Traffic Impact Study
Tower Court Residences
Naperville, Illinois

Prepared For:

GORMAN & COMPANY

KLOA
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1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed Tower Court Residences residential development to be located in Naperville, Illinois. The site, which is currently vacant, is located in the on the east side of Illinois Route 59 just south of 103rd Street. As proposed, the site will be developed with a three-story apartment building that will contain 53 age-restricted units for seniors aged 62 and older and 18 units for individuals with intellectual and developmental disabilities (IDD). The development is proposed to have a 104-space surface parking lot with access provided via an access drive on Tower Court and a future access road that will intersect IL 59 opposite Royal Mews Circle and serve both the development and the future development of the parcel in the southeast quadrant of the IL 59/103rd Street.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any additional roadway or access improvements are necessary to accommodate traffic generated by the proposed development. **Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

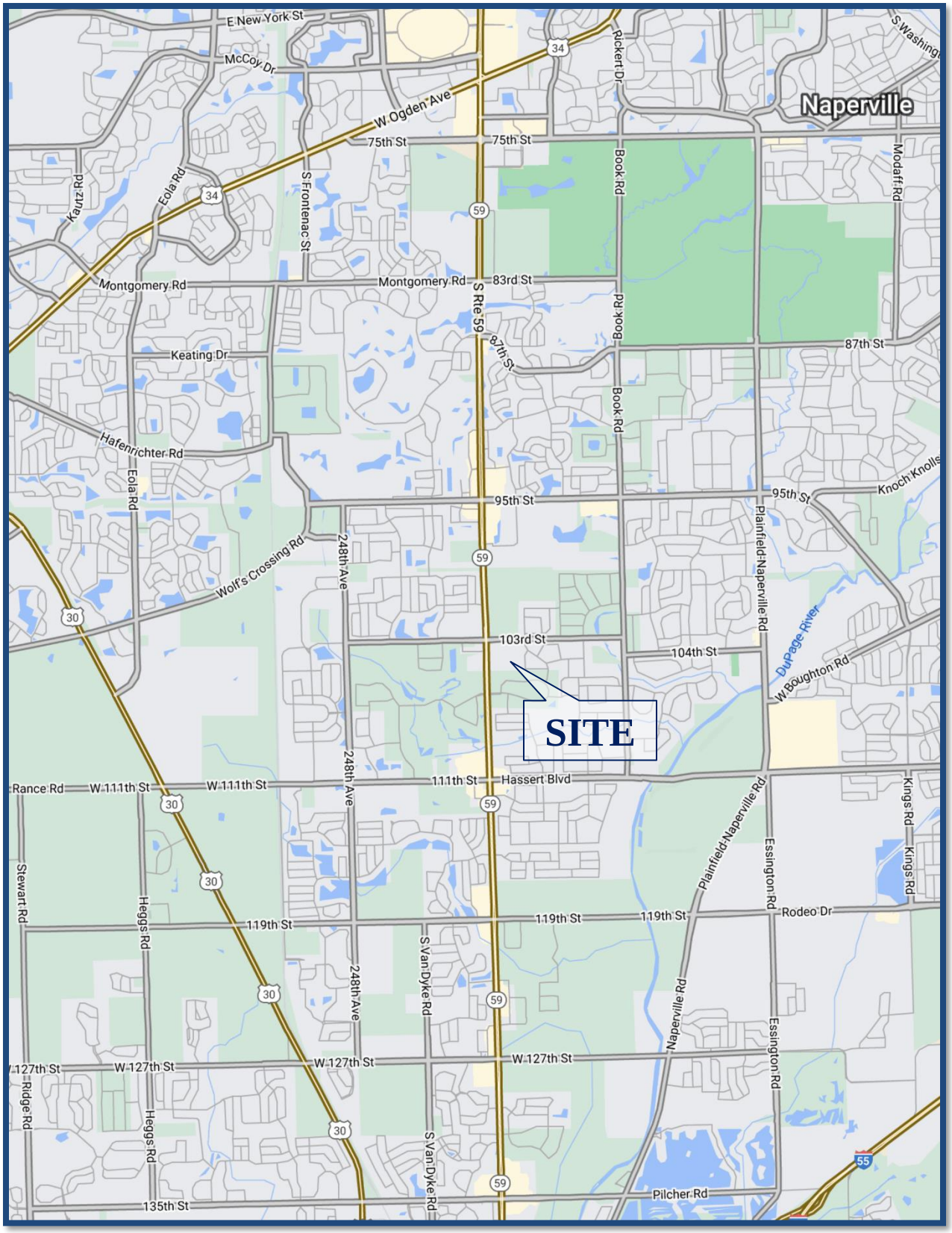
- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning and weekday evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system
- Evaluation of the adequacy of the proposed parking supply

Traffic capacity analyses were conducted for the weekday morning and weekday evening peak hours for the following conditions:

1. Existing Traffic Conditions – Analyzes the capacity of the existing roadway system using peak hour traffic volumes from traffic counts conducted in 2023.

2. Year 2029 No-Build Conditions – Analyzes the capacity of the existing roadway system using existing traffic volumes increased by an ambient area growth factor not attributable to any particular development.

3. Year 2029 Total Projected Conditions – Analyzes the capacity of the future roadway system using the projected traffic volumes that include the Year 2029 no-build volumes and the traffic estimated to be generated by the proposed development.



Site Location **Figure 1**

Aerial View of Site **Figure 2**

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

The site, which is currently vacant, is bounded by vacant/undeveloped space to the north and west, the Wheatland Township assessor's office to the east, and the Whispering Lakes residential subdivision to the south. Land uses in the area are primarily residential with commercial uses located along IL 59.

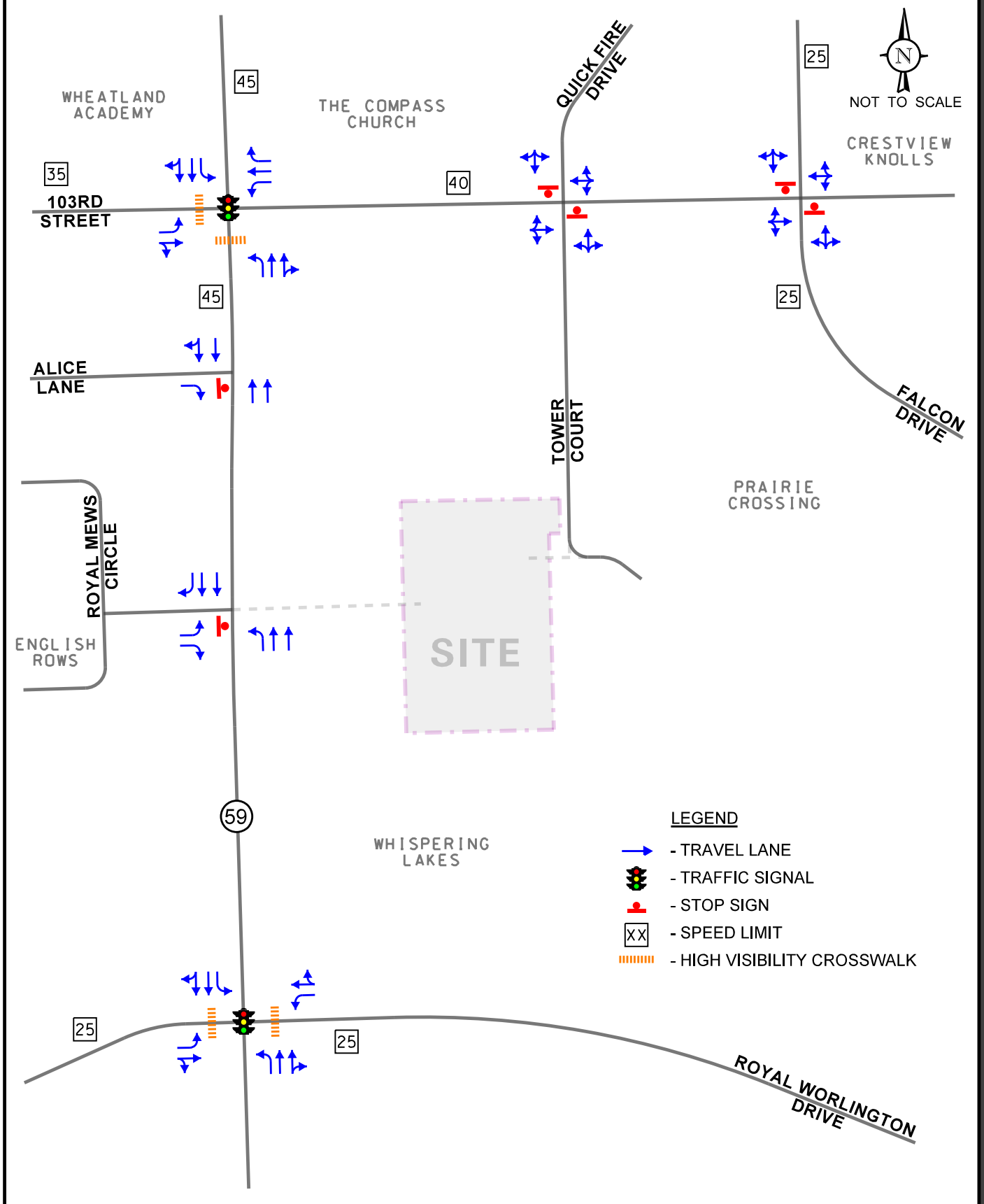
Existing Roadway System Characteristics

The characteristics of the existing roadways near the development are described below and illustrated in **Figure 3.**

Illinois Route 59 (IL 59) is a north-south, principal arterial roadway that provides two lanes in each direction generally divided by a landscape median. At its signalized intersections with 103rd Street and Royal Worlington Drive, IL 59 provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on both approaches. At its unsignalized intersection with Alice Lane, left-turn movements are restricted via the landscape median and IL 59 provides two lanes in each direction with no exclusive turn lanes. At its unsignalized intersection with Royal Mews Circle, IL 59 provides an exclusive left-turn lane and two through lanes on the northbound approach and two through lanes and an exclusive right-turn lane on the southbound approach. IL 59 is under the jurisdiction of the Illinois Department of Transportation (IDOT), is designated as a Strategic Regional Arterial (SRA) route, carries an annual average daily traffic (AADT) volume of 34,500 vehicles (IDOT 2021), and has a posted speed limit of 45 miles per hour.

103rd Street is an east-west, major collector roadway that provides one lane in each direction. At its signalized intersection with IL 59, 103rd Street provides an exclusive left-turn lane and a shared through/right-turn lane on the eastbound approach and an exclusive left-turn lane, a through lane, and an exclusive right-turn lane on the westbound approach. At its unsignalized intersections with Tower Court/Quick Fire Drive and Falcon Drive, 103rd Streeet provides one lane in each direction and no exclusive turn lanes. 103rd Street is under the jurisdiction of the City of Naperville, carries an AADT volume of 4,550 vehicles (IDOT 2019), and has a posted speed limit of 35 miles per hour west of IL 59 and 40 miles per hour east of IL 59.

