6	2.2	0	-	-	3.3	61.7	35	0	-	-	62.3	18	19.7	0	-	-	37.5	25	37.5	0	-	-	-
<b>Totals %</b>	3.9	27.6	0.7	0	32.3	43	1.4	26.5	15.1	0	43	13.6	3.9	4.3	0	21.9	1.1	0.7	1.1	0	2.9	-	-		
<b>PHF</b>	<b>0.46</b>	<b>0.71</b>	<b>0.5</b>	<b>0</b>	<b>0.73</b>	<b>0.91</b>	<b>0.5</b>	<b>0.88</b>	<b>0.7</b>	<b>0</b>	<b>0.91</b>	<b>0.73</b>	<b>0.69</b>	<b>0.6</b>	<b>0</b>	<b>0.85</b>	<b>0.38</b>	<b>0.5</b>	<b>0.38</b>	<b>0</b>	<b>0.5</b>	<b>0.85</b>	<b>0.85</b>		
<b>Cars</b>	11	77	2	0	90	119	4	73	42	0	119	38	11	12	0	61	3	2	3	0	8	278			
<b>% Cars</b>	100	100	100	0	100	99.2	100	98.6	100	0	99.2	100	100	100	0	100	100	100	100	0	100	99.6			
<b>Trucks</b>	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1			
<b>% Trucks</b>	0	0	0	0	0	0.8	0	1.4	0	0	0.8	0	0	0	0	0	0	0	0	0	0	0.4			
<b>Bicycles</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>% Bicycles</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>Peds</b>					7	-					0	-					0	-					2	-	9
<b>% Peds</b>					77.8	-					0	-					0	-					22.2	-	-



## Project #24-009 - EXP Services Inc.

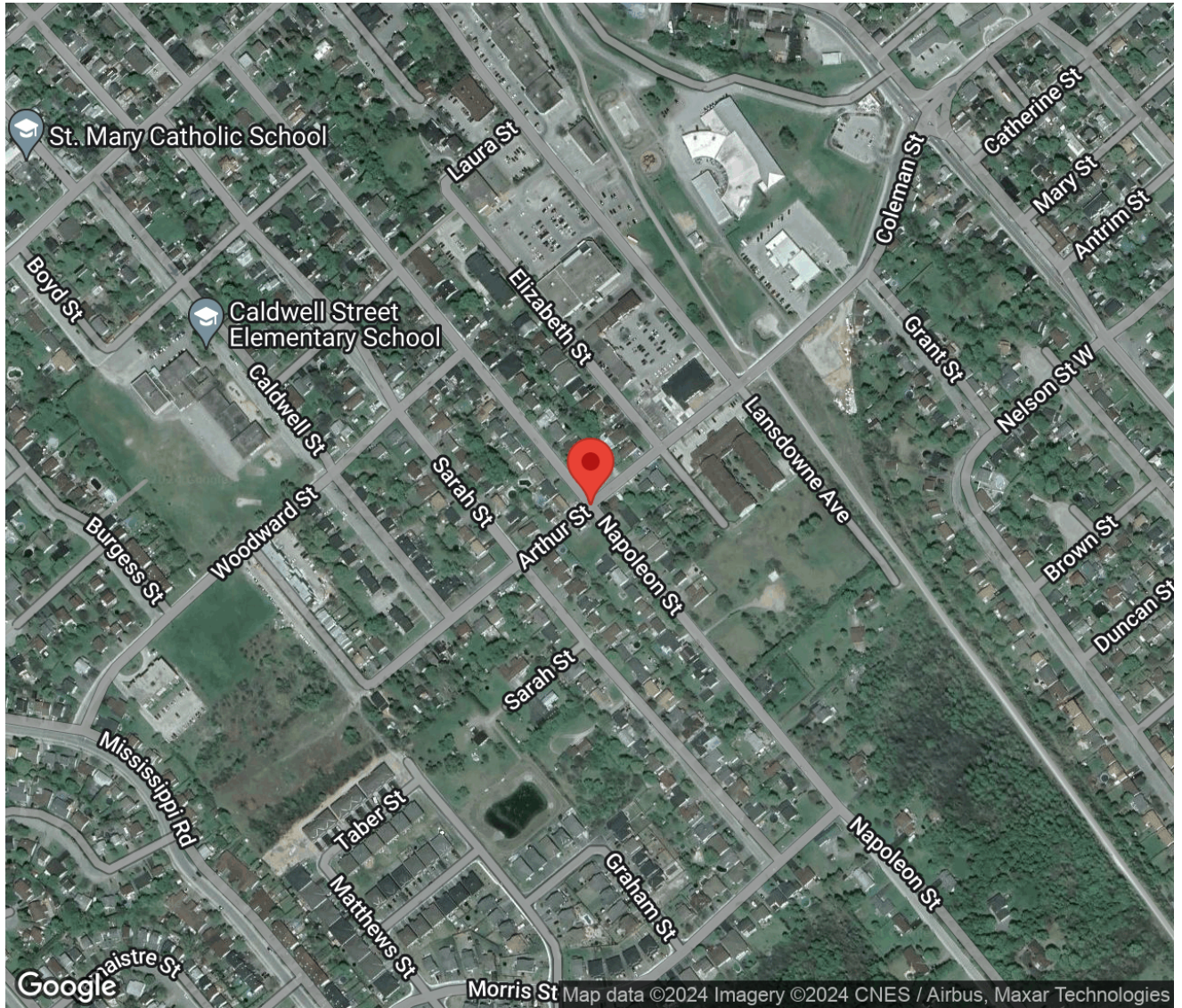
### Intersection Count Report

**Intersection:** Napoleon St & Arthur St  
**Municipality:** Carleton Place  
**Count Date:** Wednesday, Jan 10, 2024  
**Site Code:** 2400900004  
**Count Categories:** Cars, Trucks, Bicycles, Pedestrians  
**Count Period:** 07:00-09:00, 16:00-18:00  
**Weather:** Clear  
**Comments:**



## Traffic Count Map

Intersection: Napoleon St & Arthur St  
Site Code: 2400900004  
Municipality: Carleton Place  
Count Date: Jan 10, 2024





## Traffic Count Summary

Intersection: Napoleon St & Arthur St  
 Site Code: 2400900004  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### Napoleon St - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	10	5	1	0	16	0	0	15	46	0	61	2	77
08:00 - 09:00	16	14	0	0	30	2	1	27	65	0	93	0	123
BREAK													
16:00 - 17:00	25	38	0	0	63	1	1	22	69	0	92	20	155
17:00 - 18:00	15	23	3	0	41	1	2	20	68	0	90	2	131
<b>GRAND TOTAL</b>	<b>66</b>	<b>80</b>	<b>4</b>	<b>0</b>	<b>150</b>	<b>4</b>	<b>4</b>	<b>84</b>	<b>248</b>	<b>0</b>	<b>336</b>	<b>24</b>	<b>486</b>



## Traffic Count Summary

Intersection: Napoleon St & Arthur St  
 Site Code: 2400900004  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### Arthur St - Traffic Summary

Hour	East Approach Totals						West Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	17	16	10	0	43	0	0	32	0	0	32	0	75
08:00 - 09:00	24	31	19	0	74	0	0	32	1	0	33	0	107
BREAK													
16:00 - 17:00	96	73	27	0	196	4	1	38	3	0	42	0	238
17:00 - 18:00	78	56	16	0	150	0	1	34	3	0	38	0	188
<b>GRAND TOTAL</b>	<b>215</b>	<b>176</b>	<b>72</b>	<b>0</b>	<b>463</b>	<b>4</b>	<b>2</b>	<b>136</b>	<b>7</b>	<b>0</b>	<b>145</b>	<b>0</b>	<b>608</b>



## Traffic Count Data

Intersection: Napoleon St & Arthur St  
 Site Code: 2400900004  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### North Approach - Napoleon St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
07:00	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0
07:15	4	3	0	0	7	0	1	0	0	1	0	0	0	0	0	0	0
07:30	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
07:45	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
08:00	6	2	0	0	8	1	0	0	0	1	0	0	0	0	0	0	0
08:15	7	3	0	0	10	0	0	0	0	0	0	0	0	0	0	0	2
08:30	1	5	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
08:45	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	25	18	1	0	44	1	1	0	0	2	0	0	0	0	0	0	2



## Traffic Count Data

Intersection: Napoleon St & Arthur St  
 Site Code: 2400900004  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### North Approach - Napoleon St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
16:00	9	11	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0
16:15	3	9	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
16:30	6	8	0	0	14	0	0	0	0	0	0	0	0	0	0	0	1
16:45	7	10	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0
17:00	4	9	1	0	14	0	0	0	0	0	0	0	0	0	0	0	0
17:15	6	5	1	0	12	0	0	0	0	0	0	0	0	0	0	0	0
17:30	3	5	1	0	9	0	0	0	0	0	0	0	0	0	0	0	1
17:45	2	4	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	40	61	3	0	104	0	0	0	0	0	0	0	0	0	0	0	2
<b>GRAND TOTAL</b>	65	79	4	0	148	1	1	0	0	2	0	0	0	0	0	0	4



## Traffic Count Data

Intersection: Napoleon St & Arthur St  
 Site Code: 2400900004  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### South Approach - Napoleon St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	2	9	0	11	0	1	0	0	1	0	0	0	0	0	0
07:15	0	4	10	0	14	0	1	0	0	1	0	0	0	0	0	1
07:30	0	5	9	0	14	0	0	1	0	1	0	0	0	0	0	1
07:45	0	2	16	0	18	0	0	1	0	1	0	0	0	0	0	0
08:00	0	4	13	0	17	0	0	0	0	0	0	0	0	0	0	0
08:15	0	8	25	0	33	0	0	1	0	1	0	0	0	0	0	0
08:30	0	11	12	0	23	0	0	0	0	0	0	0	0	0	0	0
08:45	1	3	14	0	18	0	0	0	0	0	0	1	0	0	1	0
<b>SUBTOTAL</b>	1	39	108	0	148	0	2	3	0	5	0	1	0	0	1	2



## Traffic Count Data

Intersection: Napoleon St & Arthur St  
 Site Code: 2400900004  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### South Approach - Napoleon St

Start Time	Cars					Trucks					Bicycles					Total Peds	
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total		
16:00	0	2	15	0	17	0	0	0	0	0	0	0	0	0	0	0	12
16:15	0	3	21	0	24	0	0	0	0	0	0	0	0	0	0	0	1
16:30	0	5	15	0	20	0	0	0	0	0	0	0	0	0	0	0	6
16:45	1	12	18	0	31	0	0	0	0	0	0	0	0	0	0	0	1
17:00	1	3	20	0	24	0	0	0	0	0	0	0	0	0	0	0	0
17:15	1	5	18	0	24	0	0	0	0	0	0	0	0	0	0	0	2
17:30	0	4	15	0	19	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	8	15	0	23	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	3	42	137	0	182	0	0	0	0	0	0	0	0	0	0	0	22
<b>GRAND TOTAL</b>	4	81	245	0	330	0	2	3	0	5	0	1	0	0	1	0	24



## Traffic Count Data

Intersection: Napoleon St & Arthur St  
 Site Code: 2400900004  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### East Approach - Arthur St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	1	2	4	0	7	0	1	0	0	1	0	0	0	0	0	0
07:15	5	6	0	0	11	1	1	0	0	2	0	0	0	0	0	0
07:30	4	2	4	0	10	0	0	0	0	0	0	0	0	0	0	0
07:45	5	4	1	0	10	1	0	1	0	2	0	0	0	0	0	0
08:00	4	5	1	0	10	0	0	0	0	0	0	0	0	0	0	0
08:15	9	5	5	0	19	0	0	1	0	1	0	0	0	0	0	0
08:30	3	12	3	0	18	0	0	0	0	0	0	0	0	0	0	0
08:45	8	8	9	0	25	0	1	0	0	1	0	0	0	0	0	0
<b>SUBTOTAL</b>	39	44	27	0	110	2	3	2	0	7	0	0	0	0	0	0







## Traffic Count Data

Intersection: Napoleon St & Arthur St  
 Site Code: 2400900004  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### West Approach - Arthur St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	8	0	0	8	0	1	0	0	1	0	0	0	0	0	0
07:15	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
07:30	0	7	0	0	7	0	1	0	0	1	0	0	0	0	0	0
07:45	0	12	0	0	12	0	0	0	0	0	0	0	0	0	0	0
08:00	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
08:15	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0
08:30	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0
08:45	0	9	1	0	10	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	0	62	1	0	63	0	2	0	0	2	0	0	0	0	0	0



## Traffic Count Data

Intersection: Napoleon St & Arthur St  
 Site Code: 2400900004  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### West Approach - Arthur St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
16:00	0	12	2	0	14	0	0	1	0	1	0	0	0	0	0	0
16:15	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0
16:30	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0
16:45	1	9	0	0	10	0	0	0	0	0	0	0	0	0	0	0
17:00	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0
17:15	0	10	2	0	12	0	0	0	0	0	0	0	0	0	0	0
17:30	1	6	1	0	8	0	0	0	0	0	0	0	0	0	0	0
17:45	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	2	72	5	0	79	0	0	1	0	1	0	0	0	0	0	0
<b>GRAND TOTAL</b>	2	134	6	0	142	0	2	1	0	3	0	0	0	0	0	0

## Peak Hour Diagram

### Specified Period

From: 07:00:00  
To: 09:00:00

### One Hour Peak

From: 08:00:00  
To: 09:00:00

**Intersection:** Napoleon St & Arthur St  
**Site Code:** 2400900004  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear

**\*\* Unsignalized Intersection \*\***

**Major Road:** Arthur St runs E/W

### North Approach

	Out	In	Total
	29	44	73
	1	1	2
	0	1	1
<b>Totals</b>	<b>30</b>	<b>46</b>	<b>76</b>

### Napoleon St

	0	0	0	0
	0	0	1	0
	0	14	15	0
<b>Totals</b>	<b>0</b>	<b>14</b>	<b>16</b>	<b>0</b>

### East Approach

	Out	In	Total
	72	111	183
	2	2	4
	0	0	0
<b>Totals</b>	<b>74</b>	<b>113</b>	<b>187</b>

### Arthur St

				Totals	
0	0	0	0	0	
0	0	0	0	0	
0	0	32	32	32	
0	0	1	1	1	

Peds: 2

Peds: 0



Peds: 0

Peds: 0

### Arthur St

Totals			
0	0	0	0
19	18	1	0
31	30	1	0
24	24	0	0

### West Approach

	Out	In	Total
	33	31	64
	0	1	1
	0	0	0
<b>Totals</b>	<b>33</b>	<b>32</b>	<b>65</b>

Totals				
1	27	65	0	
	1	26	64	0
	0	0	1	0
	0	1	0	0

Napoleon St

### South Approach

Out	In	Total
91	39	130
1	0	1
1	0	1
<b>Totals</b>	<b>93</b>	<b>132</b>

- Cars

- Trucks

- Bicycles

### Comments



## Peak Hour Summary

Intersection: Napoleon St & Arthur St  
 Site Code: 2400900004  
 Count Date: Jan 10, 2024  
 Period: 07:00 - 09:00

### Peak Hour Data (08:00 - 09:00)

Start Time	North Approach Napoleon St						South Approach Napoleon St						East Approach Arthur St						West Approach Arthur St						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
08:00	7	2	0	0	0	9	0	4	13	0	0	17	4	5	1	0	0	10	0	5	0	0	0	5	41
08:15	7	3	0	0	2	10	0	8	26	0	0	34	9	5	6	0	0	20	0	9	0	0	0	9	73
08:30	1	5	0	0	0	6	0	11	12	0	0	23	3	12	3	0	0	18	0	9	0	0	0	9	56
08:45	1	4	0	0	0	5	1	4	14	0	0	19	8	9	9	0	0	26	0	9	1	0	0	10	60
<b>Grand Total</b>	<b>16</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>30</b>	<b>1</b>	<b>27</b>	<b>65</b>	<b>0</b>	<b>0</b>	<b>93</b>	<b>24</b>	<b>31</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>0</b>	<b>32</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>230</b>
Approach %	53.3	46.7	0	0	-	-	1.1	29	69.9	0	-	-	32.4	41.9	25.7	0	-	-	0	97	3	0	-	-	
Totals %	7	6.1	0	0	13	40.4	0.4	11.7	28.3	0	32.2	40.4	10.4	13.5	8.3	0	32.2	40.4	0	13.9	0.4	0	14.3	14.3	
<b>PHF</b>	<b>0.57</b>	<b>0.7</b>	<b>0</b>	<b>0</b>	<b>0.75</b>	<b>0.68</b>	<b>0.25</b>	<b>0.61</b>	<b>0.63</b>	<b>0</b>	<b>0.68</b>	<b>0.68</b>	<b>0.67</b>	<b>0.65</b>	<b>0.53</b>	<b>0</b>	<b>0.71</b>	<b>0.71</b>	<b>0</b>	<b>0.89</b>	<b>0.25</b>	<b>0</b>	<b>0.83</b>	<b>0.83</b>	<b>0.79</b>
Cars	15	14	0	0	29	91	1	26	64	0	91	91	24	30	18	0	72	72	0	32	1	0	33	33	225
% Cars	93.8	100	0	0	96.7	97.8	100	96.3	98.5	0	97.8	97.8	100	96.8	94.7	0	97.3	97.3	0	100	100	0	100	100	97.8
Trucks	1	0	0	0	1	1	0	0	1	0	1	1	0	1	1	0	2	2	0	0	0	0	0	0	4
% Trucks	6.3	0	0	0	3.3	1.1	0	0	1.5	0	1.1	1.1	0	3.2	5.3	0	2.7	2.7	0	0	0	0	0	0	1.7
Bicycles	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bicycles	0	0	0	0	0	1.1	0	3.7	0	0	1.1	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0.4
Peds					2	-					0	-					0	-					0	-	2
% Peds					100	-					0	-					0	-					0	-	

## Peak Hour Diagram

### Specified Period

From: 16:00:00  
To: 18:00:00

### One Hour Peak

From: 16:15:00  
To: 17:15:00

**Intersection:** Napoleon St & Arthur St  
**Site Code:** 2400900004  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear

**\*\* Unsignalized Intersection \*\***

**Major Road:** Arthur St runs E/W

### North Approach

	Out	In	Total
	57	48	105
	0	1	1
	0	0	0
<b>Totals</b>	<b>57</b>	<b>49</b>	<b>106</b>

### Napoleon St

	0	0	0	0
	0	0	0	0
	1	36	20	0
<b>Totals</b>	<b>1</b>	<b>36</b>	<b>20</b>	<b>0</b>

### East Approach

	Out	In	Total
	200	130	330
	1	0	1
	0	0	0
<b>Totals</b>	<b>201</b>	<b>130</b>	<b>331</b>

### Arthur St

				Totals
	0	0	0	<b>0</b>
	0	0	1	<b>1</b>
	0	0	36	<b>36</b>
	0	0	0	<b>0</b>

Peds: 1

Peds: 0



Peds: 4

Peds: 8

### Arthur St

Totals			
<b>0</b>	0	0	0
<b>25</b>	24	1	0
<b>72</b>	72	0	0
<b>104</b>	104	0	0

### West Approach

	Out	In	Total
	37	75	112
	0	0	0
	0	0	0
<b>Totals</b>	<b>37</b>	<b>75</b>	<b>112</b>

<b>Totals</b>	<b>2</b>	<b>23</b>	<b>74</b>	<b>0</b>
	2	23	74	0
	0	0	0	0
	0	0	0	0

Napoleon St

### South Approach

Out	In	Total	
	99	140	239
	0	0	0
	0	0	0
<b>Totals</b>	<b>99</b>	<b>140</b>	<b>239</b>

- Cars

- Trucks

- Bicycles

### Comments



## Peak Hour Summary

Intersection: Napoleon St & Arthur St  
 Site Code: 2400900004  
 Count Date: Jan 10, 2024  
 Period: 16:00 - 18:00

### Peak Hour Data (16:15 - 17:15)

Start Time	North Approach Napoleon St						South Approach Napoleon St						East Approach Arthur St						West Approach Arthur St						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
16:15	3	9	0	0	0	12	0	3	21	0	1	24	27	17	7	0	0	51	0	7	0	0	0	7	94
16:30	6	8	0	0	1	14	0	5	15	0	6	20	37	19	6	0	2	62	0	10	0	0	0	10	106
16:45	7	10	0	0	0	17	1	12	18	0	1	31	21	24	6	0	2	51	1	9	0	0	0	10	109
17:00	4	9	1	0	0	14	1	3	20	0	0	24	19	12	6	0	0	37	0	10	0	0	0	10	85
<b>Grand Total</b>	<b>20</b>	<b>36</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>57</b>	<b>2</b>	<b>23</b>	<b>74</b>	<b>0</b>	<b>8</b>	<b>99</b>	<b>104</b>	<b>72</b>	<b>25</b>	<b>0</b>	<b>4</b>	<b>201</b>	<b>1</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>394</b>
<b>Approach %</b>	35.1	63.2	1.8	0	-	-	2	23.2	74.7	0	-	-	51.7	35.8	12.4	0	-	-	2.7	97.3	0	0	-	-	-
<b>Totals %</b>	5.1	9.1	0.3	0	14.5	25.1	0.5	5.8	18.8	0	25.1	25.1	26.4	18.3	6.3	0	51	51	0.3	9.1	0	0	9.4	9.4	9.4
<b>PHF</b>	<b>0.71</b>	<b>0.9</b>	<b>0.25</b>	<b>0</b>	<b>0.84</b>	<b>0.8</b>	<b>0.5</b>	<b>0.48</b>	<b>0.88</b>	<b>0</b>	<b>0.8</b>	<b>0.8</b>	<b>0.7</b>	<b>0.75</b>	<b>0.89</b>	<b>0</b>	<b>0.81</b>	<b>0.81</b>	<b>0.25</b>	<b>0.9</b>	<b>0</b>	<b>0</b>	<b>0.93</b>	<b>0.93</b>	<b>0.9</b>
<b>Cars</b>	20	36	1	0	57	99	2	23	74	0	99	99	104	72	24	0	200	200	1	36	0	0	37	37	393
<b>% Cars</b>	100	100	100	0	100	100	100	100	100	0	100	100	100	100	96	0	99.5	99.5	100	100	0	0	100	100	99.7
<b>Trucks</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	1
<b>% Trucks</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0.5	0.5	0	0	0	0	0	0	0.3
<b>Bicycles</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>% Bicycles</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Peds</b>					1	-					8	-					4	-					0	-	13
<b>% Peds</b>					7.7	-					61.5	-					30.8	-					0	-	-



## Project #24-009 - EXP Services Inc.

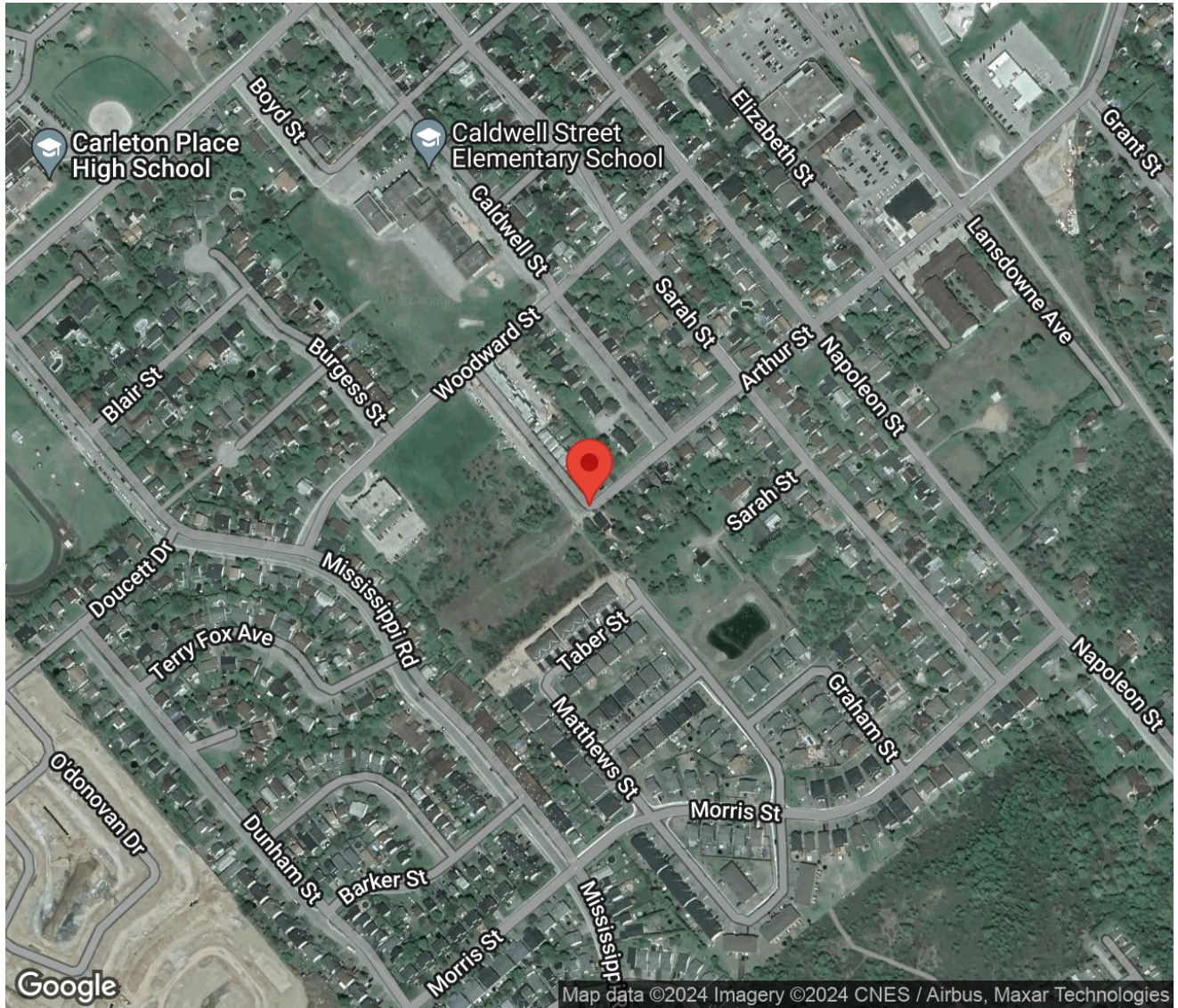
### Intersection Count Report

**Intersection:** Boyd St & Arthur St  
**Municipality:** Carleton Place  
**Count Date:** Wednesday, Jan 10, 2024  
**Site Code:** 2400900005  
**Count Categories:** Cars, Trucks, Bicycles, Pedestrians  
**Count Period:** 07:00-09:00, 16:00-18:00  
**Weather:** Clear  
**Comments:**



## Traffic Count Map

Intersection: Boyd St & Arthur St  
Site Code: 2400900005  
Municipality: Carleton Place  
Count Date: Jan 10, 2024





## Traffic Count Summary

Intersection: Boyd St & Arthur St  
 Site Code: 2400900005  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### Boyd St - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	12	0	0	0	12	1	0	0	0	0	0	0	12
08:00 - 09:00	10	0	0	0	10	0	0	0	0	0	0	0	10
BREAK													
16:00 - 17:00	17	0	0	0	17	0	0	0	0	0	0	1	17
17:00 - 18:00	17	0	0	0	17	0	0	0	0	0	0	0	17
<b>GRAND TOTAL</b>	<b>56</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>56</b>