Royal Worlington Drive is an east-west, local road that provides one lane in each direction. At its signalized intersection with IL 59, Royal Worlington Drive provides an exclusive left-turn lane and a shared through/right-turn lane on both approaches. Royal Worlington Drive is under the jurisdiction of Wheatland Township and has a posted speed limit of 25 miles per hour.



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Existing Roadway Characteristics

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Alice Lane is an east-west, local road that extends west from IL 59 and provides one lane in each direction. At its unsignalized intersection with IL 59, left-turn movements are restricted via the landscape median on IL 59 and Alice Lane provides one approach lane under stop sign control. Alice Lane is under the jurisdiction of the City of Naperville and has a posted speed limit of 25 miles per hour.

Royal Mews Circle is a local roadway that serves as the circulation road for the English Rows development that intersects IL 59. At its unsignalized intersection with IL 59, Royal Mews Circle provides an exclusive left-turn lane and an exclusive right-turn lane on the eastbound approach and is under stop sign control. Royal Mews Circle is under the jurisdiction of the City of Naperville.

Quick Fire Drive is a north-south, local road that extends north from 103rd Street and provides one lane in each direction. At its unsignalized intersection with 103rd Street, Quick Fire Drive is aligned opposite Tower Court, is wide enough for two lanes on the southbound approach, and is under stop sign control. Quick Fire Drive is under the jurisdiction of the City of Naperville.

Tower Court is a north-south, local road that extends south from 103rd Street and provides one lane in each direction. At its unsignalized intersection with 103rd Street, Tower Court is aligned opposite Quick Fire Drive, provides one lane on the northbound approach, and is under stop sign control.

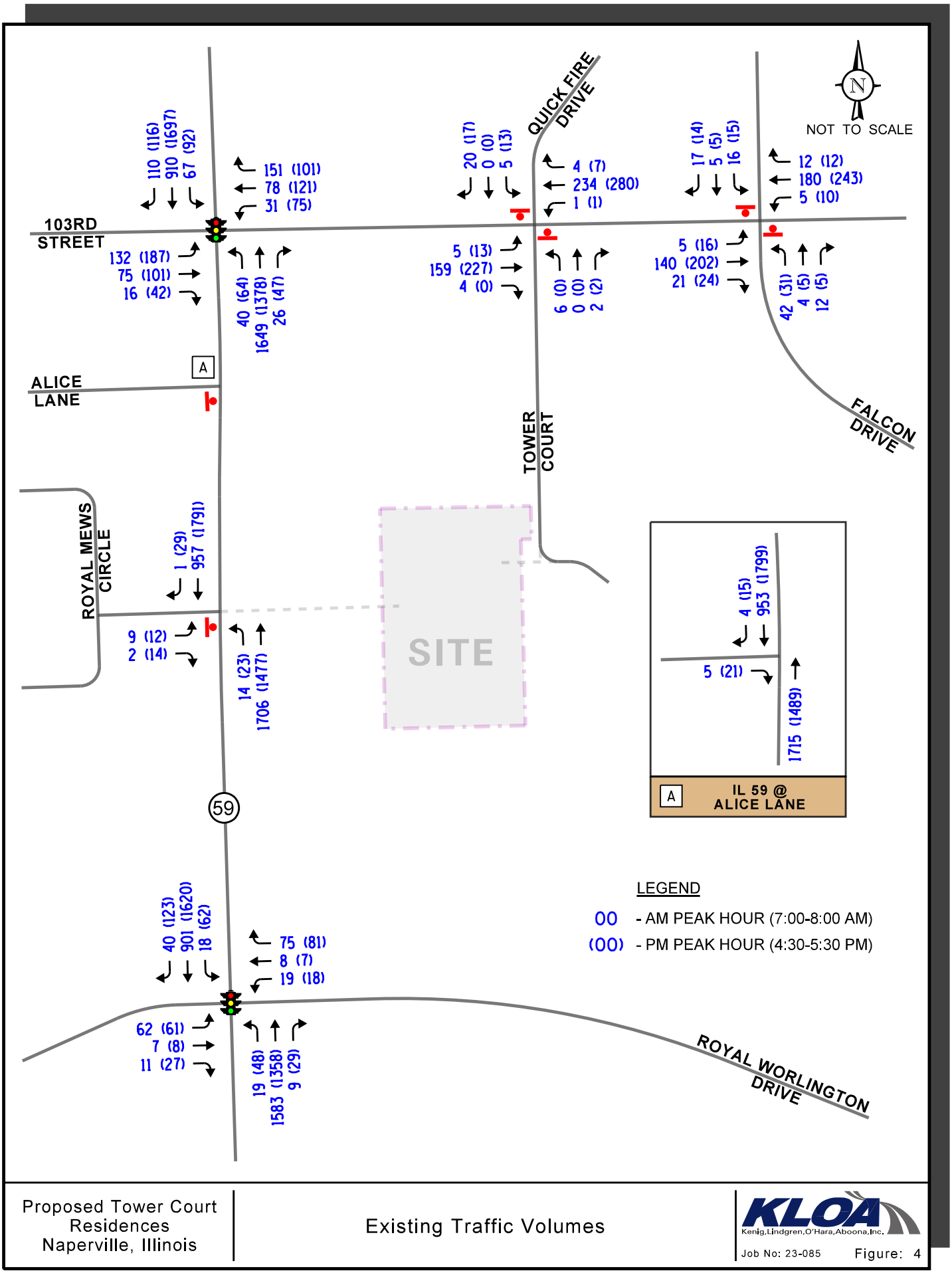
Falcon Drive is a north-south, local road that provides one lane in each direction. At its unsignalized intersection with 103rd Street, Falcon Drive provides a shared left-turn/through/right-turn lane on both approaches and is under stop sign control. Falcon Drive is under the jurisdiction of the City of Naperville.

Existing Traffic Volumes

In order to determine current traffic conditions within the study area, KLOA, Inc. conducted peak period traffic counts utilizing Miovision Scout Collection Units at the following intersections:

- IL 59 with 103rd Street
- IL 59 with Alice Lane
- IL 59 with Royal Mews Circle
- IL 59 with Royal Worlington Drive
- 103rd Street with Tower Court/Quick Fire Drive
- 103rd Street with Falcon Drive

The traffic counts were conducted on Thursday, May 4, 2023, during the weekday morning (7:00 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:00 P.M.) peak periods. The results of the traffic counts show that the peak hours of traffic generally occur between 7:00 A.M. and 8:00 A.M. during the weekday morning peak period and between 4:30 P.M. and 5:30 P.M. during the weekday evening peak period. Copies of the traffic count summary sheets are included in the Appendix. The existing traffic volumes are illustrated in **Figure 4**.



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Existing Traffic Volumes

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Crash Analysis

KLOA, Inc. obtained accident data for the most recent available past six years (2017 to 2021) for the study area intersections[1]. A review of the data indicated the following:

- No crashes reported at the intersections of IL 59 with Alice Lane and Royal Mews Circle or 103rd Street with Tower Court/Quick Fire Drive.
- Only one crash was reported at the intersection of 103rd Street with Falcon Drive.
- No fatalities were reported at any intersection during the reviewed period.

Summaries of the crash data at the intersections of IL 59 with 103rd Street and Royal Worling Drive are shown in **Tables 1** and **2**.

Table 1
IL 59 WITH 103RD STREET – CRASH SUMMARY

Year	Type of Crash Frequency							
	Angle	Pedestrian	Object	Rear End	Sideswipe	Turning	Other	Total
2017	0	0	0	7	0	1	0	8
2018	0	0	0	1	0	1	0	2
2019	1	0	0	3	0	2	0	6
2020	0	0	0	2	0	0	1	3
2021	1	0	0	5	0	0	0	6
Total	**2**	**0**	**0**	**18**	**0**	**4**	**1**	**25**
Average	**<1.0**	**--**	**--**	**3.6**	**--**	**<1.0**	**<1.0**	**5.0**

Table 2
IL 59 WITH ROYAL WORLINGTON DRIVE STREET – CRASH SUMMARY

Year	Type of Crash Frequency							
	Angle	Pedestrian	Object	Rear End	Sideswipe	Turning	Other	Total
2017	0	0	0	3	1	0	0	4
2018	0	0	1	0	0	0	0	1
2019	0	0	0	1	0	1	0	2
2020	0	0	1	1	0	0	0	2
2021	0	0	2	0	1	0	0	3
Total	**0**	**0**	**4**	**5**	**2**	**1**	**0**	**12**
Average	**--**	**--**	**<1.0**	**1.0**	**<1.0**	**<1.0**	**--**	**2.4**

[1]IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s).

3. Traffic Characteristics of the Proposed Development

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed development, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

As proposed, the site will be developed with a three-story apartment building that will contain 53 age-restricted units for seniors aged 62 and older and 18 units for individuals with intellectual and developmental disabilities (IDD). The development is proposed to have a 104-space surface parking lot with access provided as the following two access drives:

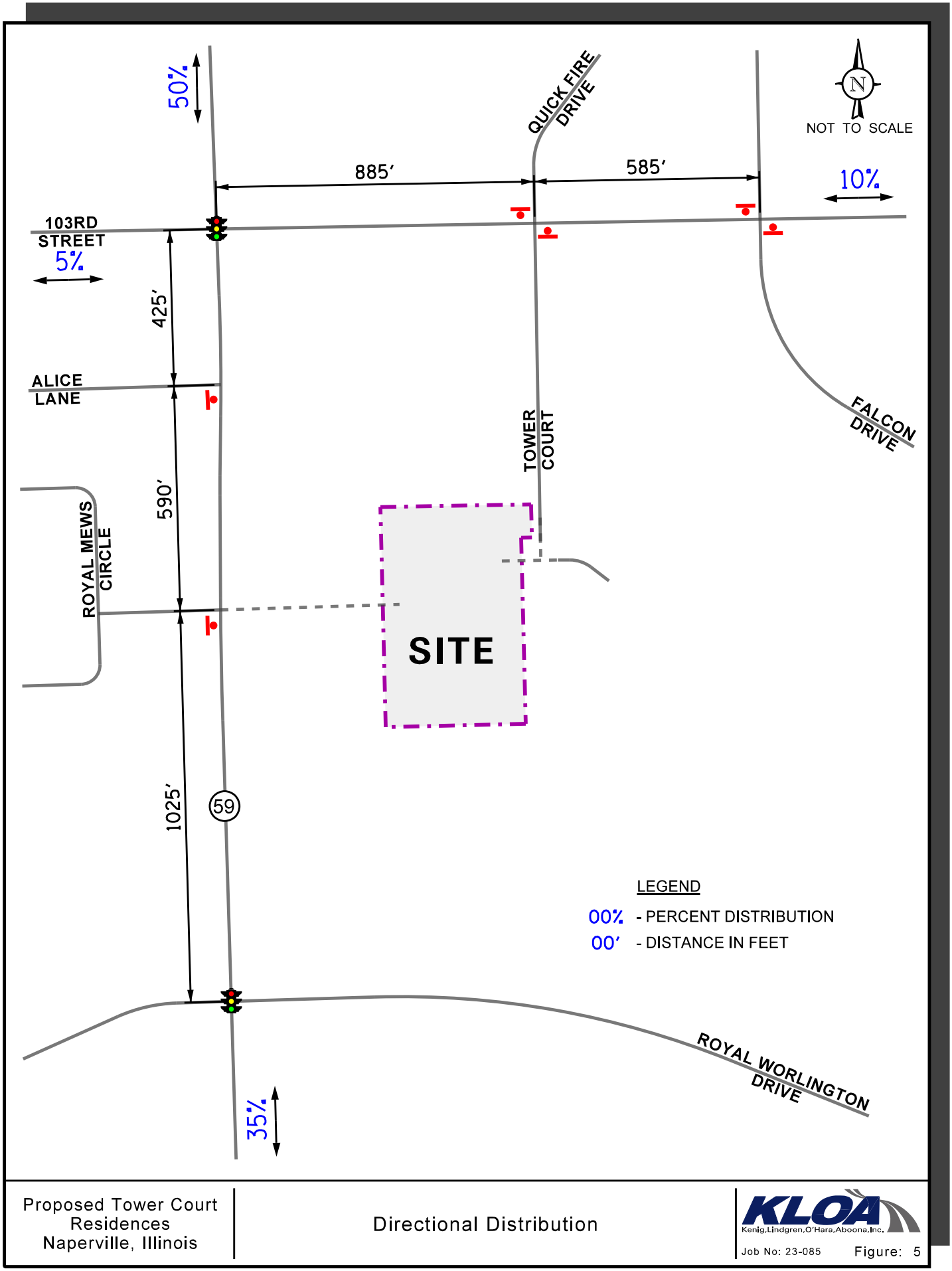
- A proposed future access road that will extend west from the site to IL 59 and will intersect IL 59 aligned opposite Royal Mews Circle. As proposed, the access road will be designed with a two-lane cross section that will also serve the future development of the vacant parcel in the southeast quadrant of the IL 59/103rd Street intersection. At its intersection with IL 59, the access road will provide one inbound lane and two outbound lanes striped for an exclusive left-turn lane and a through/right-turn lane. Outbound movements will be under stop sign control. In addition, a 215-foot southbound left-turn lane with a 220-foot taper will be required on IL 59 serving the access road. Further, given that the access road will also serve the vacant parcel in the southwest quadrant of the IL 59/103rd Street intersection, a 215-foot northbound left-turn lane with a 220-foot taper will be required on IL 59 serving the access road. Lastly, Royal Mews Court approach will be restriped to provide an exclusive left-turn lane and a shared through/right-turn lane.

- A proposed access drive located on the west side of Tower Court at its current terminus approximately 880 feet south of 103rd Street and will be aligned opposite the Wheatland Township assessor's office access drive. The access drive will provide one inbound lane and one outbound lane. The intersection of Tower Drive/Wheatland Township assessor's office access drive/development access drive should be under all-way stop control.

A copy of the preliminary is included in the Appendix.

Directional Distribution

The directions from which residents will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of the development-generated traffic. Figure 5 also shows the distance, in feet, between the existing and proposed access intersections.



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Directional Distribution

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Peak Hour Traffic Volumes

The number of peak hour trips estimated to be generated by the proposed development was based on vehicle trip generation rates contained in *Trip Generation Manual*, 11th Edition, published by the Institute of Transportation Engineers (ITE). The "Senior Adult Housing – Multi-Family" (Land-Use Code 252) rates were used to determine the traffic to be generated by age-restricted units and the "Assisted Living" (Land-Use Code 254) rates were used to determine the traffic to be generated by the IDD units. **Table 3** shows the weekday morning and weekday evening peak hour traffic to be generated by the proposed development as well as the daily total traffic volumes.

Table 3
PROJECTED DEVELOPMENT-GENERATED TRAFFIC VOLUMES

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Traffic		
		In	Out	Total	In	Out	Total	In	Out	Total
252	Senior Adult Housing - Attached (53 Units)	2	1	3	2	2	4	24	24	48
254	Assisted Living (18 Units)	4	7	11	7	6	13	89	89	178
	Total	**6**	**8**	**14**	**9**	**8**	**17**	**113**	**113**	**226**

As can be seen in Table 3, the volume of traffic that is estimated to be generated by the proposed development is very low and is due to the following characteristics of the development and its anticipated residents:

- Information provided by the operator indicates that only approximately 60 percent of residents of the age-restricted housing are expected to have vehicles.
- Residents of age-restricted housing do not typically have full-time employment. As such, traffic is more evenly distributed throughout the day and not concentrated during the weekday morning and weekday evening peak periods.
- Information provided by the operator indicates that less than two percent of residents of the IDD housing are expected to have vehicles.
- Residents will be able to utilize public transportation via the Pace 559 bus route which runs along IL 59 and has stops at both 103rd Street and Royal Worlington Drive.

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

The estimated weekday morning and evening peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). The traffic assignment for the development is illustrated in **Figure 6.**

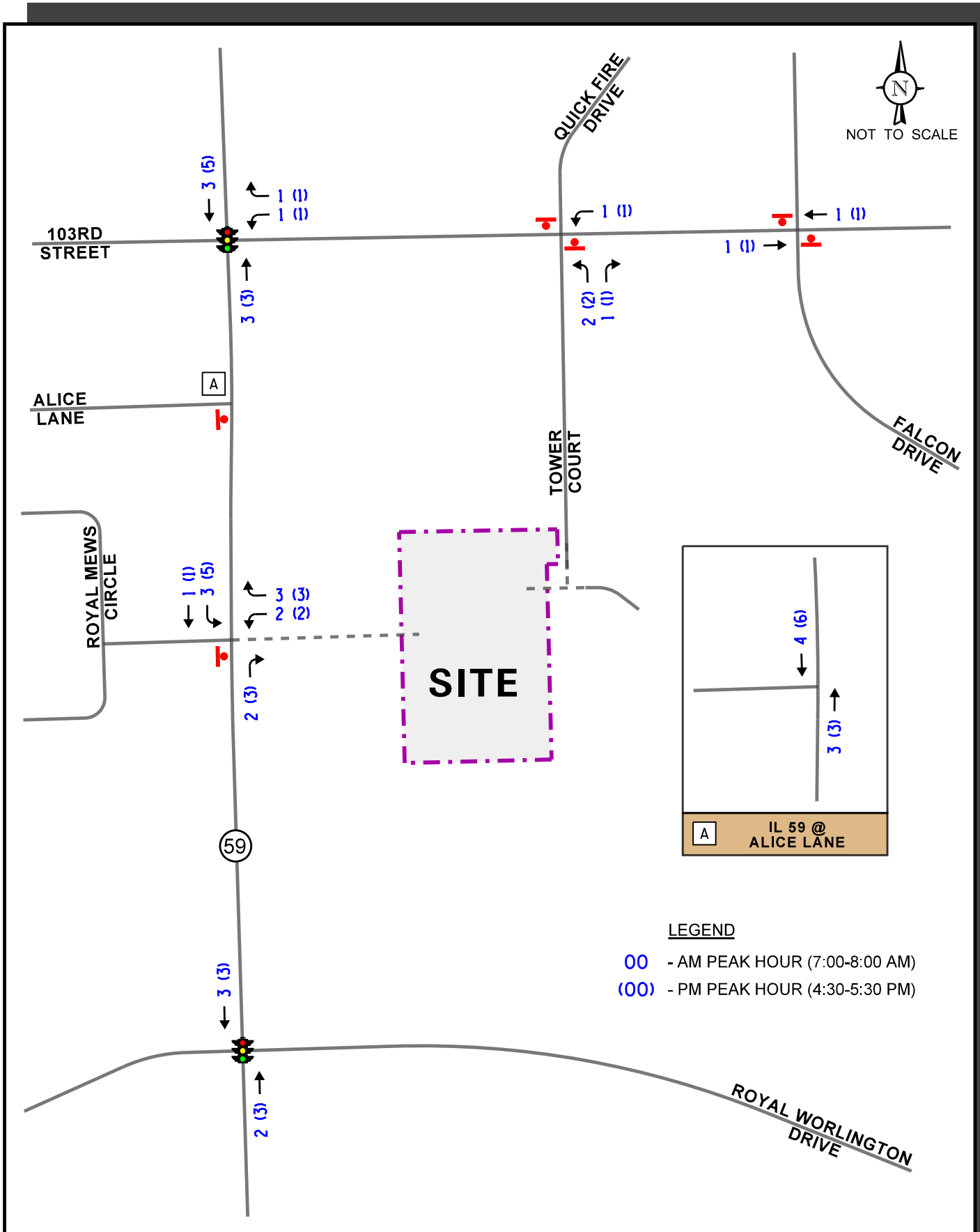
Background (No-Build) Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on Average Daily Traffic (ADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the existing traffic volumes on IL 59 were increased by an annually compounded growth rate of 0.6 percent per year for six years (buildout year plus five years) for a total of approximately 3.7 percent to project Year 2029 background conditions. Further, traffic volumes on 103rd Street were increased by an annually compounded growth rate of 1.2 percent per year for six years for a total of approximately 7.4 percent.

Figure 7 illustrates the Year 2029 no-build conditions. A copy of the CMAP 2050 projections letter is included in the Appendix.