## Traffic Count Data

Intersection: Boyd St & Arthur St  
 Site Code: 2400900005  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### South Approach - Boyd St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



## Traffic Count Data

Intersection: Boyd St & Arthur St  
 Site Code: 2400900005  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### South Approach - Boyd St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>GRAND TOTAL</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1



## Traffic Count Data

Intersection: Boyd St & Arthur St  
 Site Code: 2400900005  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### East Approach - Arthur St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	0	2	0	2	0	0	1	0	1	0	0	0	0	0	0
07:15	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
07:45	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	1
08:30	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	5	0	5	0	0	0	1	1	0	0	0	0	0	0
<b>SUBTOTAL</b>	0	0	23	0	23	0	0	1	1	2	0	0	0	0	0	2





## Traffic Count Data

Intersection: Boyd St & Arthur St  
 Site Code: 2400900005  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### East Approach - Arthur St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
16:00	0	0	9	0	9	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	14	1	15	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	9	0	9	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	9	0	9	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	0	0	63	1	64	0	0	0	0	0	0	0	0	0	0	0
<b>GRAND TOTAL</b>	0	0	86	1	87	0	0	1	1	2	0	0	0	0	0	2

## Peak Hour Diagram

### Specified Period

From: 07:00:00  
To: 09:00:00

### One Hour Peak

From: 08:00:00  
To: 09:00:00

**Intersection:** Boyd St & Arthur St  
**Site Code:** 2400900005  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear

**\*\* Unsignalized Intersection \*\***

**Major Road:** Arthur St runs E/W

### North Approach

	Out	In	Total
	10	15	25
	0	0	0
	0	0	0
<b>Totals</b>	<b>10</b>	<b>15</b>	<b>25</b>

### Boyd St

	0	0	0
	0	0	0
	0	10	0
<b>Totals</b>	<b>0</b>	<b>10</b>	<b>0</b>

### East Approach

	Out	In	Total
	15	10	25
	1	1	2
	0	0	0
<b>Totals</b>	<b>16</b>	<b>11</b>	<b>27</b>

Peds: 0

Peds: 0



Peds: 1

Peds: 0

### Arthur St

Totals			
	1	0	1
	15	15	0
	0	0	0

Totals			
	0	0	0
	0	0	0
	0	0	0

### South Approach

Out	In	Total
	0	0
	0	0
	0	0
<b>Totals</b>	<b>0</b>	<b>0</b>

Boyd St

- Cars

- Trucks

- Bicycles

### Comments



## Peak Hour Summary

Intersection: Boyd St & Arthur St  
 Site Code: 2400900005  
 Count Date: Jan 10, 2024  
 Period: 07:00 - 09:00

### Peak Hour Data (08:00 - 09:00)

Start Time	North Approach Boyd St						South Approach Boyd St						East Approach Arthur St						West Approach						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
08:00	2	0		0	0	2		0	0	0	0	0	0		5	0	0	0	5				0		7
08:15	3	0		0	0	3		0	0	0	0	0	0		3	0	1	3				0		6	
08:30	1	0		0	0	1		0	0	0	0	0	0		2	0	0	2				0		3	
08:45	4	0		0	0	4		0	0	0	0	0	0		5	1	0	6				0		10	
<b>Grand Total</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>1</b>	<b>1</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26</b>	
Approach %	100	0	0	-	-	-	0	0	0	-	-	-	0	93.8	6.3	-	-	-	-	-	-	-	-	-	-
Totals %	38.5	0	0	38.5	0	0	0	0	0	0	0	0	0	57.7	3.8	61.5	0	0	0	0	0	0	0	0	0
<b>PHF</b>	<b>0.63</b>	<b>0</b>	<b>0</b>	<b>0.63</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.75</b>	<b>0.25</b>	<b>0.67</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.65</b>	
Cars	10	0	0	10	0	0	0	0	0	0	0	0	0	15	0	15	0	0	0	0	0	0	0	25	
% Cars	100	0	0	100	0	0	0	0	0	0	0	0	0	100	0	93.8	0	0	0	0	0	0	0	96.2	
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	6.3	0	0	0	0	0	0	0	3.8	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Peds				0	-					0	-					1	-			0	-			1	
% Peds				0	-					0	-					100	-			0	-			1	

## Peak Hour Diagram

### Specified Period

From: 16:00:00  
To: 18:00:00

### One Hour Peak

From: 16:00:00  
To: 17:00:00




**Intersection:** Boyd St & Arthur St  
**Site Code:** 2400900005  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear




**\*\* Unsignalized Intersection \*\***

**Major Road:** Arthur St runs E/W

### North Approach

	Out	In	Total
	17	39	56
	0	0	0
	0	0	0
<b>Totals</b>	<b>17</b>	<b>39</b>	<b>56</b>

### Boyd St

	0	0	0
	0	0	0
	0	17	0
<b>Totals</b>	<b>0</b>	<b>17</b>	<b>0</b>






Peds: 0



Peds: 0




Peds: 0

Peds: 1







Totals	0	0	0
	0	0	0
	0	0	0
	0	0	0

Boyd St




### East Approach

Out	In	Total	
	40	18	58
	0	0	0
	0	0	0
<b>Totals</b>	<b>40</b>	<b>18</b>	<b>58</b>


### Arthur St

Totals			
	1	1	0
	39	39	0
	0	0	0

### South Approach

Out	In	Total	
	0	0	0
	0	0	0
	0	0	0
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>

 - Cars

 - Trucks

 - Bicycles

### Comments



## Peak Hour Summary

Intersection: Boyd St & Arthur St  
 Site Code: 2400900005  
 Count Date: Jan 10, 2024  
 Period: 16:00 - 18:00

### Peak Hour Data (16:00 - 17:00)

Start Time	North Approach Boyd St						South Approach Boyd St						East Approach Arthur St						West Approach						Total Vehicles	
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total		
16:00	7	0		0	0	7		0	0	0	0	0	0		9	0	0	0	9					0		16
16:15	4	0		0	0	4		0	0	0	0	0	0		8	0	0	0	8					0		12
16:30	3	0		0	0	3		0	0	0	1	0	0		8	0	0	0	8					0		11
16:45	3	0		0	0	3		0	0	0	0	0	0		14	1	0	0	15					0		18
<b>Grand Total</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>57</b>
Approach %	100	0	0	-	-	-	0	0	0	-	-	-	0	97.5	2.5	-	-	-	-	-	-	-	-	-	-	-
Totals %	29.8	0	0	29.8	0	0	0	0	0	0	0	0	0	68.4	1.8	70.2	0	0	0	0	0	0	0	0	0	0
<b>PHF</b>	<b>0.61</b>	<b>0</b>	<b>0</b>	<b>0.61</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.7</b>	<b>0.25</b>	<b>0.67</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.79</b>	
Cars	17	0	0	17	0	0	0	0	0	0	0	0	0	39	1	40	0	0	0	0	0	0	0	0	0	57
% Cars	100	0	0	100	0	0	0	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0	0	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peds				0	-					1	-						0	-					0	-		1
% Peds				0	-					100	-						0	-					0	-		1



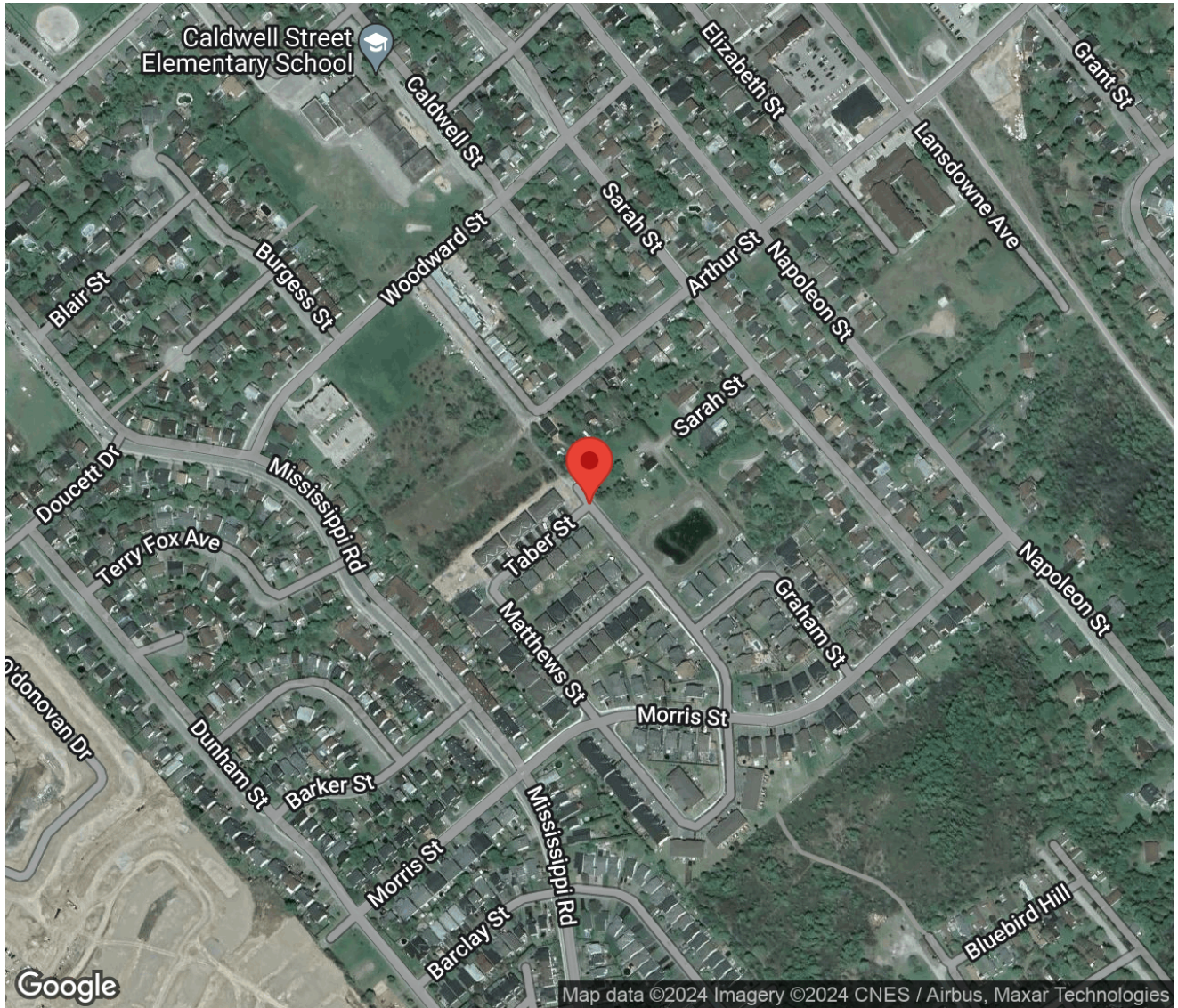
## Project #24-009 - EXP Services Inc.

### Intersection Count Report

**Intersection:** Boyd St & Taber St  
**Municipality:** Carleton Place  
**Count Date:** Wednesday, Jan 10, 2024  
**Site Code:** 2400900006  
**Count Categories:** Cars, Trucks, Bicycles, Pedestrians  
**Count Period:** 07:00-09:00, 16:00-18:00  
**Weather:** Clear  
**Comments:**

## Traffic Count Map

Intersection: Boyd St & Taber St  
Site Code: 2400900006  
Municipality: Carleton Place  
Count Date: Jan 10, 2024





## Traffic Count Summary

Intersection: Boyd St & Taber St  
 Site Code: 2400900006  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### Boyd St - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	0	0	0	0	0	0	1	0	0	0	1	0	1
08:00 - 09:00	0	0	0	0	0	0	2	0	0	1	3	0	3
BREAK													
16:00 - 17:00	0	0	0	0	0	0	7	0	0	0	7	0	7
17:00 - 18:00	0	0	0	0	0	0	6	0	0	0	6	0	6
<b>GRAND TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>17</b>	<b>0</b>	<b>17</b>





## Traffic Count Summary

Intersection: Boyd St & Taber St  
 Site Code: 2400900006  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### Taber St - Traffic Summary

Hour	East Approach Totals						West Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	0	0	0	0	0	0	0	0	4	0	4	0	4
08:00 - 09:00	0	0	0	0	0	0	1	0	7	1	9	0	9
BREAK													
16:00 - 17:00	0	0	0	0	0	0	0	0	3	0	3	3	3
17:00 - 18:00	0	0	0	0	0	0	0	0	2	1	3	1	3
<b>GRAND TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>16</b>	<b>2</b>	<b>19</b>	<b>4</b>	<b>19</b>



## Traffic Count Data

Intersection: Boyd St & Taber St  
 Site Code: 2400900006  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### North Approach - Boyd St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



## Traffic Count Data

Intersection: Boyd St & Taber St  
 Site Code: 2400900006  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### North Approach - Boyd St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>GRAND TOTAL</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



## Traffic Count Data

Intersection: Boyd St & Taber St  
 Site Code: 2400900006  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### South Approach - Boyd St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
<b>SUBTOTAL</b>	2	0	0	1	3	1	0	0	0	1	0	0	0	0	0	0



## Traffic Count Data

Intersection: Boyd St & Taber St  
 Site Code: 2400900006  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### South Approach - Boyd St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
16:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
16:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
16:30	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
16:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
17:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
17:15	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
17:30	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
17:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	13	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0
<b>GRAND TOTAL</b>	15	0	0	1	16	1	0	0	0	1	0	0	0	0	0	0



## Traffic Count Data

Intersection: Boyd St & Taber St  
 Site Code: 2400900006  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### West Approach - Taber St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0
07:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
08:30	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	1	0	10	1	12	0	0	1	0	1	0	0	0	0	0	0