Total Projected Traffic Volumes

The development-generated traffic (Figure 6) was added to the Year 2029 no-build traffic volumes (Figure 7) to determine the Year 2029 total projected traffic volumes, shown in **Figure 8.**



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Site-Generated Traffic Volumes

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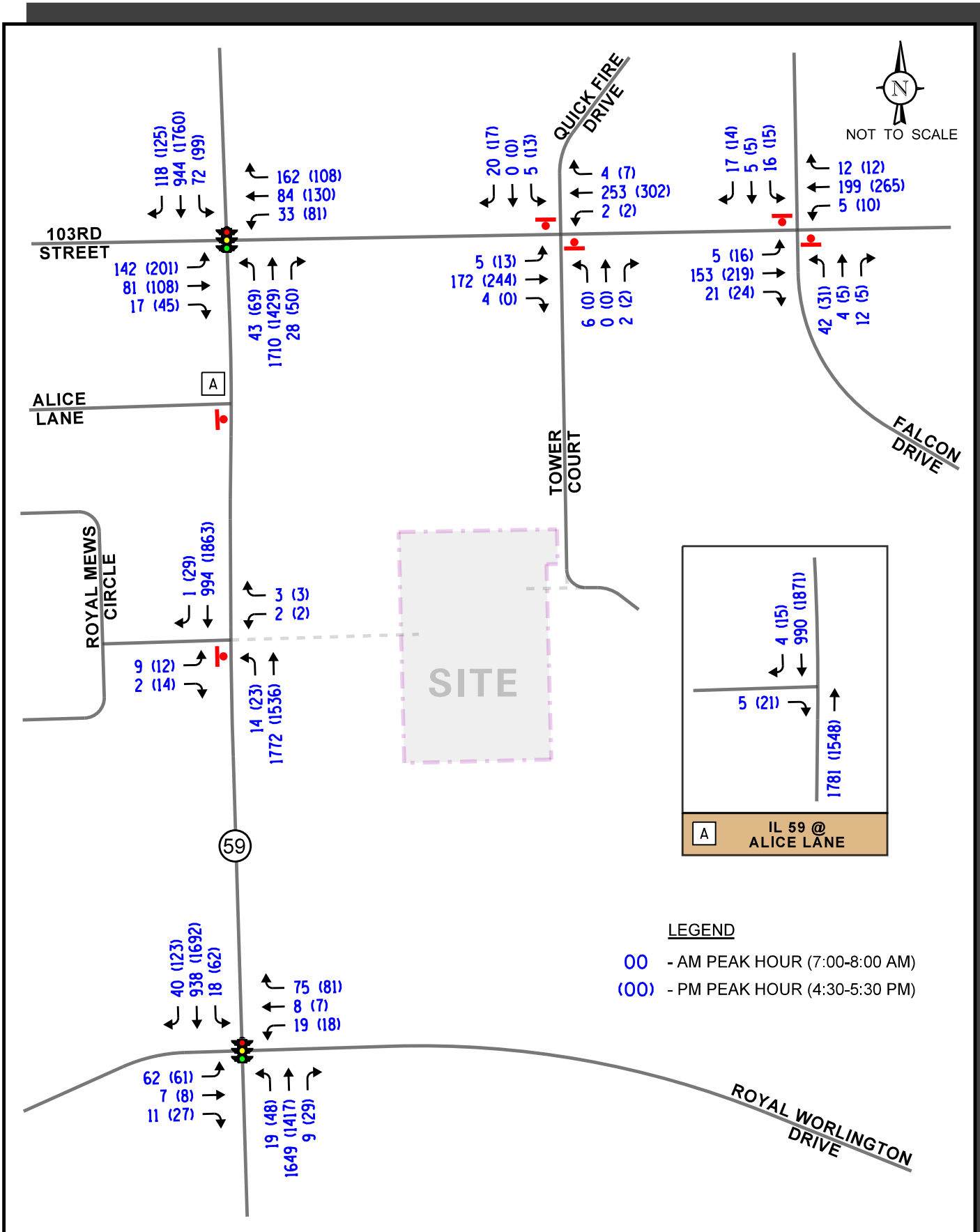

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Year 2029 No-Build Traffic Volumes

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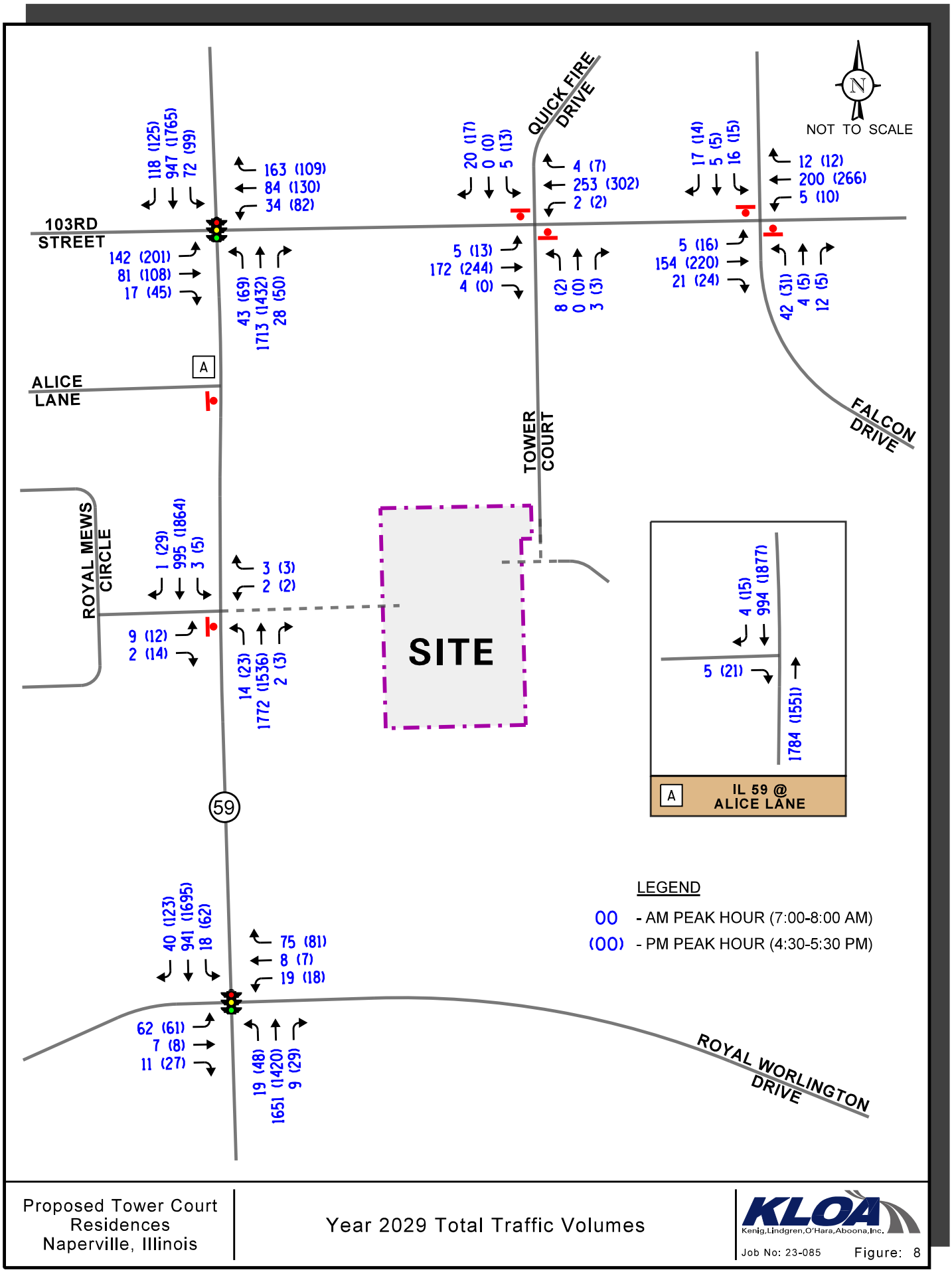

Proposed Tower Court Residences
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Year 2029 Total Traffic Volumes

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5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and weekday evening peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and weekday evening peak hours for the existing, Year 2029 no-build, and Year 2029 total projected traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6th Edition and analyzed using Synchro/SimTraffic 11 software. The analysis for the traffic-signal controlled intersections were accomplished using actual and field-measured cycle lengths and phasings to determine the average overall vehicle delay and levels of service.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing, Year 2029 no-build, and Year 202 total projected conditions are presented in **Tables 4** through **8**. A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 4
CAPACITY ANALYSIS RESULTS – IL 59 WITH 103RD STREET– SIGNALIZED

	Peak Hour	Eastbound		Westbound			Northbound		Southbound		Overall
		L	T/R	L	T	R	L	T/R	L	T/R	
Existing Conditions	Weekday Morning	E 64.8	E 67.5	D 49.4	E 74.7	E 56.4	E 79.8	B 12.9	F 85.5	B 12.7	C 22.6
		E – 65.9		E – 61.0			B – 14.5		B – 17.2		
	Weekday Evening	E 79.6	F 81.7	D 53.7	F 83.9	D 52.7	F 82.8	C 20.5	F 86.9	D 35.4	D 37.9
		E – 79.0		E – 65.7			C – 23.2		D – 37.9		
Year 2029 No-Build Conditions	Weekday Morning	E 68.7	E 68.3	D 49.5	E 76.5	E 57.4	E 79.9	B 13.8	F 88.0	B 13.2	C 23.8
		E – 68.6		E – 62.2			B – 15.4		B – 17.9		
	Weekday Evening	F 86.6	F 83.9	D 54.4	F 85.2	D 52.1	F 83.8	C 22.6	F 87.1	D 40.9	D 41.9
		E – 85.4		E – 66.2			C – 25.3		D – 43.2		
Year 2029 Projected Conditions	Weekday Morning	E 67.8	E 73.9	D 49.6	E 76.5	E 57.5	F 80.1	B 13.9	F 88.0	B 13.2	C 23.9
		E – 70.3		E – 62.3			B – 15.5		B – 17.9		
	Weekday Evening	F 86.6	F 84.0	D 54.5	F 85.2	D 52.2	F 83.8	C 22.7	F 87.1	D 41.3	D 42.1
		E – 85.5		E – 66.2			C – 25.4		D – 43.6		

Letter denotes Level of Service L – Left Turn R – Right Turn
Delay is measured in seconds. T – Through

Table 5
CAPACITY ANALYSIS RESULTS – IL 59 WITH ROYAL WORLING DRIVE– SIGNALIZED

	Peak Hour	Eastbound		Westbound		Northbound		Southbound		Overall
		L	T/R	L	T/R	L	T/R	L	T/R	
Existing Conditions	Weekday Morning	D 52.1	E 57.2	D 47.4	F 84.7	E 69.6	B 15.1	E 64.8	A 8.6	B 17.0
		D – 53.2		E – 77.6		B – 15.8		A – 9.7		
	Weekday Evening	E 58.0	E 65.7	D 52.8	F 91.3	F 91.4	B 17.6	F 86.4	A 7.7	B 18.1
		E - 60.8		F – 84.7		C – 20.1		B – 10.4		
Year 2029 No-Build Conditions	Weekday Morning	D 52.1	E 57.2	D 47.4	F 84.7	E 69.6	B 15.9	E 64.5	A 8.7	B 17.4
		D – 53.2		E – 77.6		B – 16.6		A – 9.7		
	Weekday Evening	E 58.0	E 65.7	D 52.8	F 91.3	F 91.4	B 18.3	F 84.7	A 8.1	B 18.3
		E - 60.8		F – 84.7		C – 20.6		B – 10.6		
Year 2029 Projected Conditions	Weekday Morning	D 52.1	E 57.2	D 47.4	F 84.7	E 69.6	B 16.0	E 64.7	A 8.7	B 17.4
		D – 53.2		E – 77.6		B – 16.6		A – 9.7		
	Weekday Evening	E 58.0	E 65.7	D 52.8	F 91.3	F 91.4	B 18.3	F 84.7	A 8.2	B 18.4
		E - 60.8		F – 84.7		C – 20.6		B – 10.7		

Letter denotes Level of Service L – Left Turn R – Right Turn
Delay is measured in seconds. T – Through

Table 6
CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
IL 59 with Alice Lane				
• Eastbound Approach	B	12.8	C	20.4
Il 59 with Royal Mews Circle				
• Eastbound Left Turn	D	29.0	F	62.6
• Eastbound Right Turn	B	12.4	C	19.5
• Northbound Left turn	B	10.6	C	17.7
103rd Street with Tower Court and Quick Fire Drive				
• Eastbound Left Turn	A	7.9	A	7.9
• Westbound Left Turn	A	7.7	A	7.7
• Northbound Approach	B	14.2	A	9.5
• Southbound Approach	B	11.2	B	11.6
103rd Street with Falcon Drive				
• Eastbound Left Turn	A	7.8	A	7.8
• Westbound Left Turn	A	7.9	A	7.7
• Northbound Approach	B	13.7	B	14.1
• Southbound Approach	B	12.3	B	12.6

LOS = Level of Service
Delay is measured in seconds.

Table 7
CAPACITY ANALYSIS RESULTS – NO-BUILD CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
IL 59 with Alice Lane				
• Eastbound Approach	B	13.1	C	21.4
Il 59 with Royal Mews Circle				
• Eastbound Left Turn	D	30.5	F	69.8
• Eastbound Right Turn	B	12.6	C	20.4
• Northbound Left turn	B	10.9	C	18.7
103rd Street with Tower Court and Quick Fire Drive				
• Eastbound Left Turn	A	8.0	A	8.0
• Westbound Left Turn	A	7.7	A	7.7
• Northbound Approach	B	14.9	A	9.6
• Southbound Approach	B	11.5	B	12.0
103rd Street with Falcon Drive				
• Eastbound Left Turn	A	7.8	A	7.9
• Westbound Left Turn	A	8.0	A	7.8
• Northbound Approach	B	14.4	B	14.7
• Southbound Approach	B	12.8	B	13.0

LOS = Level of Service
Delay is measured in seconds.

Table 8
CAPACITY ANALYSIS RESULTS – TOTAL PROJECTED CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
IL 59 with Alice Lane				
• Eastbound Approach	B	13.1	C	21.5
Il 59 with Royal Mews Circle				
• Eastbound Left Turn	E	39.0	F	99+
• Eastbound Right Turn	B	12.6	C	20.4
• Westbound Left Turn	F	80.4	F	66.2
• Westbound Right Turn	C	19.8	C	16.4
• Northbound Left Turn	B	10.9	C	18.7
• Southbound Left Turn	C	17.5	B	14.3
103rd Street with Tower Court and Quick Fire Drive				
• Eastbound Left Turn	A	8.0	A	8.0
• Westbound Left Turn	A	7.7	A	7.7
• Northbound Approach	B	14.8	B	11.6
• Southbound Approach	B	11.5	B	12.1
103rd Street with Falcon Drive				
• Eastbound Left Turn	A	7.8	A	7.9
• Westbound Left Turn	A	8.0	A	7.8
• Northbound Approach	B	14.5	B	14.8
• Southbound Approach	B	12.8	B	13.1

LOS = Level of Service
Delay is measured in seconds.

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the development-generated traffic.

IL 59 with 103rd Street

The results of the capacity analyses indicate that the intersection currently operates at an overall Level of Service (LOS) C during the weekday morning peak hour and LOS D during the weekday evening peak hour. It should be noted that multiple eastbound and westbound movements operate at LOS E/F during both peak hours. The lower levels of service is a result of the long cycle length (140 to 160 seconds during the peak hours) and the reduced green time provided to the 103rd Street movements as IL 59, which is designated as an SRA route, is the major roadway at this intersection. Further, the northbound and southbound left-turn movements operate at LOS E/F during both peak hours. The lower levels of service are a result of the long cycle length (140 to 160 seconds during the peak hours) and that the left-turn movements operation on a protected phase only. However, all movements operate with a volume-to-capacity (v/c) ratio of less than one which indicates that volume of traffic is below the capacity of the movements. In addition, 95th percentile queues for all movements are accommodated within the existing turn lanes with the exception of the eastbound left-turn movement. The IL 59 through movements operate at LOS B or better during the weekday morning peak hour and LOS C or D during the weekday evening peak hour.

Under Year 2029 no-build conditions, this intersection is projected to continue to operate at an overall LOS C during the weekday morning peak hour and LOS D during the weekday evening peak hour.

Under Year 2029 total projected conditions, this intersection is projected to continue to operate at an overall LOS C during the weekday morning peak hour and LOS D during the weekday evening peak hour with increase in delay of less than one second. Some movements are projected to operate at LOS E or F. However, as is the case under existing conditions, these movements are projected to operate with a v/c ratio of less than one and 95th percentile queues that can be accommodated within the existing turn lanes with the exception of the eastbound left-turn movement, which will continue to exceed the provided storage during the weekday evening peak hour. It should be noted that the proposed development will not add any traffic to the eastbound left-turn movement. The IL 59 through movements are projected to continue to operate at the same level of service with increases in delay of less than one second. Overall, the proposed development is projected to increase the volume of traffic traversing this intersection by approximately one quarter of one percent. As such, the intersection has sufficient reserve capacity to accommodate the traffic to be generated by the development and no roadway improvements or traffic control modifications are required.

IL 59 with Royal Worlington Drive

The results of the capacity analyses indicate that the intersection currently operates at an overall LOS B during the weekday morning and weekday evening peak hours. It should be noted that multiple eastbound and westbound movements operate at LOS E/F during both peak hours. The lower levels of service is a result of the long cycle length (140 to 160 seconds during the peak hours) and the reduced green time provided to the Royal Worlington Drive movements as IL 59, which is designated as an SRA route, is the major roadway at this intersection. Further, the northbound and southbound left-turn movements operate at LOS E/F during both peak hours. The lower levels of service are a result of the long cycle length (140 to 160 seconds during the peak hours) and that the left-turn movements operation on a protected phase only. However, all the movements operate with a volume-to-capacity (v/c) ratio of less than one and the 95th percentile queues for all movements can be accommodated within the existing lanes. The IL 59 through movements operate at LOS A or B during both peak hours.

Under Year 2029 no-build conditions, this intersection is projected to continue to operate at an overall LOS B during both peak hours.

Under Year 2029 total projected conditions, this intersection is projected to continue to operate at an overall LOS B during both peak hours with increases in delay of less than one second. Some movements are projected to operate at LOS E or F. However, as is the case under existing conditions, these movements are projected to operate with a v/c ratio of less than one and 95th percentile queues that can be accommodated within the existing lanes. The IL 59 through movements are projected to continue to operate at the same level of service with increases in delay of less than one second.

Overall, the proposed development is projected to increase the volume of traffic traversing this intersection by approximately one quarter of one percent. As such, the intersection has sufficient reserve capacity to accommodate the traffic to be generated by the development and no roadway improvements or traffic control modifications are required.

IL 59 with Alice Lane

The results of the capacity analyses indicate that turning movements from Alice Lane operate at LOS C or better during the weekday morning and weekday evening peak hours. Under Year 2029 no-build and total projected conditions, the turning movements at this intersection are projected to continue to operate at the same levels of service during both peak hours with increases in delay of approximately one second or less. As such, the intersection has sufficient reserve capacity to accommodate the traffic to be generated by the development and no roadway improvements or traffic control modifications are required.

IL 59 with Royal Mews Circle and the Future Access Road

The results of the capacity analyses indicate that the eastbound left-turn movement operates at LOS D during the weekday morning peak hour and LOS F during the weekday evening peak hour. This is typical and expected of a stop sign control approach along an SRA route such as IL 59. Further, the eastbound left-turn movement operates with a volume to capacity (v/c) ratio of less than one. All other critical movements operate at LOS C or better during both peak hours. Under Year 2029 no-build conditions, all the critical movements at this intersection are projected to continue to operate at the same levels of service during both peak hours.

The proposed access road that will serve the development and eventually the vacant parcel in the southwest corner of the IL 59/103rd Street intersection will intersect IL 59 opposite Royal Mews Court. At its intersection with IL 59, the access road will provide one inbound lane and two outbound lanes striped for an exclusive left-turn lane and a through/right-turn lane. Outbound movements will be under stop sign control. In addition, a 215-foot southbound left-turn lane with a 220-foot taper will be required on IL 59 serving the access road. Further, given that the access road will also serve the vacant parcel in the southwest quadrant of the IL 59/103rd Street intersection, a 215-foot northbound left-turn lane with a 220-foot taper will be required on IL 59 serving the access road. Lastly, Royal Mews Court approach will be restriped to provide an exclusive left-turn lane and a shared through/right-turn lane.

Under Year 2029 total projected conditions, the eastbound and westbound left-turn movements are projected to operate at LOS E or F. However, as is the case under existing conditions, these movements are projected to operate with a v/c ratio of less than one. All other movements are projected to operate at LOS C or better during both peak hours. It should be noted that development-generated traffic seeking to travel south on IL 59 has the option to exit the development via Tower Court and turn onto IL 59 at the signalized intersection of IL 59 with 103rd Street. Similarly, outbound traffic from Royal Mews Court can also utilize the IL 59/103rd Street intersection via Alice Lane and Helene Avenue.

103rd Street with Tower Court and Quick Fire Drive

The results of the capacity analyses indicate that all critical movements at this intersection operate at LOS B or better during the weekday morning and weekday evening peak hours. Under Year 2029 no-build and total projected conditions, all the critical movements at this intersection are projected to continue to operate at the same levels of service during both peak hours. As such, the intersection has sufficient reserve capacity to accommodate the traffic to be generated by the development and no roadway improvements or traffic control modifications are required.

103rd Street with Falcon Drive

The results of the capacity analyses indicate that all critical movements at this intersection operate at LOS B or better during the weekday morning and weekday evening peak hours. Under Year 2029 no-build and total projected conditions, all the critical movements at this intersection are projected to continue to operate at the same levels of service during both peak hours. As such, the intersection has sufficient reserve capacity to accommodate the traffic to be generated by the development and no roadway improvements or traffic control modifications are required.

Parking Evaluation

As previously indicated, the site will be developed with a three-story apartment building that will contain 53 age-restricted units for seniors aged 62 and older and 18 units for individuals with intellectual and developmental disabilities (IDD). Parking will be provided via a 104-space surface parking lot. In order to determine if the parking supply will be sufficient to meet the peak parking demand of the development, the parking requirements of the proposed development was estimated based on the City of Naperville's Zoning Ordinance and the rates published in the Institute of Transportation Engineers' (ITE) *Parking Generation Manual*, 5th Edition.

City of Naperville Requirements

The City of Naperville Code of Ordinance does not provide specific rates for age-restricted or IDD housing. Multiple family dwelling residential developments require a parking ratio of two parking spaces per dwelling unit and 0.25 guest parking spaces per unit for a total of 2.25 parking spaces per unit. Based on the above and the total of 71 units, the proposed development would require a total of 160 parking spaces per the City of Naperville's ordinance.

ITE Parking Generation Manual

Based on the average parking rates published in the Institute of Transportation Engineers (ITE) *Parking Generation Manual*, 5th Edition, the projected average peak parking demand for the development was estimated and shown in Table 9.