## Traffic Count Data

Intersection: Boyd St & Taber St  
 Site Code: 2400900006  
 Municipality: Carleton Place  
 Count Date: Jan 10, 2024

### West Approach - Taber St

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
16:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:00	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>SUBTOTAL</b>	0	0	5	1	6	0	0	0	0	0	0	0	0	0	0	4
<b>GRAND TOTAL</b>	1	0	15	2	18	0	0	1	0	1	0	0	0	0	0	4

## Peak Hour Diagram

### Specified Period

From: 07:00:00  
To: 09:00:00

### One Hour Peak

From: 08:00:00  
To: 09:00:00




**Intersection:** Boyd St & Taber St  
**Site Code:** 2400900006  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear

**\*\* Unsignalized Intersection \*\***

**Major Road:** Taber St runs E/W

### North Approach

	Out	In	Total
	0	1	1
	0	0	0
	0	0	0
<b>Totals</b>	<b>0</b>	<b>1</b>	<b>1</b>







### Boyd St

	0	0	0
	0	0	0
	0	0	0
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>



Peds: 0

### Taber St

			Totals	
0	0	1	1	
0	0	1	1	
0	0	7	7	




Peds: 0









Peds: 0

Peds: 0




### West Approach

	Out	In	Total
	9	2	11
	0	1	1
	0	0	0
<b>Totals</b>	<b>9</b>	<b>3</b>	<b>12</b>


Totals			
	1	0	1
	1	0	0
	0	0	0

Boyd St

### South Approach

	Out	In	Total
	2	8	10
	1	0	1
	0	0	0
<b>Totals</b>	<b>3</b>	<b>8</b>	<b>11</b>

 - Cars

 - Trucks

 - Bicycles

### Comments





## Peak Hour Summary

Intersection: Boyd St & Taber St  
 Site Code: 2400900006  
 Count Date: Jan 10, 2024  
 Period: 07:00 - 09:00

### Peak Hour Data (08:00 - 09:00)

Start Time	North Approach Boyd St						South Approach Boyd St						East Approach						West Approach Taber St						Total Vehicles	
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total		
08:00	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	2	3
08:15	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	2
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3	3
08:45	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	3	4
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>9</b>	<b>12</b>							
Approach %	0	0	0	-	-	-	66.7	0	33.3	-	-	-	-	11.1	77.8	11.1	-	-	-							
Totals %	0	0	0	0	0	0	16.7	0	8.3	25	0	0	0	8.3	58.3	8.3	75	0	0							
<b>PHF</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.5</b>	<b>0</b>	<b>0.25</b>	<b>0.75</b>	<b>0</b>	<b>0</b>	<b>0.25</b>	<b>0.58</b>	<b>0.25</b>	<b>0.75</b>	<b>0.75</b>	<b>0.75</b>								
Cars	0	0	0	0	0	0	1	0	1	0	2	0	0	1	7	1	0	9	11							
% Cars	0	0	0	0	0	0	50	0	100	66.7	0	0	100	100	100	100	100	91.7								
Trucks	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1							
% Trucks	0	0	0	0	0	0	50	0	0	33.3	0	0	0	0	0	0	0	8.3								
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
Peds					0	-				0	-						0	-	0							
% Peds					0	-				0	-						0	-	0							

## Peak Hour Diagram

### Specified Period

From: 16:00:00  
To: 18:00:00

### One Hour Peak

From: 16:15:00  
To: 17:15:00




**Intersection:** Boyd St & Taber St  
**Site Code:** 2400900006  
**Count Date:** Jan 10, 2024

**Weather conditions:** Clear


**\*\* Unsignalized Intersection \*\***

**Major Road:** Taber St runs E/W

### North Approach

	Out	In	Total
	0	0	0
	0	0	0
	0	0	0
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>







### Boyd St

	0	0	0
	0	0	0
	0	0	0
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>

← ↓ ↻

Peds: 0

### Taber St

			Totals
0	0	1	1 
0	0	0	0 
0	0	3	3 




Peds: 3






Peds: 0

Peds: 0

### West Approach




	Out	In	Total
	4	8	12
	0	0	0
	0	0	0
<b>Totals</b>	<b>4</b>	<b>8</b>	<b>12</b>

Totals	7	0	0
	7	0	0
	0	0	0
	0	0	0


← ↑ ↻

Boyd St

### South Approach

	Out	In	Total
	7	3	10
	0	0	0
	0	0	0
<b>Totals</b>	<b>7</b>	<b>3</b>	<b>10</b>

 - Cars

 - Trucks

 - Bicycles

### Comments



## Peak Hour Summary

Intersection: Boyd St & Taber St  
 Site Code: 2400900006  
 Count Date: Jan 10, 2024  
 Period: 16:00 - 18:00

### Peak Hour Data (16:15 - 17:15)

Start Time	North Approach Boyd St						South Approach Boyd St						East Approach						West Approach Taber St						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
16:15		0	0	0	0	0	1	0		0	0	1					0		0		2	0	0	2	3
16:30		0	0	0	0	0	4	0		0	0	4					0		0		0	0	2	0	4
16:45		0	0	0	0	0	1	0		0	0	1					0		0		0	0	1	0	1
17:00		0	0	0	0	0	1	0		0	0	1					0		0		1	1	0	2	3
<b>Grand Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>7</b>					<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>11</b>	
Approach %		0	0	0		-	100	0		0		-					0		75		25			-	
Totals %		0	0	0		0	63.6	0		0		63.6					0		27.3		9.1			36.4	
<b>PHF</b>		<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0.44</b>	<b>0</b>		<b>0</b>		<b>0.44</b>					<b>0</b>	<b>0</b>	<b>0.38</b>		<b>0.25</b>			<b>0.5</b>	<b>0.69</b>
Cars		0	0	0		0	7	0		0		7					0		3		1		4	11	
% Cars		0	0	0		0	100	0		0		100					0		100		100		100	100	
Trucks		0	0	0		0	0	0		0		0					0		0		0		0	0	
% Trucks		0	0	0		0	0	0		0		0					0		0		0		0	0	
Bicycles		0	0	0		0	0	0		0		0					0		0		0		0	0	
% Bicycles		0	0	0		0	0	0		0		0					0		0		0		0	0	
Peds						0						0											3	-	3
% Peds						0						0											100	-	

Appendix D:  
Existing Synchro Outputs

Intersection						
Int Delay, s/veh	3.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	6	1	5	11	3
Future Vol, veh/h	14	6	1	5	11	3
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	15	0	0	20	0	0
Mvmt Flow	22	10	2	8	17	5

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	32	0	39
Stage 1	-	-	-	-	27
Stage 2	-	-	-	-	12
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1593	-	978
Stage 1	-	-	-	-	1001
Stage 2	-	-	-	-	1016
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1593	-	977
Mov Cap-2 Maneuver	-	-	-	-	977
Stage 1	-	-	-	-	1001
Stage 2	-	-	-	-	1015

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	992	-	-	1593	-
HCM Lane V/C Ratio	0.022	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	32	1	24	31	19	1	26	65	16	14	0
Future Vol, veh/h	0	32	1	24	31	19	1	26	65	16	14	0
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	0	0	0	4	6	0	0	2	7	0	2
Mvmt Flow	0	41	1	30	39	24	1	33	82	20	18	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.5	7.7	7.3	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	32%	53%
Vol Thru, %	28%	97%	42%	47%
Vol Right, %	71%	3%	26%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	92	33	74	30
LT Vol	1	0	24	16
Through Vol	26	32	31	14
RT Vol	65	1	19	0
Lane Flow Rate	116	42	94	38
Geometry Grp	1	1	1	1
Degree of Util (X)	0.121	0.049	0.107	0.047
Departure Headway (Hd)	3.741	4.224	4.112	4.452
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	943	837	863	794
Service Time	1.822	2.305	2.18	2.538
HCM Lane V/C Ratio	0.123	0.05	0.109	0.048
HCM Control Delay	7.3	7.5	7.7	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.2	0.4	0.1

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	5	0	25	0	5	2	36	18	5	35	0
Future Vol, veh/h	2	5	0	25	0	5	2	36	18	5	35	0
Conflicting Peds, #/hr	4	0	0	0	0	4	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	50	0	2	0	2	0	50	9	0	40	0	2
Mvmt Flow	2	5	0	27	0	5	2	39	19	5	38	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	110	113	41	104	104	53	41	0	0	58	0	0
Stage 1	51	51	-	53	53	-	-	-	-	-	-	-
Stage 2	59	62	-	51	51	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.5	6.22	7.1	6.52	6.2	4.6	-	-	4.5	-	-
Critical Hdwy Stg 1	6.6	5.5	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.5	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4	3.318	3.5	4.018	3.3	2.65	-	-	2.56	-	-
Pot Cap-1 Maneuver	767	781	1030	881	786	1020	1309	-	-	1335	-	-
Stage 1	853	856	-	965	851	-	-	-	-	-	-	-
Stage 2	845	847	-	967	852	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	755	774	1027	872	779	1017	1306	-	-	1335	-	-
Mov Cap-2 Maneuver	755	774	-	872	779	-	-	-	-	-	-	-
Stage 1	849	850	-	963	849	-	-	-	-	-	-	-
Stage 2	836	845	-	957	846	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	9.2	0.3	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1306	-	-	768	893	1335	-	-
HCM Lane V/C Ratio	0.002	-	-	0.01	0.036	0.004	-	-
HCM Control Delay (s)	7.8	0	-	9.7	9.2	7.7	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	27	1	2	13	7	3	0	2	9	0	2
Future Vol, veh/h	1	27	1	2	13	7	3	0	2	9	0	2
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	100	0	0	0	0	15	0	2	0	0	2	0
Mvmt Flow	1	29	1	2	14	8	3	0	2	10	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	24	0	0	30	0	0	55	60	30	57	56	20
Stage 1	-	-	-	-	-	-	32	32	-	24	24	-
Stage 2	-	-	-	-	-	-	23	28	-	33	32	-
Critical Hdwy	5.1	-	-	4.1	-	-	7.1	6.52	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.5	4.018	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1134	-	-	1596	-	-	948	831	1050	945	835	1064
Stage 1	-	-	-	-	-	-	990	868	-	999	875	-
Stage 2	-	-	-	-	-	-	1000	872	-	988	868	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	1132	-	-	1596	-	-	944	828	1050	940	832	1062
Mov Cap-2 Maneuver	-	-	-	-	-	-	944	828	-	940	832	-
Stage 1	-	-	-	-	-	-	989	867	-	996	872	-
Stage 2	-	-	-	-	-	-	997	869	-	985	867	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.7			8.7			8.8		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	984	1132	-	-	1596	-	-	960
HCM Lane V/C Ratio	0.005	0.001	-	-	0.001	-	-	0.012
HCM Control Delay (s)	8.7	8.2	0	-	7.3	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0



Intersection						
Int Delay, s/veh	3.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	19	17	1	13	37	1
Future Vol, veh/h	19	17	1	13	37	1
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	20	1	15	44	1

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	42	0	51
Stage 1	-	-	-	-	32
Stage 2	-	-	-	-	19
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1580	-	963
Stage 1	-	-	-	-	996
Stage 2	-	-	-	-	1009
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1580	-	960
Mov Cap-2 Maneuver	-	-	-	-	960
Stage 1	-	-	-	-	996
Stage 2	-	-	-	-	1006

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	962	-	-	1580	-
HCM Lane V/C Ratio	0.046	-	-	0.001	-
HCM Control Delay (s)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	36	0	104	72	25	2	23	74	20	36	1
Future Vol, veh/h	1	36	0	104	72	25	2	23	74	20	36	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	2	0	0	4	0	0	0	0	0	0
Mvmt Flow	1	40	0	116	80	28	2	26	82	22	40	1
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	9	7.8	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	3%	52%	35%
Vol Thru, %	23%	97%	36%	63%
Vol Right, %	75%	0%	12%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	99	37	201	57
LT Vol	2	1	104	20
Through Vol	23	36	72	36
RT Vol	74	0	25	1
Lane Flow Rate	110	41	223	63
Geometry Grp	1	1	1	1
Degree of Util (X)	0.126	0.052	0.271	0.082
Departure Headway (Hd)	4.137	4.536	4.361	4.685
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	868	790	826	766
Service Time	2.157	2.559	2.378	2.708
HCM Lane V/C Ratio	0.127	0.052	0.27	0.082
HCM Control Delay	7.8	7.8	9	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.2	1.1	0.3

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	2	3	38	11	12	4	74	42	11	77	2
Future Vol, veh/h	3	2	3	38	11	12	4	74	42	11	77	2
Conflicting Peds, #/hr	7	0	0	0	0	7	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	0	0
Mvmt Flow	4	2	4	45	13	14	5	87	49	13	91	2

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	262	266	94	243	243	119	95	0	0	136	0	0
Stage 1	120	120	-	122	122	-	-	-	-	-	-	-
Stage 2	142	146	-	121	121	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	695	643	968	715	662	938	1512	-	-	1461	-	-
Stage 1	889	800	-	887	799	-	-	-	-	-	-	-
Stage 2	866	780	-	888	800	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	662	633	966	704	652	932	1509	-	-	1461	-	-
Mov Cap-2 Maneuver	662	633	-	704	652	-	-	-	-	-	-	-
Stage 1	884	791	-	883	796	-	-	-	-	-	-	-
Stage 2	831	777	-	874	791	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	10.5	0.2	0.9
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1509	-	-	741	729	1461	-	-
HCM Lane V/C Ratio	0.003	-	-	0.013	0.098	0.009	-	-
HCM Control Delay (s)	7.4	0	-	9.9	10.5	7.5	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0	-	-

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	30	2	5	39	15	0	0	4	9	0	4
Future Vol, veh/h	7	30	2	5	39	15	0	0	4	9	0	4
Conflicting Peds, #/hr	8	0	2	2	0	8	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	2	2	0	0	2	0
Mvmt Flow	8	34	2	6	44	17	0	0	5	10	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	69	0	0	38	0	0	120	134	37	127	127	61
Stage 1	-	-	-	-	-	-	53	53	-	73	73	-
Stage 2	-	-	-	-	-	-	67	81	-	54	54	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.12	6.52	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.52	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4.018	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1545	-	-	1585	-	-	855	757	1041	851	764	1010
Stage 1	-	-	-	-	-	-	960	851	-	942	834	-
Stage 2	-	-	-	-	-	-	943	828	-	963	850	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1535	-	-	1582	-	-	844	743	1039	836	750	1003
Mov Cap-2 Maneuver	-	-	-	-	-	-	844	743	-	836	750	-
Stage 1	-	-	-	-	-	-	953	845	-	931	825	-
Stage 2	-	-	-	-	-	-	935	819	-	954	844	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			0.6			8.5			9.2		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1039	1535	-	-	1582	-	-	881
HCM Lane V/C Ratio	0.004	0.005	-	-	0.004	-	-	0.017
HCM Control Delay (s)	8.5	7.4	0	-	7.3	0	-	9.2
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Appendix E:  
Future Background Synchro Outputs

Intersection						
Int Delay, s/veh	3.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	6	1	5	11	3
Future Vol, veh/h	14	6	1	5	11	3
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	15	0	0	20	0	0
Mvmt Flow	22	10	2	8	17	5

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	32	0	39 28
Stage 1	-	-	-	-	27 -
Stage 2	-	-	-	-	12 -
Critical Hdwy	-	-	4.1	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	1593	-	978 1053
Stage 1	-	-	-	-	1001 -
Stage 2	-	-	-	-	1016 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1593	-	977 1052
Mov Cap-2 Maneuver	-	-	-	-	977 -
Stage 1	-	-	-	-	1001 -
Stage 2	-	-	-	-	1015 -

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	992	-	-	1593	-
HCM Lane V/C Ratio	0.022	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	5.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	15	0	21	5	5
Future Vol, veh/h	18	15	0	21	5	5
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	0	2	2	0	2
Mvmt Flow	28	23	0	32	8	8

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	41	17	0	0	33	0
Stage 1	17	-	-	-	-	-
Stage 2	24	-	-	-	-	-
Critical Hdwy	6.42	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	970	1068	-	-	1592	-
Stage 1	1006	-	-	-	-	-
Stage 2	999	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	964	1067	-	-	1591	-
Mov Cap-2 Maneuver	964	-	-	-	-	-
Stage 1	1005	-	-	-	-	-
Stage 2	994	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1008	1591
HCM Lane V/C Ratio	-	-	0.05	0.005
HCM Control Delay (s)	-	-	8.8	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	40	1	12	43	19	0	13	65	16	7	7
Future Vol, veh/h	8	40	1	12	43	19	0	13	65	16	7	7
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	0	0	0	4	6	0	0	2	7	0	2
Mvmt Flow	10	51	1	15	54	24	0	16	82	20	9	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.6	7.2	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	16%	16%	53%
Vol Thru, %	17%	82%	58%	23%
Vol Right, %	83%	2%	26%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	78	49	74	30
LT Vol	0	8	12	16
Through Vol	13	40	43	7
RT Vol	65	1	19	7
Lane Flow Rate	99	62	94	38
Geometry Grp	1	1	1	1
Degree of Util (X)	0.101	0.073	0.106	0.046
Departure Headway (Hd)	3.696	4.265	4.064	4.332
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	953	831	873	814
Service Time	1.786	2.335	2.129	2.424
HCM Lane V/C Ratio	0.104	0.075	0.108	0.047
HCM Control Delay	7.2	7.7	7.6	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.2	0.4	0.1



Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	5	0	25	0	5	2	72	18	5	119	0
Future Vol, veh/h	2	5	0	25	0	5	2	72	18	5	119	0
Conflicting Peds, #/hr	4	0	0	0	0	4	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	50	0	2	0	2	0	50	9	0	40	0	2
Mvmt Flow	2	5	0	27	0	5	2	77	19	5	128	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	238	241	131	232	232	91	131	0	0	96	0	0
Stage 1	141	141	-	91	91	-	-	-	-	-	-	-
Stage 2	97	100	-	141	141	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.5	6.22	7.1	6.52	6.2	4.6	-	-	4.5	-	-
Critical Hdwy Stg 1	6.6	5.5	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.5	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4	3.318	3.5	4.018	3.3	2.65	-	-	2.56	-	-
Pot Cap-1 Maneuver	627	664	919	727	668	972	1205	-	-	1290	-	-
Stage 1	760	784	-	921	820	-	-	-	-	-	-	-
Stage 2	804	816	-	867	780	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	617	658	917	719	662	969	1202	-	-	1290	-	-
Mov Cap-2 Maneuver	617	658	-	719	662	-	-	-	-	-	-	-
Stage 1	756	779	-	919	818	-	-	-	-	-	-	-
Stage 2	795	814	-	858	775	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.6		10		0.2		0.3	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1202	-	-	646	751	1290	-	-
HCM Lane V/C Ratio	0.002	-	-	0.012	0.043	0.004	-	-
HCM Control Delay (s)	8	0	-	10.6	10	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	13	1	2	20	14	3	0	2	9	0	2
Future Vol, veh/h	15	13	1	2	20	14	3	0	2	9	0	2
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	100	0	0	0	0	15	0	2	0	0	2	0
Mvmt Flow	16	14	1	2	22	15	3	0	2	10	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	15	0	0	82	90	15	84	83	32
Stage 1	-	-	-	-	-	-	47	47	-	36	36	-
Stage 2	-	-	-	-	-	-	35	43	-	48	47	-
Critical Hdwy	5.1	-	-	4.1	-	-	7.1	6.52	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.5	4.018	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1117	-	-	1616	-	-	910	800	1070	908	807	1048
Stage 1	-	-	-	-	-	-	972	856	-	985	865	-
Stage 2	-	-	-	-	-	-	986	859	-	971	856	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	1115	-	-	1616	-	-	898	786	1070	894	793	1046
Mov Cap-2 Maneuver	-	-	-	-	-	-	898	786	-	894	793	-
Stage 1	-	-	-	-	-	-	958	844	-	969	862	-
Stage 2	-	-	-	-	-	-	983	856	-	955	844	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.3			0.4			8.8			9		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	960	1115	-	-	1616	-	-	918
HCM Lane V/C Ratio	0.006	0.014	-	-	0.001	-	-	0.013
HCM Control Delay (s)	8.8	8.3	0	-	7.2	0	-	9
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection						
Int Delay, s/veh	3.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	19	17	1	13	37	1
Future Vol, veh/h	19	17	1	13	37	1
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	20	1	15	44	1

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	42	0	51
Stage 1	-	-	-	-	32
Stage 2	-	-	-	-	19
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1580	-	963
Stage 1	-	-	-	-	996
Stage 2	-	-	-	-	1009
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1580	-	960
Mov Cap-2 Maneuver	-	-	-	-	960
Stage 1	-	-	-	-	996
Stage 2	-	-	-	-	1006

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	962	-	-	1580	-
HCM Lane V/C Ratio	0.046	-	-	0.001	-
HCM Control Delay (s)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	7.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	39	0	21	8	9
Future Vol, veh/h	69	39	0	21	8	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	0	2	2	0	2
Mvmt Flow	87	49	0	27	10	11

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	45	14	0	0	27	0
Stage 1	14	-	-	-	-	-
Stage 2	31	-	-	-	-	-
Critical Hdwy	6.42	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	965	1072	-	-	1600	-
Stage 1	1009	-	-	-	-	-
Stage 2	992	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	959	1072	-	-	1600	-
Mov Cap-2 Maneuver	959	-	-	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	986	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	997	1600
HCM Lane V/C Ratio	-	-	0.137	0.006
HCM Control Delay (s)	-	-	9.2	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	42	0	52	124	25	1	11	74	20	18	19
Future Vol, veh/h	7	42	0	52	124	25	1	11	74	20	18	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	2	0	0	4	0	0	0	0	0	0
Mvmt Flow	8	47	0	58	138	28	1	12	82	22	20	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	8.9	7.6	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %		1%	14%	26%
Vol Thru, %		13%	86%	62%
Vol Right, %		86%	0%	12%
Sign Control		Stop	Stop	Stop
Traffic Vol by Lane		86	49	201
LT Vol		1	7	52
Through Vol		11	42	124
RT Vol		74	0	25
Lane Flow Rate		96	54	223
Geometry Grp		1	1	1
Degree of Util (X)		0.108	0.068	0.267
Departure Headway (Hd)		4.085	4.515	4.3
Convergence, Y/N		Yes	Yes	Yes
Cap		878	794	840
Service Time		2.105	2.536	2.3
HCM Lane V/C Ratio		0.109	0.068	0.265
HCM Control Delay		7.6	7.9	8.9
HCM Lane LOS		A	A	A
HCM 95th-tile Q		0.4	0.2	1.1

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	2	3	38	11	12	4	168	42	11	140	2
Future Vol, veh/h	3	2	3	38	11	12	4	168	42	11	140	2
Conflicting Peds, #/hr	7	0	0	0	0	7	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	0	0
Mvmt Flow	4	2	4	45	13	14	5	198	49	13	165	2

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	447	451	168	428	428	230	169	0	0	247	0	0
Stage 1	194	194	-	233	233	-	-	-	-	-	-	-
Stage 2	253	257	-	195	195	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	525	507	881	541	522	814	1421	-	-	1331	-	-
Stage 1	812	744	-	775	716	-	-	-	-	-	-	-
Stage 2	756	699	-	811	743	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	496	498	880	531	513	809	1419	-	-	1331	-	-
Mov Cap-2 Maneuver	496	498	-	531	513	-	-	-	-	-	-	-
Stage 1	807	734	-	772	713	-	-	-	-	-	-	-
Stage 2	722	696	-	796	733	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.2	12.3	0.1	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1419	-	-	594	566	1331	-	-
HCM Lane V/C Ratio	0.003	-	-	0.016	0.127	0.01	-	-
HCM Control Delay (s)	7.5	0	-	11.2	12.3	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0	-	-

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	15	2	5	46	21	0	0	4	9	0	4
Future Vol, veh/h	22	15	2	5	46	21	0	0	4	9	0	4
Conflicting Peds, #/hr	8	0	2	2	0	8	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	2	2	0	0	2	0
Mvmt Flow	25	17	2	6	52	24	0	0	5	10	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	84	0	0	21	0	0	149	166	20	155	155	72
Stage 1	-	-	-	-	-	-	70	70	-	84	84	-
Stage 2	-	-	-	-	-	-	79	96	-	71	71	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.12	6.52	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.52	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4.018	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1526	-	-	1608	-	-	819	727	1064	816	737	996
Stage 1	-	-	-	-	-	-	940	837	-	929	825	-
Stage 2	-	-	-	-	-	-	930	815	-	944	836	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1516	-	-	1605	-	-	801	705	1062	794	715	989
Mov Cap-2 Maneuver	-	-	-	-	-	-	801	705	-	794	715	-
Stage 1	-	-	-	-	-	-	922	821	-	907	816	-
Stage 2	-	-	-	-	-	-	922	806	-	924	820	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.2	0.5	8.4	9.3
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1062	1516	-	-	1605	-	-	845
HCM Lane V/C Ratio	0.004	0.016	-	-	0.004	-	-	0.017
HCM Control Delay (s)	8.4	7.4	0	-	7.3	0	-	9.3
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

Intersection						
Int Delay, s/veh	3.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	6	1	5	11	3
Future Vol, veh/h	14	6	1	5	11	3
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	15	0	0	20	0	0
Mvmt Flow	22	10	2	8	17	5

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	32	0	39 28
Stage 1	-	-	-	-	27 -
Stage 2	-	-	-	-	12 -
Critical Hdwy	-	-	4.1	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	1593	-	978 1053
Stage 1	-	-	-	-	1001 -
Stage 2	-	-	-	-	1016 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1593	-	977 1052
Mov Cap-2 Maneuver	-	-	-	-	977 -
Stage 1	-	-	-	-	1001 -
Stage 2	-	-	-	-	1015 -

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	992	-	-	1593	-
HCM Lane V/C Ratio	0.022	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Intersection						
Int Delay, s/veh	5.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	15	0	21	5	5
Future Vol, veh/h	18	15	0	21	5	5
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	0	2	2	0	2
Mvmt Flow	28	23	0	32	8	8

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	41	17	0	0	33	0
Stage 1	17	-	-	-	-	-
Stage 2	24	-	-	-	-	-
Critical Hdwy	6.42	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	970	1068	-	-	1592	-
Stage 1	1006	-	-	-	-	-
Stage 2	999	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	964	1067	-	-	1591	-
Mov Cap-2 Maneuver	964	-	-	-	-	-
Stage 1	1005	-	-	-	-	-
Stage 2	994	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1008	1591
HCM Lane V/C Ratio	-	-	0.05	0.005
HCM Control Delay (s)	-	-	8.8	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	40	1	12	43	19	0	13	65	16	7	7
Future Vol, veh/h	8	40	1	12	43	19	0	13	65	16	7	7
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	0	0	0	4	6	0	0	2	7	0	2
Mvmt Flow	10	51	1	15	54	24	0	16	82	20	9	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.6	7.2	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	16%	16%	53%
Vol Thru, %	17%	82%	58%	23%
Vol Right, %	83%	2%	26%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	78	49	74	30
LT Vol	0	8	12	16
Through Vol	13	40	43	7
RT Vol	65	1	19	7
Lane Flow Rate	99	62	94	38
Geometry Grp	1	1	1	1
Degree of Util (X)	0.101	0.073	0.106	0.046
Departure Headway (Hd)	3.696	4.265	4.064	4.332
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	953	831	873	814
Service Time	1.786	2.335	2.129	2.424
HCM Lane V/C Ratio	0.104	0.075	0.108	0.047
HCM Control Delay	7.2	7.7	7.6	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.2	0.4	0.1