Table 9
PROJECTED PEAK PARKING DEMAND PER ITE PARKING RATES

ITE Land Use	ITE Parking Rates	Proposed Number of Units	Peak Parking Demand
Senior Adult Housing – Attached (Land-Use Code 252)	0.63 spaces per unit	53 units	33 vehicles
Assisted Living (Land-Use Code 254)	0.74 spaces per unit	18 units	14 vehicles
		Total	**47**

Based on ITE *Parking Generation Manual* rates, the proposed development is projected to have a peak parking demand of 47 vehicles, which can be accommodated by the 104 parking spaces.

Evaluation

The proposed development does not meet Naperville parking requirements for a typical multi-family residential development. However, given the following characteristics of the development and its residents, the parking demand of the proposed development will be much lower than the City of Naperville requirements:

- Information provided by the operator indicates that only approximately 60 percent of residents of the age-restricted housing are expected to have vehicles.

- Information provided by the operator indicates that less than two percent of residents of the IDD housing are expected to have vehicles.

- Residents will be able to utilize public transportation via the Pace 559 bus route which runs along IL 59 and has stops at both 103rd Street and Royal Worlington Drive.

- The development will have a limited number of employees working at the development.

The difference in the parking requirements of the City of Naperville and that of the development's characteristics is reflected in the ITE trip generation rates for land-uses that more accurately represent the proposed development. As such, the proposed parking supply of 104 parking spaces will be adequate in accommodating the projected peak parking demand of the proposed development.

6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- As proposed, the site will be developed with a three-story apartment building that will contain 53 age-restricted units for seniors aged 62 and older and 18 units for individuals with intellectual and developmental disabilities (IDD).

- The proposed development will generate a limited volume of traffic during the peak hours and have a lower parking demand, given the following characteristics of the developments and its residents:

    - Information provided by the operator indicates that only approximately 60 percent of residents of the age-restricted housing are expected to have vehicles.

    - Residents of age-restricted housing do not typically have full-time employment. As such, traffic is more evenly distributed throughout the day and not concentrated during the weekday morning and weekday evening peak periods.

    - Information provided by the operator indicates that less than two percent of residents of the IDD housing are expected to have vehicles.

    - Residents will be able to utilize public transportation via the Pace 559 bus route which runs along IL 59 and has stops at both 103rd Street and Royal Worlington Drive.

    - The development will have a limited number of employees working at the development.

- Access to the development will be provided as follows:

    - A proposed future access road that will extend west from the site to IL 59 and will intersect IL 59 aligned opposite Royal Mews Circle. As proposed, the access road will be designed with a two-lane cross section that will also serve the future development of the vacant parcel in the southeast quadrant of the IL 59/103rd Street intersection. At its intersection with IL 59, the access road will provide one inbound lane and two outbound lanes striped for an exclusive left-turn lane and a through/right-turn lane. Outbound movements will be under stop sign control. In addition, a 215-foot southbound left-turn lane with a 220-foot taper will be required on IL 59 serving the access road. Further, given that the access road will also be serving the vacant parcel in the southwest quadrant of the IL 59/103rd Street intersection, a 215-foot northbound left-turn lane with a 220-foot taper will be required on IL 59 serving the access road. Lastly, Royal Mews Court approach will be restriped to provide an exclusive left-turn lane and a shared through/right-turn lane.

- A proposed access drive located on the west side of Tower Court at its current terminus approximately 880 feet south of 103rd Street and will be aligned opposite the Wheatland Township assessor's office access drive. The access drive will provide one inbound lane and one outbound lane. The intersection of Tower Drive/Wheatland Township assessor's office access drive/development access drive should be under all-way stop control.

- The proposed access will adequately accommodate site-generated traffic and ensure that efficient and flexible access to and from the site is provided.

- The area roadway system generally has sufficient reserve capacity to accommodate the traffic to be generated by the proposed development and no additional roadway improvements or traffic control modifications are required.

- The proposed parking supply of 104 parking spaces will be adequate in accommodating the projected peak parking demand of the proposed development.

Appendix

Traffic Count Summary Sheets
Preliminary Site Plan
2050 CMAP Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets
Turn Lane Warrants

Traffic Count Summary Sheets

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Count Name: 103rd Street with Tower Court and Quick Fire Drive TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Data

Start Time	103rd Street Eastbound						103rd Street Westbound						Quick Fire Drive Northbound						Quick Fire Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	0	34	1	0	35	0	0	109	0	1	109	0	1	0	2	0	3	0	0	0	5	2	5	152
7:15 AM	0	1	42	3	0	46	0	0	34	0	0	34	0	1	0	0	0	1	0	1	0	6	0	7	88
7:30 AM	0	1	30	0	0	31	0	0	48	0	0	48	0	1	0	0	0	1	0	3	0	5	2	8	88
7:45 AM	0	3	52	0	0	55	0	1	43	4	0	48	0	3	0	0	0	3	0	1	0	4	0	5	111
Hourly Total	0	5	158	4	0	167	0	1	234	4	1	239	0	6	0	2	0	8	0	5	0	20	4	25	439
8:00 AM	0	0	47	1	0	48	0	0	39	1	0	40	0	1	0	0	0	1	0	2	0	3	0	5	94
8:15 AM	0	1	42	0	0	43	0	0	38	0	0	38	0	0	0	0	0	0	0	5	0	1	0	6	87
8:30 AM	0	1	31	1	0	33	0	1	30	2	0	33	0	1	0	0	0	1	0	2	0	0	0	2	69
8:45 AM	0	3	44	2	0	49	0	0	57	2	0	59	0	0	0	0	0	0	0	10	0	2	0	12	120
Hourly Total	0	5	164	4	0	173	0	1	164	5	0	170	0	2	0	0	0	2	0	19	0	6	0	25	370
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	4	63	0	0	67	0	1	59	1	0	61	0	3	0	0	0	3	0	2	0	5	0	7	138
4:15 PM	0	3	55	1	0	59	0	0	69	2	0	71	0	0	0	1	0	1	0	1	0	2	0	3	134
4:30 PM	0	2	36	0	0	38	0	1	65	1	0	67	0	0	0	0	0	0	0	2	0	5	1	7	112
4:45 PM	0	3	55	0	0	58	0	0	77	1	0	78	0	0	0	1	0	1	0	2	0	3	1	5	142
Hourly Total	0	12	209	1	0	222	0	2	270	5	0	277	0	3	0	2	0	5	0	7	0	15	2	22	526
5:00 PM	0	5	67	0	0	72	0	0	65	1	0	66	0	0	0	0	0	0	0	4	0	4	0	8	146
5:15 PM	0	3	60	0	0	63	0	0	70	4	0	74	0	0	0	1	0	1	0	5	0	5	0	10	148
5:30 PM	0	1	56	1	0	58	0	0	62	1	0	63	0	0	0	1	1	1	0	0	0	3	2	3	125
5:45 PM	0	1	40	0	0	41	0	0	65	1	0	66	0	0	0	0	0	0	0	4	0	5	0	9	116
Hourly Total	0	10	223	1	0	234	0	0	262	7	0	269	0	0	0	2	1	2	0	13	0	17	2	30	535
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	2	29	1	0	32	0	0	52	1	0	53	0	0	0	0	0	0	0	1	0	1	0	2	87
11:15 AM	0	0	39	1	0	40	0	0	31	1	0	32	0	0	0	1	0	1	0	3	0	2	0	5	78
11:30 AM	0	2	39	0	0	41	0	0	33	3	0	36	0	0	0	0	0	0	0	2	0	3	0	5	82
11:45 AM	0	0	43	0	0	43	0	0	52	3	0	55	0	0	0	0	0	0	0	4	0	2	0	6	104
Hourly Total	0	4	150	2	0	156	0	0	168	8	0	176	0	0	0	1	0	1	0	10	0	8	0	18	351
12:00 PM	0	0	40	1	0	41	0	0	61	3	0	64	0	0	0	2	0	2	0	4	0	0	0	4	111
12:15 PM	0	2	46	0	0	48	0	0	54	1	0	55	0	0	0	0	0	0	0	1	0	5	0	6	109
12:30 PM	0	1	42	0	0	43	0	0	66	0	0	66	0	0	0	0	0	0	0	1	0	0	0	1	110
12:45 PM	0	2	50	0	0	52	0	0	43	1	0	44	0	0	0	0	0	0	0	5	0	3	0	8	104
Hourly Total	0	5	178	1	0	184	0	0	224	5	0	229	0	0	0	2	0	2	0	11	0	8	0	19	434
1:00 PM	0	1	35	0	0	36	0	0	51	1	0	52	0	0	0	0	0	0	0	2	0	2	0	4	92
1:15 PM	0	0	49	0	0	49	0	0	37	3	0	40	0	0	0	0	0	0	0	1	0	1	0	2	91
1:30 PM	0	1	38	0	0	39	0	0	42	1	0	43	0	0	0	0	0	0	0	1	0	4	0	5	87

1:45 PM	0	3	42	0	0	45	0	0	43	0	0	43	0	0	0	0	0	0	0	3	0	1	0	4	92
Hourly Total	0	5	164	0	0	169	0	0	173	5	0	178	0	0	0	0	0	0	0	7	0	8	0	15	362
Grand Total	0	46	1246	13	0	1305	0	4	1495	39	1	1538	0	11	0	9	1	20	0	72	0	82	8	154	3017
Approach %	0.0	3.5	95.5	1.0	-	-	0.0	0.3	97.2	2.5	-	-	0.0	55.0	0.0	45.0	-	-	0.0	46.8	0.0	53.2	-	-	-
Total %	0.0	1.5	41.3	0.4	-	43.3	0.0	0.1	49.6	1.3	-	51.0	0.0	0.4	0.0	0.3	-	0.7	0.0	2.4	0.0	2.7	-	5.1	-
Lights	0	46	1211	9	-	1266	0	3	1463	38	-	1504	0	6	0	9	-	15	0	68	0	80	-	148	2933
% Lights	-	100.0	97.2	69.2	-	97.0	-	75.0	97.9	97.4	-	97.8	-	54.5	-	100.0	-	75.0	-	94.4	-	97.6	-	96.1	97.2
Buses	0	0	14	0	-	14	0	0	14	0	-	14	0	0	0	0	-	0	0	3	0	2	-	5	33
% Buses	-	0.0	1.1	0.0	-	1.1	-	0.0	0.9	0.0	-	0.9	-	0.0	-	0.0	-	0.0	-	4.2	-	2.4	-	3.2	1.1
Single-Unit Trucks	0	0	13	3	-	16	0	1	13	1	-	15	0	5	0	0	-	5	0	1	0	0	-	1	37
% Single-Unit Trucks	-	0.0	1.0	23.1	-	1.2	-	25.0	0.9	2.6	-	1.0	-	45.5	-	0.0	-	25.0	-	1.4	-	0.0	-	0.6	1.2
Articulated Trucks	0	0	4	1	-	5	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	7
% Articulated Trucks	-	0.0	0.3	7.7	-	0.4	-	0.0	0.1	0.0	-	0.1	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2
Bicycles on Road	0	0	4	0	-	4	0	0	3	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	7
% Bicycles on Road	-	0.0	0.3	0.0	-	0.3	-	0.0	0.2	0.0	-	0.2	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	8	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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Count Name: 103rd Street with Tower Court and Quick Fire Drive TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (7:00 AM)