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	5	0	25	0	5	2	75	18	5	122	0
Future Vol, veh/h	2	5	0	25	0	5	2	75	18	5	122	0
Conflicting Peds, #/hr	4	0	0	0	0	4	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	50	0	2	0	2	0	50	9	0	40	0	2
Mvmt Flow	2	5	0	27	0	5	2	81	19	5	131	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	245	248	134	239	239	95	134	0	0	100	0	0
Stage 1	144	144	-	95	95	-	-	-	-	-	-	-
Stage 2	101	104	-	144	144	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.5	6.22	7.1	6.52	6.2	4.6	-	-	4.5	-	-
Critical Hdwy Stg 1	6.6	5.5	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.5	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4	3.318	3.5	4.018	3.3	2.65	-	-	2.56	-	-
Pot Cap-1 Maneuver	620	658	915	719	662	967	1202	-	-	1286	-	-
Stage 1	757	782	-	917	816	-	-	-	-	-	-	-
Stage 2	800	813	-	864	778	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	610	652	913	711	656	964	1199	-	-	1286	-	-
Mov Cap-2 Maneuver	610	652	-	711	656	-	-	-	-	-	-	-
Stage 1	753	777	-	915	814	-	-	-	-	-	-	-
Stage 2	791	811	-	855	773	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB			
HCM Control Delay, s	10.7		10.1		0.2		0.3			
HCM LOS	B		B							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1199	-	-	639	744	1286	-	-
HCM Lane V/C Ratio	0.002	-	-	0.012	0.043	0.004	-	-
HCM Control Delay (s)	8	0	-	10.7	10.1	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

HCM 6th TWSC  
6: Code Cres/Boyd St & Morris St

Five Year Background, AM Peak Hour

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	13	1	2	20	14	3	0	2	9	0	2
Future Vol, veh/h	15	13	1	2	20	14	3	0	2	9	0	2
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	100	0	0	0	0	15	0	2	0	0	2	0
Mvmt Flow	16	14	1	2	22	15	3	0	2	10	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	15	0	0	82	90	15	84	83	32
Stage 1	-	-	-	-	-	-	47	47	-	36	36	-
Stage 2	-	-	-	-	-	-	35	43	-	48	47	-
Critical Hdwy	5.1	-	-	4.1	-	-	7.1	6.52	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.5	4.018	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1117	-	-	1616	-	-	910	800	1070	908	807	1048
Stage 1	-	-	-	-	-	-	972	856	-	985	865	-
Stage 2	-	-	-	-	-	-	986	859	-	971	856	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1115	-	-	1616	-	-	898	786	1070	894	793	1046
Mov Cap-2 Maneuver	-	-	-	-	-	-	898	786	-	894	793	-
Stage 1	-	-	-	-	-	-	958	844	-	969	862	-
Stage 2	-	-	-	-	-	-	983	856	-	955	844	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.3			0.4			8.8			9		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	960	1115	-	-	1616	-	-	918
HCM Lane V/C Ratio	0.006	0.014	-	-	0.001	-	-	0.013
HCM Control Delay (s)	8.8	8.3	0	-	7.2	0	-	9
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection						
Int Delay, s/veh	3.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	19	17	1	13	37	1
Future Vol, veh/h	19	17	1	13	37	1
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	20	1	15	44	1

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	42	0	51
Stage 1	-	-	-	-	32
Stage 2	-	-	-	-	19
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1580	-	963
Stage 1	-	-	-	-	996
Stage 2	-	-	-	-	1009
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1580	-	960
Mov Cap-2 Maneuver	-	-	-	-	960
Stage 1	-	-	-	-	996
Stage 2	-	-	-	-	1006

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	962	-	-	1580	-
HCM Lane V/C Ratio	0.046	-	-	0.001	-
HCM Control Delay (s)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	7.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	39	0	21	8	9
Future Vol, veh/h	69	39	0	21	8	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	0	2	2	0	2
Mvmt Flow	87	49	0	27	10	11

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	45	14	0	0	27	0
Stage 1	14	-	-	-	-	-
Stage 2	31	-	-	-	-	-
Critical Hdwy	6.42	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	965	1072	-	-	1600	-
Stage 1	1009	-	-	-	-	-
Stage 2	992	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	959	1072	-	-	1600	-
Mov Cap-2 Maneuver	959	-	-	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	986	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	997	1600
HCM Lane V/C Ratio	-	-	0.137	0.006
HCM Control Delay (s)	-	-	9.2	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	42	0	52	124	25	1	11	74	20	18	19
Future Vol, veh/h	7	42	0	52	124	25	1	11	74	20	18	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	4	0	0	0	0	0	0
Mvmt Flow	8	47	0	58	138	28	1	12	82	22	20	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	8.9	7.6	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %		1%	14%	26%
Vol Thru, %		13%	86%	62%
Vol Right, %		86%	0%	12%
Sign Control		Stop	Stop	Stop
Traffic Vol by Lane		86	49	201
LT Vol		1	7	52
Through Vol		11	42	124
RT Vol		74	0	25
Lane Flow Rate		96	54	223
Geometry Grp		1	1	1
Degree of Util (X)		0.108	0.068	0.267
Departure Headway (Hd)		4.085	4.515	4.3
Convergence, Y/N		Yes	Yes	Yes
Cap		878	794	840
Service Time		2.105	2.536	2.3
HCM Lane V/C Ratio		0.109	0.068	0.265
HCM Control Delay		7.6	7.9	8.9
HCM Lane LOS		A	A	A
HCM 95th-tile Q		0.4	0.2	1.1

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	2	3	38	11	12	4	183	42	11	155	2
Future Vol, veh/h	3	2	3	38	11	12	4	183	42	11	155	2
Conflicting Peds, #/hr	7	0	0	0	0	7	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	0	0
Mvmt Flow	4	2	4	45	13	14	5	215	49	13	182	2

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	481	485	185	462	462	247	186	0	0	264	0	0
Stage 1	211	211	-	250	250	-	-	-	-	-	-	-
Stage 2	270	274	-	212	212	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	499	485	862	513	500	797	1401	-	-	1312	-	-
Stage 1	796	731	-	759	704	-	-	-	-	-	-	-
Stage 2	740	687	-	795	731	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	471	477	861	503	492	792	1399	-	-	1312	-	-
Mov Cap-2 Maneuver	471	477	-	503	492	-	-	-	-	-	-	-
Stage 1	791	721	-	756	701	-	-	-	-	-	-	-
Stage 2	706	684	-	780	721	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB			
HCM Control Delay, s	11.4		12.7		0.1		0.5			
HCM LOS	B		B							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1399	-	-	570	540	1312	-	-
HCM Lane V/C Ratio	0.003	-	-	0.017	0.133	0.01	-	-
HCM Control Delay (s)	7.6	0	-	11.4	12.7	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0	-	-



Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	15	2	5	46	21	0	0	4	9	0	4
Future Vol, veh/h	22	15	2	5	46	21	0	0	4	9	0	4
Conflicting Peds, #/hr	8	0	2	2	0	8	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	2	0
Mvmt Flow	25	17	2	6	52	24	0	0	5	10	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	84	0	0	21	0	0	149	166	20	155	155	72
Stage 1	-	-	-	-	-	-	70	70	-	84	84	-
Stage 2	-	-	-	-	-	-	79	96	-	71	71	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.52	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.018	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1526	-	-	1608	-	-	824	727	1064	816	737	996
Stage 1	-	-	-	-	-	-	945	837	-	929	825	-
Stage 2	-	-	-	-	-	-	935	815	-	944	836	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1516	-	-	1605	-	-	806	705	1062	794	715	989
Mov Cap-2 Maneuver	-	-	-	-	-	-	806	705	-	794	715	-
Stage 1	-	-	-	-	-	-	927	821	-	907	816	-
Stage 2	-	-	-	-	-	-	927	806	-	924	820	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.2	0.5	8.4	9.3
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1062	1516	-	-	1605	-	-	845
HCM Lane V/C Ratio	0.004	0.016	-	-	0.004	-	-	0.017
HCM Control Delay (s)	8.4	7.4	0	-	7.3	0	-	9.3
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

Appendix F:  
Future Total Synchro Outputs

Lanes, Volumes, Timings  
1: Boyd St & Woodward St

Opening Year Total, AM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	14	6	1	5	11	3
Future Volume (vph)	14	6	1	5	11	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.958			0.969		
Flt Protected				0.990	0.963	
Satd. Flow (prot)	1650	0	0	1622	1773	0
Flt Permitted				0.990	0.963	
Satd. Flow (perm)	1650	0	0	1622	1773	0
Link Speed (k/h)	40			40	50	
Link Distance (m)	171.5			188.7	168.4	
Travel Time (s)	15.4			17.0	12.1	
Confl. Peds. (#/hr)						1
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63
Heavy Vehicles (%)	15%	0%	0%	20%	0%	0%
Adj. Flow (vph)	22	10	2	8	17	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	32	0	0	10	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	15		25	25		15
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	13.7%
	ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	3.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	6	1	5	11	3
Future Vol, veh/h	14	6	1	5	11	3
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	15	0	0	20	0	0
Mvmt Flow	22	10	2	8	17	5

















Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	32	0	39
Stage 1	-	-	-	-	27
Stage 2	-	-	-	-	12
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1593	-	978
Stage 1	-	-	-	-	1001
Stage 2	-	-	-	-	1016
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1593	-	977
Mov Cap-2 Maneuver	-	-	-	-	977
Stage 1	-	-	-	-	1001
Stage 2	-	-	-	-	1015

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	992	-	-	1593	-
HCM Lane V/C Ratio	0.022	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lanes, Volumes, Timings  
2: Boyd St & 166 Boyd/Arthur St

Opening Year Total, AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	22	12	18	7	15	4	0	21	5	5	0
Future Volume (vph)	0	22	12	18	7	15	4	0	21	5	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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		0.953			0.950			0.886				
Flt Protected					0.978			0.992			0.976	
Satd. Flow (prot)	0	1775	0	0	1743	0	0	1637	0	0	1836	0
Flt Permitted					0.978			0.992			0.976	
Satd. Flow (perm)	0	1775	0	0	1743	0	0	1637	0	0	1836	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		71.4			273.5			91.5			168.4	
Travel Time (s)		5.1			19.7			6.6			12.1	
Confl. Peds. (#/hr)										1		
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
Heavy Vehicles (%)	2%	2%	2%	2%	2%	0%	2%	2%	2%	0%	2%	2%
Adj. Flow (vph)	0	34	18	28	11	23	6	0	32	8	8	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	52	0	0	62	0	0	38	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	
<b>Intersection Summary</b>												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	18.9%						ICU Level of Service A					
Analysis Period (min)	15											

Intersection												
Int Delay, s/veh	6.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	22	12	18	7	15	4	0	21	5	5	0
Future Vol, veh/h	0	22	12	18	7	15	4	0	21	5	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	0	2	2	2	0	2	2
Mvmt Flow	0	34	18	28	11	23	6	0	32	8	8	0

















Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	69	69	8	79	53	17	8	0	0	33	0	0
Stage 1	24	24	-	29	29	-	-	-	-	-	-	-
Stage 2	45	45	-	50	24	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	923	822	1074	910	838	1068	1612	-	-	1592	-	-
Stage 1	994	875	-	988	871	-	-	-	-	-	-	-
Stage 2	969	857	-	963	875	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	888	814	1074	859	830	1067	1612	-	-	1591	-	-
Mov Cap-2 Maneuver	888	814	-	859	830	-	-	-	-	-	-	-
Stage 1	990	871	-	983	867	-	-	-	-	-	-	-
Stage 2	933	853	-	905	871	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	9.2	1.2	3.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	890	921	1591	-	-
HCM Lane V/C Ratio	0.004	-	-	0.059	0.067	0.005	-	-
HCM Control Delay (s)	7.2	0	-	9.3	9.2	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Lanes, Volumes, Timings  
3: Napoleon St & Arthur St

Opening Year Total, AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	57	1	12	48	19	0	13	65	16	7	9
Future Volume (vph)	13	57	1	12	48	19	0	13	65	16	7	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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		0.998			0.968			0.887			0.963	
Flt Protected		0.991			0.993						0.976	
Satd. Flow (prot)	0	1872	0	0	1758	0	0	1658	0	0	1716	0
Flt Permitted		0.991			0.993						0.976	
Satd. Flow (perm)	0	1872	0	0	1758	0	0	1658	0	0	1716	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		273.5			172.5			202.7			151.8	
Travel Time (s)		19.7			12.4			14.6			10.9	
Confl. Peds. (#/hr)	2					2						
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles (%)	2%	0%	0%	0%	4%	6%	0%	0%	2%	7%	0%	2%
Adj. Flow (vph)	16	72	1	15	61	24	0	16	82	20	9	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	0	0	100	0	0	98	0	0	40	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Stop			Stop	
<b>Intersection Summary</b>												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	21.2%					ICU Level of Service A						
Analysis Period (min)	15											

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	57	1	12	48	19	0	13	65	16	7	9
Future Vol, veh/h	13	57	1	12	48	19	0	13	65	16	7	9
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	0	0	0	4	6	0	0	2	7	0	2
Mvmt Flow	16	72	1	15	61	24	0	16	82	20	9	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0










Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.7	7.3	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	18%	15%	50%
Vol Thru, %	17%	80%	61%	22%
Vol Right, %	83%	1%	24%	28%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	78	71	79	32
LT Vol	0	13	12	16
Through Vol	13	57	48	7
RT Vol	65	1	19	9
Lane Flow Rate	99	90	100	41
Geometry Grp	1	1	1	1
Degree of Util (X)	0.106	0.107	0.114	0.05
Departure Headway (Hd)	3.869	4.282	4.098	4.472
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	932	826	862	805
Service Time	1.87	2.368	2.185	2.475
HCM Lane V/C Ratio	0.106	0.109	0.116	0.051
HCM Control Delay	7.3	7.9	7.7	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0.4	0.2



Lanes, Volumes, Timings  
4: Boyd St & Taber St

Opening Year Total, AM Peak Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	7	2	25	24	11
Future Volume (vph)	0	7	2	25	24	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865			0.957		
Flt Protected				0.996		
Satd. Flow (prot)	1644	0	0	1785	1783	0
Flt Permitted				0.996		
Satd. Flow (perm)	1644	0	0	1785	1783	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	112.8			250.5	91.5	
Travel Time (s)	8.1			18.0	6.6	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles (%)	2%	0%	50%	2%	2%	2%
Adj. Flow (vph)	0	9	3	33	32	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	9	0	0	36	47	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	13.3%			ICU Level of Service A		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	0	7	2	25	24	11
Future Vol, veh/h	0	7	2	25	24	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	0	50	2	2	2
Mvmt Flow	0	9	3	33	32	15

















Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	79	40	47	0	0
Stage 1	40	-	-	-	-
Stage 2	39	-	-	-	-
Critical Hdwy	6.42	6.2	4.6	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.3	2.65	-	-
Pot Cap-1 Maneuver	924	1037	1302	-	-
Stage 1	982	-	-	-	-
Stage 2	983	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	922	1037	1302	-	-
Mov Cap-2 Maneuver	922	-	-	-	-
Stage 1	980	-	-	-	-
Stage 2	983	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1302	-	1037	-	-
HCM Lane V/C Ratio	0.002	-	0.009	-	-
HCM Control Delay (s)	7.8	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lanes, Volumes, Timings  
5: Mississippi Rd & Morris St

Opening Year Total, AM Peak Hour

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	2	5	0	37	0	5	2	72	22	5	119	0	
Future Volume (vph)	2	5	0	37	0	5	2	72	22	5	119	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
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						0.969	
Flt Protected	0.986				0.957				0.999		0.998		
Satd. Flow (prot)	0	1639	0	0	1791	0	0	1708	0	0	1868	0	
Flt Permitted	0.986				0.957				0.999		0.998		
Satd. Flow (perm)	0	1639	0	0	1791	0	0	1708	0	0	1868	0	
Link Speed (k/h)					50						50		
Link Distance (m)					179.2						221.0		
Travel Time (s)					12.9						15.9		
Confl. Peds. (#/hr)	4						4	3					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	50%	0%	2%	0%	2%	0%	50%	9%	0%	40%	0%	2%	
Adj. Flow (vph)	2	5	0	40	0	5	2	77	24	5	128	0	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	7	0	0	45	0	0	103	0	0	133	0	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right	
Median Width(m)	0.0				0.0				0.0		0.0		
Link Offset(m)	0.0				0.0				0.0		0.0		
Crosswalk Width(m)	4.8				4.8				4.8		4.8		
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (k/h)	25		15		25		15		25		15		
Sign Control	Stop				Stop				Free		Free		
<b>Intersection Summary</b>													
Area Type:	Other												
Control Type:	Unsignalized												
Intersection Capacity Utilization	22.9%					ICU Level of Service A							
Analysis Period (min)	15												

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	5	0	37	0	5	2	72	22	5	119	0
Future Vol, veh/h	2	5	0	37	0	5	2	72	22	5	119	0
Conflicting Peds, #/hr	4	0	0	0	0	4	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	50	0	2	0	2	0	50	9	0	40	0	2
Mvmt Flow	2	5	0	40	0	5	2	77	24	5	128	0

















Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	241	246	131	234	234	93	131	0	0	101	0	0
Stage 1	141	141	-	93	93	-	-	-	-	-	-	-
Stage 2	100	105	-	141	141	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.5	6.22	7.1	6.52	6.2	4.6	-	-	4.5	-	-
Critical Hdwy Stg 1	6.6	5.5	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.5	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4	3.318	3.5	4.018	3.3	2.65	-	-	2.56	-	-
Pot Cap-1 Maneuver	624	660	919	725	666	970	1205	-	-	1285	-	-
Stage 1	760	784	-	919	818	-	-	-	-	-	-	-
Stage 2	801	812	-	867	780	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	614	654	917	717	660	967	1202	-	-	1285	-	-
Mov Cap-2 Maneuver	614	654	-	717	660	-	-	-	-	-	-	-
Stage 1	756	779	-	917	816	-	-	-	-	-	-	-
Stage 2	792	810	-	858	775	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.7		10.2		0.2		0.3	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1202	-	-	642	740	1285	-	-
HCM Lane V/C Ratio	0.002	-	-	0.012	0.061	0.004	-	-
HCM Control Delay (s)	8	0	-	10.7	10.2	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Lanes, Volumes, Timings  
6: Code Cres/Boyd St & Morris St

Opening Year Total, AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	13	1	2	20	14	3	0	2	9	0	14
Future Volume (vph)	19	13	1	2	20	14	3	0	2	9	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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		0.996			0.948			0.946			0.919	
Flt Protected		0.972			0.997			0.971			0.980	
Satd. Flow (prot)	0	1171	0	0	1698	0	0	1745	0	0	1711	0
Flt Permitted		0.972			0.997			0.971			0.980	
Satd. Flow (perm)	0	1171	0	0	1698	0	0	1745	0	0	1711	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		219.6			227.7			56.8			250.5	
Travel Time (s)		15.8			16.4			4.1			18.0	
Confl. Peds. (#/hr)	2					2						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	100%	0%	0%	0%	0%	15%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	20	14	1	2	22	15	3	0	2	10	0	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	35	0	0	39	0	0	5	0	0	25	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	
<b>Intersection Summary</b>												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	18.5%						ICU Level of Service A					
Analysis Period (min)	15											

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	13	1	2	20	14	3	0	2	9	0	14
Future Vol, veh/h	19	13	1	2	20	14	3	0	2	9	0	14
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	100	0	0	0	0	15	0	2	0	0	2	0
Mvmt Flow	20	14	1	2	22	15	3	0	2	10	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	15	0	0	96	98	15	92	91	32
Stage 1	-	-	-	-	-	-	55	55	-	36	36	-
Stage 2	-	-	-	-	-	-	41	43	-	56	55	-
Critical Hdwy	5.1	-	-	4.1	-	-	7.1	6.52	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.5	4.018	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1117	-	-	1616	-	-	891	792	1070	897	799	1048
Stage 1	-	-	-	-	-	-	962	849	-	985	865	-
Stage 2	-	-	-	-	-	-	979	859	-	961	849	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	1115	-	-	1616	-	-	865	775	1070	881	782	1046
Mov Cap-2 Maneuver	-	-	-	-	-	-	865	775	-	881	782	-
Stage 1	-	-	-	-	-	-	945	834	-	965	862	-
Stage 2	-	-	-	-	-	-	964	856	-	942	834	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.8			0.4			8.9			8.8		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	937	1115	-	-	1616	-	-	975
HCM Lane V/C Ratio	0.006	0.018	-	-	0.001	-	-	0.025
HCM Control Delay (s)	8.9	8.3	0	-	7.2	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

Intersection						
Int Delay, s/veh	3.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	19	17	1	13	37	1
Future Vol, veh/h	19	17	1	13	37	1
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	20	1	15	44	1

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	42	0	51
Stage 1	-	-	-	-	32
Stage 2	-	-	-	-	19
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1580	-	963
Stage 1	-	-	-	-	996
Stage 2	-	-	-	-	1009
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1580	-	960
Mov Cap-2 Maneuver	-	-	-	-	960
Stage 1	-	-	-	-	996
Stage 2	-	-	-	-	1006

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	962	-	-	1580	-
HCM Lane V/C Ratio	0.046	-	-	0.001	-
HCM Control Delay (s)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection												
Int Delay, s/veh	8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	16	9	69	17	39	9	0	21	8	9	0
Future Vol, veh/h	0	16	9	69	17	39	9	0	21	8	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	0	2	2	2	0	2	2
Mvmt Flow	0	20	11	87	22	49	11	0	27	10	11	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	102	80	11	83	67	14	11	0	0	27	0	0
Stage 1	31	31	-	36	36	-	-	-	-	-	-	-
Stage 2	71	49	-	47	31	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	879	810	1070	904	824	1072	1608	-	-	1600	-	-
Stage 1	986	869	-	980	865	-	-	-	-	-	-	-
Stage 2	939	854	-	967	869	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	813	799	1070	869	813	1072	1608	-	-	1600	-	-
Mov Cap-2 Maneuver	813	799	-	869	813	-	-	-	-	-	-	-
Stage 1	979	864	-	973	859	-	-	-	-	-	-	-
Stage 2	867	848	-	929	864	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	9.8	2.2	3.4
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1608	-	-	879	914	1600	-	-
HCM Lane V/C Ratio	0.007	-	-	0.036	0.173	0.006	-	-
HCM Control Delay (s)	7.3	0	-	9.2	9.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.6	0	-	-



Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	55	0	52	137	25	1	11	74	20	18	23
Future Vol, veh/h	10	55	0	52	137	25	1	11	74	20	18	23
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	2	0	0	4	0	0	0	0	0	0
Mvmt Flow	11	61	0	58	152	28	1	12	82	22	20	26
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	9.1	7.7	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	15%	24%	33%
Vol Thru, %	13%	85%	64%	30%
Vol Right, %	86%	0%	12%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	86	65	214	61
LT Vol	1	10	52	20
Through Vol	11	55	137	18
RT Vol	74	0	25	23
Lane Flow Rate	96	72	238	68
Geometry Grp	1	1	1	1
Degree of Util (X)	0.111	0.091	0.285	0.086
Departure Headway (Hd)	4.168	4.549	4.32	4.547
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	861	788	832	788
Service Time	2.189	2.575	2.342	2.571
HCM Lane V/C Ratio	0.111	0.091	0.286	0.086
HCM Control Delay	7.7	8	9.1	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.3	1.2	0.3

HCM 6th TWSC  
4: Boyd St & Taber St

Opening Year Total, PM Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	0	3	7	30	48	39
Future Vol, veh/h	0	3	7	30	48	39
Conflicting Peds, #/hr	3	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	2	0	0	2	2	2
Mvmt Flow	0	4	10	43	70	57

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	165	99	127	0	-	0
Stage 1	99	-	-	-	-	-
Stage 2	66	-	-	-	-	-
Critical Hdwy	6.42	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	826	962	1472	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	957	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	820	962	1472	-	-	-
Mov Cap-2 Maneuver	820	-	-	-	-	-
Stage 1	919	-	-	-	-	-
Stage 2	957	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	1.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1472	-	962	-	-
HCM Lane V/C Ratio	0.007	-	0.005	-	-
HCM Control Delay (s)	7.5	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	2	3	47	11	12	4	168	51	11	140	2
Future Vol, veh/h	3	2	3	47	11	12	4	168	51	11	140	2
Conflicting Peds, #/hr	7	0	0	0	0	7	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	0	0
Mvmt Flow	4	2	4	55	13	14	5	198	60	13	165	2

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	453	462	168	433	433	235	169	0	0	258	0	0
Stage 1	194	194	-	238	238	-	-	-	-	-	-	-
Stage 2	259	268	-	195	195	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	520	500	881	537	519	809	1421	-	-	1318	-	-
Stage 1	812	744	-	770	712	-	-	-	-	-	-	-
Stage 2	750	691	-	811	743	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	491	492	880	527	510	804	1419	-	-	1318	-	-
Mov Cap-2 Maneuver	491	492	-	527	510	-	-	-	-	-	-	-
Stage 1	807	734	-	767	709	-	-	-	-	-	-	-
Stage 2	716	688	-	796	733	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.2		12.6		0.1		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1419	-	-	589	557	1318	-	-
HCM Lane V/C Ratio	0.003	-	-	0.016	0.148	0.01	-	-
HCM Control Delay (s)	7.5	0	-	11.2	12.6	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	0	-	-

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	31	15	2	5	46	21	0	0	4	9	0	13
Future Vol, veh/h	31	15	2	5	46	21	0	0	4	9	0	13
Conflicting Peds, #/hr	8	0	2	2	0	8	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	2	2	0	0	2	0
Mvmt Flow	35	17	2	6	52	24	0	0	5	10	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	84	0	0	21	0	0	174	186	20	175	175	72
Stage 1	-	-	-	-	-	-	90	90	-	84	84	-
Stage 2	-	-	-	-	-	-	84	96	-	91	91	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.12	6.52	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.52	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4.018	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1526	-	-	1608	-	-	789	708	1064	792	718	996
Stage 1	-	-	-	-	-	-	917	820	-	929	825	-
Stage 2	-	-	-	-	-	-	924	815	-	921	820	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1516	-	-	1605	-	-	760	683	1062	767	692	989
Mov Cap-2 Maneuver	-	-	-	-	-	-	760	683	-	767	692	-
Stage 1	-	-	-	-	-	-	894	800	-	901	816	-
Stage 2	-	-	-	-	-	-	907	806	-	896	800	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.8			0.5			8.4			9.2		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1062	1516	-	-	1605	-	-	884
HCM Lane V/C Ratio	0.004	0.023	-	-	0.004	-	-	0.028
HCM Control Delay (s)	8.4	7.4	0	-	7.3	0	-	9.2
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

HCM 6th TWSC  
1: Boyd St & Woodward St

Five Year Total, AM Peak Hour

Intersection						
Int Delay, s/veh	3.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	6	1	5	11	3
Future Vol, veh/h	14	6	1	5	11	3
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	15	0	0	20	0	0
Mvmt Flow	22	10	2	8	17	5