Start Time	103rd Street Eastbound						103rd Street Westbound						Quick Fire Drive Northbound						Quick Fire Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	0	34	1	0	35	0	0	109	0	1	109	0	1	0	2	0	3	0	0	0	5	2	5	152
7:15 AM	0	1	42	3	0	46	0	0	34	0	0	34	0	1	0	0	0	1	0	1	0	6	0	7	88
7:30 AM	0	1	30	0	0	31	0	0	48	0	0	48	0	1	0	0	0	1	0	3	0	5	2	8	88
7:45 AM	0	3	52	0	0	55	0	1	43	4	0	48	0	3	0	0	0	3	0	1	0	4	0	5	111
Total	0	5	158	4	0	167	0	1	234	4	1	239	0	6	0	2	0	8	0	5	0	20	4	25	439
Approach %	0.0	3.0	94.6	2.4	-	-	0.0	0.4	97.9	1.7	-	-	0.0	75.0	0.0	25.0	-	-	0.0	20.0	0.0	80.0	-	-	-
Total %	0.0	1.1	36.0	0.9	-	38.0	0.0	0.2	53.3	0.9	-	54.4	0.0	1.4	0.0	0.5	-	1.8	0.0	1.1	0.0	4.6	-	5.7	-
PHF	0.000	0.417	0.760	0.333	-	0.759	0.000	0.250	0.537	0.250	-	0.548	0.000	0.500	0.000	0.250	-	0.667	0.000	0.417	0.000	0.833	-	0.781	0.722
Lights	0	5	147	4	-	156	0	1	229	4	-	234	0	3	0	2	-	5	0	4	0	18	-	22	417
% Lights	-	100.0	93.0	100.0	-	93.4	-	100.0	97.9	100.0	-	97.9	-	50.0	-	100.0	-	62.5	-	80.0	-	90.0	-	88.0	95.0
Buses	0	0	8	0	-	8	0	0	5	0	-	5	0	0	0	0	-	0	0	1	0	2	-	3	16
% Buses	-	0.0	5.1	0.0	-	4.8	-	0.0	2.1	0.0	-	2.1	-	0.0	-	0.0	-	0.0	-	20.0	-	10.0	-	12.0	3.6
Single-Unit Trucks	0	0	2	0	-	2	0	0	0	0	-	0	0	3	0	0	-	3	0	0	0	0	-	0	5
% Single-Unit Trucks	-	0.0	1.3	0.0	-	1.2	-	0.0	0.0	0.0	-	0.0	-	50.0	-	0.0	-	37.5	-	0.0	-	0.0	-	0.0	1.1
Articulated Trucks	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Articulated Trucks	-	0.0	0.6	0.0	-	0.6	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	4	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: 103rd Street with Tower Court and Quick Fire Drive TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (4:30 PM)

Start Time	103rd Street Eastbound						103rd Street Westbound						Quick Fire Drive Northbound						Quick Fire Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	2	36	0	0	38	0	1	65	1	0	67	0	0	0	0	0	0	0	2	0	5	1	7	112
4:45 PM	0	3	55	0	0	58	0	0	77	1	0	78	0	0	0	1	0	1	0	2	0	3	1	5	142
5:00 PM	0	5	67	0	0	72	0	0	65	1	0	66	0	0	0	0	0	0	0	4	0	4	0	8	146
5:15 PM	0	3	60	0	0	63	0	0	70	4	0	74	0	0	0	1	0	1	0	5	0	5	0	10	148
Total	0	13	218	0	0	231	0	1	277	7	0	285	0	0	0	2	0	2	0	13	0	17	2	30	548
Approach %	0.0	5.6	94.4	0.0	-	-	0.0	0.4	97.2	2.5	-	-	0.0	0.0	0.0	100.0	-	-	0.0	43.3	0.0	56.7	-	-	-
Total %	0.0	2.4	39.8	0.0	-	42.2	0.0	0.2	50.5	1.3	-	52.0	0.0	0.0	0.0	0.4	-	0.4	0.0	2.4	0.0	3.1	-	5.5	-
PHF	0.000	0.650	0.813	0.000	-	0.802	0.000	0.250	0.899	0.438	-	0.913	0.000	0.000	0.000	0.500	-	0.500	0.000	0.650	0.000	0.850	-	0.750	0.926
Lights	0	13	217	0	-	230	0	0	274	7	-	281	0	0	0	2	-	2	0	13	0	17	-	30	543
% Lights	-	100.0	99.5	-	-	99.6	-	0.0	98.9	100.0	-	98.6	-	-	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	99.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	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
Single-Unit Trucks	0	0	1	0	-	1	0	1	2	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	4
% Single-Unit Trucks	-	0.0	0.5	-	-	0.4	-	100.0	0.7	0.0	-	1.1	-	-	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated 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 on Road	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	-	0.0	0.0	-	-	0.0	-	0.0	0.4	0.0	-	0.4	-	-	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
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Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: 103rd Street with Tower Court and Quick Fire Drive TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (11:45 AM)

Start Time	103rd Street Eastbound						103rd Street Westbound						Quick Fire Drive Northbound						Quick Fire Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
11:45 AM	0	0	43	0	0	43	0	0	52	3	0	55	0	0	0	0	0	0	0	4	0	2	0	6	104
12:00 PM	0	0	40	1	0	41	0	0	61	3	0	64	0	0	0	2	0	2	0	4	0	0	0	4	111
12:15 PM	0	2	46	0	0	48	0	0	54	1	0	55	0	0	0	0	0	0	0	1	0	5	0	6	109
12:30 PM	0	1	42	0	0	43	0	0	66	0	0	66	0	0	0	0	0	0	0	1	0	0	0	1	110
Total	0	3	171	1	0	175	0	0	233	7	0	240	0	0	0	2	0	2	0	10	0	7	0	17	434
Approach %	0.0	1.7	97.7	0.6	-	-	0.0	0.0	97.1	2.9	-	-	0.0	0.0	0.0	100.0	-	-	0.0	58.8	0.0	41.2	-	-	-
Total %	0.0	0.7	39.4	0.2	-	40.3	0.0	0.0	53.7	1.6	-	55.3	0.0	0.0	0.0	0.5	-	0.5	0.0	2.3	0.0	1.6	-	3.9	-
PHF	0.000	0.375	0.929	0.250	-	0.911	0.000	0.000	0.883	0.583	-	0.909	0.000	0.000	0.000	0.250	-	0.250	0.000	0.625	0.000	0.350	-	0.708	0.977
Lights	0	3	170	1	-	174	0	0	233	6	-	239	0	0	0	2	-	2	0	10	0	7	-	17	432
% Lights	-	100.0	99.4	100.0	-	99.4	-	-	100.0	85.7	-	99.6	-	-	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	99.5
Buses	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	-	0.0	0.6	0.0	-	0.6	-	-	0.0	0.0	-	0.0	-	-	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	-	0.0	14.3	-	0.4	-	-	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated 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 on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	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
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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(847)518-9990 abowen@kloainc.com

Count Name: 103rd+with+Falcon TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Data

Start Time	103rd Street Eastbound						103rd Street Westbound						Falcon Drive Northbound						Falcon Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	1	30	8	0	39	0	2	75	1	2	78	0	24	0	4	2	28	0	3	0	6	0	9	154
7:15 AM	0	0	32	7	0	39	0	0	22	3	0	25	0	3	1	1	0	5	0	4	0	1	1	5	74
7:30 AM	0	2	28	4	0	34	0	2	34	5	0	41	0	8	0	4	0	12	0	4	1	8	0	13	100
7:45 AM	0	2	44	2	0	48	0	1	39	3	0	43	0	7	3	3	0	13	0	5	4	2	1	11	115
Hourly Total	0	5	134	21	0	160	0	5	170	12	2	187	0	42	4	12	2	58	0	16	5	17	2	38	443
8:00 AM	0	3	46	2	0	51	0	1	30	7	1	38	0	7	1	1	0	9	0	5	0	3	1	8	106
8:15 AM	0	2	37	2	1	41	0	2	28	3	0	33	0	5	0	4	0	9	0	2	2	1	1	5	88
8:30 AM	0	2	32	3	1	37	0	1	27	6	1	34	0	2	0	0	1	2	0	5	1	4	0	10	83
8:45 AM	0	1	46	6	1	53	0	0	49	1	0	50	0	12	2	4	0	18	0	10	9	1	0	20	141
Hourly Total	0	8	161	13	3	182	0	4	134	17	2	155	0	26	3	9	1	38	0	22	12	9	2	43	418
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	45	12	0	57	0	2	48	7	0	57	0	4	0	2	0	6	0	6	3	4	0	13	133
4:15 PM	0	4	46	2	0	52	0	2	54	3	1	59	0	7	2	1	0	10	0	5	0	8	0	13	134
4:30 PM	0	2	35	8	3	45	0	4	57	2	0	63	0	5	1	1	0	7	0	5	2	5	0	12	127
4:45 PM	0	4	51	3	0	58	0	3	68	5	0	76	0	10	2	0	0	12	0	4	0	4	1	8	154
Hourly Total	0	10	177	25	3	212	0	11	227	17	1	255	0	26	5	4	0	35	0	20	5	21	1	46	548
5:00 PM	0	2	58	7	0	67	0	2	57	2	8	61	0	8	0	2	0	10	0	4	2	3	0	9	147
5:15 PM	0	5	58	6	0	69	0	1	61	3	0	65	0	8	2	2	0	12	0	2	1	2	1	5	151
5:30 PM	0	2	48	8	2	58	0	1	57	8	0	66	0	4	0	1	0	5	0	5	5	3	0	13	142
5:45 PM	0	1	41	7	0	49	0	3	53	3	0	59	0	11	0	2	0	13	0	3	0	2	0	5	126
Hourly Total	0	10	205	28	2	243	0	7	228	16	8	251	0	31	2	7	0	40	0	14	8	10	1	32	566
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	2	21	5	0	28	0	5	35	5	0	45	0	8	0	5	0	13	0	6	0	2	0	8	94
11:15 AM	0	1	35	5	0	41	0	7	26	2	0	35	0	5	1	1	0	7	0	1	1	1	0	3	86
11:30 AM	0	1	35	4	0	40	0	3	30	3	0	36	0	6	2	4	0	12	0	6	1	0	0	7	95
11:45 AM	0	2	44	2	0	48	0	1	46	2	0	49	0	8	1	2	0	11	0	4	1	5	0	10	118
Hourly Total	0	6	135	16	0	157	0	16	137	12	0	165	0	27	4	12	0	43	0	17	3	8	0	28	393
12:00 PM	0	2	32	9	0	43	0	1	52	3	0	56	0	10	1	1	0	12	0	3	3	2	0	8	119
12:15 PM	0	1	41	8	0	50	0	0	49	2	1	51	0	7	0	3	0	10	0	4	0	1	0	5	116
12:30 PM	0	2	38	3	0	43	0	3	50	4	0	57	0	7	4	4	0	15	0	3	1	4	0	8	123
12:45 PM	0	4	39	10	0	53	0	4	32	4	1	40	0	8	1	3	0	12	0	1	0	3	0	4	109
Hourly Total	0	9	150	30	0	189	0	8	183	13	2	204	0	32	6	11	0	49	0	11	4	10	0	25	467
1:00 PM	0	2	26	4	0	32	0	6	36	6	0	48	0	9	2	1	1	12	0	3	3	8	0	14	106
1:15 PM	0	4	38	8	0	50	0	1	29	4	0	34	0	6	0	2	0	8	0	5	1	5	0	11	103
1:30 PM	0	2	27	8	0	37	0	7	35	2	0	44	0	5	4	1	0	10	0	2	1	4	0	7	98