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	32	0	39
Stage 1	-	-	-	-	27
Stage 2	-	-	-	-	12
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1593	-	978
Stage 1	-	-	-	-	1001
Stage 2	-	-	-	-	1016
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1593	-	977
Mov Cap-2 Maneuver	-	-	-	-	977
Stage 1	-	-	-	-	1001
Stage 2	-	-	-	-	1015

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	992	-	-	1593	-
HCM Lane V/C Ratio	0.022	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

HCM 6th TWSC  
2: Boyd St & 166 Boyd/Arthur St

Five Year Total, AM Peak Hour

Intersection												
Int Delay, s/veh	6.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	22	12	18	7	15	4	0	21	5	5	0
Future Vol, veh/h	0	22	12	18	7	15	4	0	21	5	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	0	2	2	2	0	2	2
Mvmt Flow	0	34	18	28	11	23	6	0	32	8	8	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	69	69	8	79	53	17	8	0	0	33	0	0
Stage 1	24	24	-	29	29	-	-	-	-	-	-	-
Stage 2	45	45	-	50	24	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	923	822	1074	910	838	1068	1612	-	-	1592	-	-
Stage 1	994	875	-	988	871	-	-	-	-	-	-	-
Stage 2	969	857	-	963	875	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	888	814	1074	859	830	1067	1612	-	-	1591	-	-
Mov Cap-2 Maneuver	888	814	-	859	830	-	-	-	-	-	-	-
Stage 1	990	871	-	983	867	-	-	-	-	-	-	-
Stage 2	933	853	-	905	871	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	9.2	1.2	3.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	890	921	1591	-	-
HCM Lane V/C Ratio	0.004	-	-	0.059	0.067	0.005	-	-
HCM Control Delay (s)	7.2	0	-	9.3	9.2	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

HCM 6th AWSC  
3: Napoleon St & Arthur St

Five Year Total, AM Peak Hour

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	57	1	12	48	19	0	13	65	16	7	9
Future Vol, veh/h	13	57	1	12	48	19	0	13	65	16	7	9
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	0	0	0	4	6	0	0	2	7	0	2
Mvmt Flow	16	72	1	15	61	24	0	16	82	20	9	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.7	7.3	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	18%	15%	50%
Vol Thru, %	17%	80%	61%	22%
Vol Right, %	83%	1%	24%	28%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	78	71	79	32
LT Vol	0	13	12	16
Through Vol	13	57	48	7
RT Vol	65	1	19	9
Lane Flow Rate	99	90	100	41
Geometry Grp	1	1	1	1
Degree of Util (X)	0.106	0.107	0.114	0.05
Departure Headway (Hd)	3.869	4.282	4.098	4.472
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	932	826	862	805
Service Time	1.87	2.368	2.185	2.475
HCM Lane V/C Ratio	0.106	0.109	0.116	0.051
HCM Control Delay	7.3	7.9	7.7	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0.4	0.2

HCM 6th TWSC  
4: Boyd St & Taber St

Five Year Total, AM Peak Hour

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	0	7	2	25	24	11
Future Vol, veh/h	0	7	2	25	24	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	0	50	2	2	2
Mvmt Flow	0	9	3	33	32	15

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	79	40	47	0	0
Stage 1	40	-	-	-	-
Stage 2	39	-	-	-	-
Critical Hdwy	6.42	6.2	4.6	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.3	2.65	-	-
Pot Cap-1 Maneuver	924	1037	1302	-	-
Stage 1	982	-	-	-	-
Stage 2	983	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	922	1037	1302	-	-
Mov Cap-2 Maneuver	922	-	-	-	-
Stage 1	980	-	-	-	-
Stage 2	983	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1302	-	1037	-	-
HCM Lane V/C Ratio	0.002	-	0.009	-	-
HCM Control Delay (s)	7.8	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-



HCM 6th TWSC  
5: Mississippi Rd & Morris St

Five Year Total, AM Peak Hour

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	5	0	37	0	5	2	75	22	5	122	0
Future Vol, veh/h	2	5	0	37	0	5	2	75	22	5	122	0
Conflicting Peds, #/hr	4	0	0	0	0	4	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	50	0	2	0	2	0	50	9	0	40	0	2
Mvmt Flow	2	5	0	40	0	5	2	81	24	5	131	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	248	253	134	241	241	97	134	0	0	105	0	0
Stage 1	144	144	-	97	97	-	-	-	-	-	-	-
Stage 2	104	109	-	144	144	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.5	6.22	7.1	6.52	6.2	4.6	-	-	4.5	-	-
Critical Hdwy Stg 1	6.6	5.5	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.5	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.95	4	3.318	3.5	4.018	3.3	2.65	-	-	2.56	-	-
Pot Cap-1 Maneuver	617	654	915	717	660	965	1202	-	-	1280	-	-
Stage 1	757	782	-	914	815	-	-	-	-	-	-	-
Stage 2	797	809	-	864	778	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	607	648	913	709	654	962	1199	-	-	1280	-	-
Mov Cap-2 Maneuver	607	648	-	709	654	-	-	-	-	-	-	-
Stage 1	753	777	-	912	813	-	-	-	-	-	-	-
Stage 2	788	807	-	855	773	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.7		10.2		0.2		0.3	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1199	-	-	636	732	1280	-	-
HCM Lane V/C Ratio	0.002	-	-	0.012	0.062	0.004	-	-
HCM Control Delay (s)	8	0	-	10.7	10.2	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

HCM 6th TWSC  
6: Code Cres/Boyd St & Morris St

Five Year Total, AM Peak Hour

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	13	1	2	20	14	3	0	2	9	0	14
Future Vol, veh/h	19	13	1	2	20	14	3	0	2	9	0	14
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	100	0	0	0	0	15	0	2	0	0	2	0
Mvmt Flow	20	14	1	2	22	15	3	0	2	10	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	15	0	0	96	98	15	92	91	32
Stage 1	-	-	-	-	-	-	55	55	-	36	36	-
Stage 2	-	-	-	-	-	-	41	43	-	56	55	-
Critical Hdwy	5.1	-	-	4.1	-	-	7.1	6.52	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.5	4.018	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1117	-	-	1616	-	-	891	792	1070	897	799	1048
Stage 1	-	-	-	-	-	-	962	849	-	985	865	-
Stage 2	-	-	-	-	-	-	979	859	-	961	849	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1115	-	-	1616	-	-	865	775	1070	881	782	1046
Mov Cap-2 Maneuver	-	-	-	-	-	-	865	775	-	881	782	-
Stage 1	-	-	-	-	-	-	945	834	-	965	862	-
Stage 2	-	-	-	-	-	-	964	856	-	942	834	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.8			0.4			8.9			8.8		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	937	1115	-	-	1616	-	-	975
HCM Lane V/C Ratio	0.006	0.018	-	-	0.001	-	-	0.025
HCM Control Delay (s)	8.9	8.3	0	-	7.2	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

HCM 6th TWSC  
1: Boyd St & Woodward St

Five Year Total, PM Peak Hour

Intersection						
Int Delay, s/veh	3.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	19	17	1	13	37	1
Future Vol, veh/h	19	17	1	13	37	1
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	20	1	15	44	1

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	42	0	51
Stage 1	-	-	-	-	32
Stage 2	-	-	-	-	19
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1580	-	963
Stage 1	-	-	-	-	996
Stage 2	-	-	-	-	1009
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1580	-	960
Mov Cap-2 Maneuver	-	-	-	-	960
Stage 1	-	-	-	-	996
Stage 2	-	-	-	-	1006

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	962	-	-	1580	-
HCM Lane V/C Ratio	0.046	-	-	0.001	-
HCM Control Delay (s)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

HCM 6th TWSC  
2: Boyd St & 166 Boyd/Arthur St

Five Year Total, PM Peak Hour

Intersection												
Int Delay, s/veh	8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	16	9	69	17	39	9	0	21	8	9	0
Future Vol, veh/h	0	16	9	69	17	39	9	0	21	8	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	0	2	2	2	0	2	2
Mvmt Flow	0	20	11	87	22	49	11	0	27	10	11	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	102	80	11	83	67	14	11	0	0	27	0	0
Stage 1	31	31	-	36	36	-	-	-	-	-	-	-
Stage 2	71	49	-	47	31	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	879	810	1070	904	824	1072	1608	-	-	1600	-	-
Stage 1	986	869	-	980	865	-	-	-	-	-	-	-
Stage 2	939	854	-	967	869	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	813	799	1070	869	813	1072	1608	-	-	1600	-	-
Mov Cap-2 Maneuver	813	799	-	869	813	-	-	-	-	-	-	-
Stage 1	979	864	-	973	859	-	-	-	-	-	-	-
Stage 2	867	848	-	929	864	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	9.8	2.2	3.4
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1608	-	-	879	914	1600	-	-
HCM Lane V/C Ratio	0.007	-	-	0.036	0.173	0.006	-	-
HCM Control Delay (s)	7.3	0	-	9.2	9.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.6	0	-	-

HCM 6th AWSC  
3: Napoleon St & Arthur St

Five Year Total, PM Peak Hour

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	55	0	52	137	25	1	11	74	20	18	23
Future Vol, veh/h	10	55	0	52	137	25	1	11	74	20	18	23
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	4	0	0	0	0	0	0
Mvmt Flow	11	61	0	58	152	28	1	12	82	22	20	26
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	9.1	7.7	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %		1%	15%	24%
Vol Thru, %		13%	85%	64%
Vol Right, %		86%	0%	12%
Sign Control		Stop	Stop	Stop
Traffic Vol by Lane		86	65	214
LT Vol		1	10	52
Through Vol		11	55	137
RT Vol		74	0	25
Lane Flow Rate		96	72	238
Geometry Grp		1	1	1
Degree of Util (X)		0.111	0.091	0.285
Departure Headway (Hd)		4.168	4.549	4.32
Convergence, Y/N		Yes	Yes	Yes
Cap		861	788	832
Service Time		2.189	2.575	2.342
HCM Lane V/C Ratio		0.111	0.091	0.286
HCM Control Delay		7.7	8	9.1
HCM Lane LOS		A	A	A
HCM 95th-tile Q		0.4	0.3	1.2

HCM 6th TWSC  
4: Boyd St & Taber St

Five Year Total, PM Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	0	3	7	30	48	39
Future Vol, veh/h	0	3	7	30	48	39
Conflicting Peds, #/hr	3	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	2	0	0	2	2	2
Mvmt Flow	0	4	10	43	70	57

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	165	99	127	0	0
Stage 1	99	-	-	-	-
Stage 2	66	-	-	-	-
Critical Hdwy	6.42	6.2	4.1	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.3	2.2	-	-
Pot Cap-1 Maneuver	826	962	1472	-	-
Stage 1	925	-	-	-	-
Stage 2	957	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	820	962	1472	-	-
Mov Cap-2 Maneuver	820	-	-	-	-
Stage 1	919	-	-	-	-
Stage 2	957	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	1.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1472	-	962	-	-
HCM Lane V/C Ratio	0.007	-	0.005	-	-
HCM Control Delay (s)	7.5	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 6th TWSC  
5: Mississippi Rd & Morris St

Five Year Total, PM Peak Hour

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	2	3	47	11	12	4	183	51	11	155	2
Future Vol, veh/h	3	2	3	47	11	12	4	183	51	11	155	2
Conflicting Peds, #/hr	7	0	0	0	0	7	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	0	0
Mvmt Flow	4	2	4	55	13	14	5	215	60	13	182	2

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	487	496	185	467	467	252	186	0	0	275	0	0
Stage 1	211	211	-	255	255	-	-	-	-	-	-	-
Stage 2	276	285	-	212	212	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	494	478	862	509	496	792	1401	-	-	1300	-	-
Stage 1	796	731	-	754	700	-	-	-	-	-	-	-
Stage 2	735	679	-	795	731	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	466	470	861	499	488	787	1399	-	-	1300	-	-
Mov Cap-2 Maneuver	466	470	-	499	488	-	-	-	-	-	-	-
Stage 1	791	721	-	751	697	-	-	-	-	-	-	-
Stage 2	701	676	-	780	721	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.5		13		0.1		0.5	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1399	-	-	564	530	1300	-	-
HCM Lane V/C Ratio	0.003	-	-	0.017	0.155	0.01	-	-
HCM Control Delay (s)	7.6	0	-	11.5	13	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0	-	-

HCM 6th TWSC  
6: Code Cres/Boyd St & Morris St

Five Year Total, PM Peak Hour

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	31	15	2	5	46	21	0	0	4	9	0	13
Future Vol, veh/h	31	15	2	5	46	21	0	0	4	9	0	13
Conflicting Peds, #/hr	8	0	2	2	0	8	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	2	0
Mvmt Flow	35	17	2	6	52	24	0	0	5	10	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	84	0	0	21	0	0	174	186	20	175	175	72
Stage 1	-	-	-	-	-	-	90	90	-	84	84	-
Stage 2	-	-	-	-	-	-	84	96	-	91	91	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.52	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.018	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1526	-	-	1608	-	-	793	708	1064	792	718	996
Stage 1	-	-	-	-	-	-	922	820	-	929	825	-
Stage 2	-	-	-	-	-	-	929	815	-	921	820	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1516	-	-	1605	-	-	764	683	1062	767	692	989
Mov Cap-2 Maneuver	-	-	-	-	-	-	764	683	-	767	692	-
Stage 1	-	-	-	-	-	-	899	800	-	901	816	-
Stage 2	-	-	-	-	-	-	911	806	-	896	800	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.8	0.5	8.4	9.2
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1062	1516	-	-	1605	-	-	884
HCM Lane V/C Ratio	0.004	0.023	-	-	0.004	-	-	0.028
HCM Control Delay (s)	8.4	7.4	0	-	7.3	0	-	9.2
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1