1:45 PM	0	3	38	9	0	50	0	2	39	5	0	46	0	11	2	1	0	14	0	2	4	2	0	8	118
Hourly Total	0	11	129	29	0	169	0	16	139	17	0	172	0	31	8	5	1	44	0	12	9	19	0	40	425
Grand Total	0	59	1091	162	8	1312	0	67	1218	104	15	1389	0	215	32	60	4	307	0	112	46	94	6	252	3260
Approach %	0.0	4.5	83.2	12.3	-	-	0.0	4.8	87.7	7.5	-	-	0.0	70.0	10.4	19.5	-	-	0.0	44.4	18.3	37.3	-	-	-
Total %	0.0	1.8	33.5	5.0	-	40.2	0.0	2.1	37.4	3.2	-	42.6	0.0	6.6	1.0	1.8	-	9.4	0.0	3.4	1.4	2.9	-	7.7	-
Lights	0	57	1063	157	-	1277	0	63	1189	100	-	1352	0	213	21	59	-	293	0	109	33	90	-	232	3154
% Lights	-	96.6	97.4	96.9	-	97.3	-	94.0	97.6	96.2	-	97.3	-	99.1	65.6	98.3	-	95.4	-	97.3	71.7	95.7	-	92.1	96.7
Buses	0	1	10	4	-	15	0	1	9	3	-	13	0	1	0	0	-	1	0	2	2	4	-	8	37
% Buses	-	1.7	0.9	2.5	-	1.1	-	1.5	0.7	2.9	-	0.9	-	0.5	0.0	0.0	-	0.3	-	1.8	4.3	4.3	-	3.2	1.1
Single-Unit Trucks	0	1	12	1	-	14	0	2	15	0	-	17	0	1	1	0	-	2	0	1	4	0	-	5	38
% Single-Unit Trucks	-	1.7	1.1	0.6	-	1.1	-	3.0	1.2	0.0	-	1.2	-	0.5	3.1	0.0	-	0.7	-	0.9	8.7	0.0	-	2.0	1.2
Articulated Trucks	0	0	1	0	-	1	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	3
% Articulated Trucks	-	0.0	0.1	0.0	-	0.1	-	0.0	0.2	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	5	0	-	5	0	1	3	1	-	5	0	0	10	1	-	11	0	0	7	0	-	7	28
% Bicycles on Road	-	0.0	0.5	0.0	-	0.4	-	1.5	0.2	1.0	-	0.4	-	0.0	31.3	1.7	-	3.6	-	0.0	15.2	0.0	-	2.8	0.9
Pedestrians	-	-	-	-	8	-	-	-	-	-	15	-	-	-	-	-	4	-	-	-	-	-	6	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

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(847)518-9990 abowen@kloainc.com

Count Name: 103rd+with+Falcon TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (7:00 AM)

Start Time	103rd Street Eastbound						103rd Street Westbound						Falcon Drive Northbound						Falcon Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	1	30	8	0	39	0	2	75	1	2	78	0	24	0	4	2	28	0	3	0	6	0	9	154
7:15 AM	0	0	32	7	0	39	0	0	22	3	0	25	0	3	1	1	0	5	0	4	0	1	1	5	74
7:30 AM	0	2	28	4	0	34	0	2	34	5	0	41	0	8	0	4	0	12	0	4	1	8	0	13	100
7:45 AM	0	2	44	2	0	48	0	1	39	3	0	43	0	7	3	3	0	13	0	5	4	2	1	11	115
Total	0	5	134	21	0	160	0	5	170	12	2	187	0	42	4	12	2	58	0	16	5	17	2	38	443
Approach %	0.0	3.1	83.8	13.1	-	-	0.0	2.7	90.9	6.4	-	-	0.0	72.4	6.9	20.7	-	-	0.0	42.1	13.2	44.7	-	-	-
Total %	0.0	1.1	30.2	4.7	-	36.1	0.0	1.1	38.4	2.7	-	42.2	0.0	9.5	0.9	2.7	-	13.1	0.0	3.6	1.1	3.8	-	8.6	-
PHF	0.000	0.625	0.761	0.656	-	0.833	0.000	0.625	0.567	0.600	-	0.599	0.000	0.438	0.333	0.750	-	0.518	0.000	0.800	0.313	0.531	-	0.731	0.719
Lights	0	5	123	20	-	148	0	4	166	10	-	180	0	42	3	12	-	57	0	15	5	14	-	34	419
% Lights	-	100.0	91.8	95.2	-	92.5	-	80.0	97.6	83.3	-	96.3	-	100.0	75.0	100.0	-	98.3	-	93.8	100.0	82.4	-	89.5	94.6
Buses	0	0	7	1	-	8	0	1	2	2	-	5	0	0	0	0	-	0	0	1	0	3	-	4	17
% Buses	-	0.0	5.2	4.8	-	5.0	-	20.0	1.2	16.7	-	2.7	-	0.0	0.0	0.0	-	0.0	-	6.3	0.0	17.6	-	10.5	3.8
Single-Unit Trucks	0	0	4	0	-	4	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	6
% Single-Unit Trucks	-	0.0	3.0	0.0	-	2.5	-	0.0	1.2	0.0	-	1.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	1.4
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated 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	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	1
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	25.0	0.0	-	1.7	-	0.0	0.0	0.0	-	0.0	0.2
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: 103rd+with+Falcon TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (4:30 PM)

Start Time	103rd Street Eastbound						103rd Street Westbound						Falcon Drive Northbound						Falcon Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	2	35	8	3	45	0	4	57	2	0	63	0	5	1	1	0	7	0	5	2	5	0	12	127
4:45 PM	0	4	51	3	0	58	0	3	68	5	0	76	0	10	2	0	0	12	0	4	0	4	1	8	154
5:00 PM	0	2	58	7	0	67	0	2	57	2	8	61	0	8	0	2	0	10	0	4	2	3	0	9	147
5:15 PM	0	5	58	6	0	69	0	1	61	3	0	65	0	8	2	2	0	12	0	2	1	2	1	5	151
Total	0	13	202	24	3	239	0	10	243	12	8	265	0	31	5	5	0	41	0	15	5	14	2	34	579
Approach %	0.0	5.4	84.5	10.0	-	-	0.0	3.8	91.7	4.5	-	-	0.0	75.6	12.2	12.2	-	-	0.0	44.1	14.7	41.2	-	-	-
Total %	0.0	2.2	34.9	4.1	-	41.3	0.0	1.7	42.0	2.1	-	45.8	0.0	5.4	0.9	0.9	-	7.1	0.0	2.6	0.9	2.4	-	5.9	-
PHF	0.000	0.650	0.871	0.750	-	0.866	0.000	0.625	0.893	0.600	-	0.872	0.000	0.775	0.625	0.625	-	0.854	0.000	0.750	0.625	0.700	-	0.708	0.940
Lights	0	13	201	24	-	238	0	10	239	12	-	261	0	31	4	4	-	39	0	15	4	14	-	33	571
% Lights	-	100.0	99.5	100.0	-	99.6	-	100.0	98.4	100.0	-	98.5	-	100.0	80.0	80.0	-	95.1	-	100.0	80.0	100.0	-	97.1	98.6
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	1	0	-	1	0	0	3	0	-	3	0	0	0	0	-	0	0	0	1	0	-	1	5
% Single-Unit Trucks	-	0.0	0.5	0.0	-	0.4	-	0.0	1.2	0.0	-	1.1	-	0.0	0.0	0.0	-	0.0	-	0.0	20.0	0.0	-	2.9	0.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated 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	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	1	0	-	1	0	0	1	1	-	2	0	0	0	0	-	0	3
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.4	0.0	-	0.4	-	0.0	20.0	20.0	-	4.9	-	0.0	0.0	0.0	-	0.0	0.5
Pedestrians	-	-	-	-	3	-	-	-	-	-	8	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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(847)518-9990 abowen@kloainc.com

Count Name: 103rd+with+Falcon TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (11:45 AM)

Start Time	103rd Street Eastbound						103rd Street Westbound						Falcon Drive Northbound						Falcon Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
11:45 AM	0	2	44	2	0	48	0	1	46	2	0	49	0	8	1	2	0	11	0	4	1	5	0	10	118
12:00 PM	0	2	32	9	0	43	0	1	52	3	0	56	0	10	1	1	0	12	0	3	3	2	0	8	119
12:15 PM	0	1	41	8	0	50	0	0	49	2	1	51	0	7	0	3	0	10	0	4	0	1	0	5	116
12:30 PM	0	2	38	3	0	43	0	3	50	4	0	57	0	7	4	4	0	15	0	3	1	4	0	8	123
Total	0	7	155	22	0	184	0	5	197	11	1	213	0	32	6	10	0	48	0	14	5	12	0	31	476
Approach %	0.0	3.8	84.2	12.0	-	-	0.0	2.3	92.5	5.2	-	-	0.0	66.7	12.5	20.8	-	-	0.0	45.2	16.1	38.7	-	-	-
Total %	0.0	1.5	32.6	4.6	-	38.7	0.0	1.1	41.4	2.3	-	44.7	0.0	6.7	1.3	2.1	-	10.1	0.0	2.9	1.1	2.5	-	6.5	-
PHF	0.000	0.875	0.881	0.611	-	0.920	0.000	0.417	0.947	0.688	-	0.934	0.000	0.800	0.375	0.625	-	0.800	0.000	0.875	0.417	0.600	-	0.775	0.967
Lights	0	7	153	22	-	182	0	4	196	11	-	211	0	32	2	10	-	44	0	14	4	12	-	30	467
% Lights	-	100.0	98.7	100.0	-	98.9	-	80.0	99.5	100.0	-	99.1	-	100.0	33.3	100.0	-	91.7	-	100.0	80.0	100.0	-	96.8	98.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	2	0	-	2	0	1	1	0	-	2	0	0	0	0	-	0	0	0	1	0	-	1	5
% Single-Unit Trucks	-	0.0	1.3	0.0	-	1.1	-	20.0	0.5	0.0	-	0.9	-	0.0	0.0	0.0	-	0.0	-	0.0	20.0	0.0	-	3.2	1.1
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated 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	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	4	0	-	4	0	0	0	0	-	0	4
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	66.7	0.0	-	8.3	-	0.0	0.0	0.0	-	0.0	0.8
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: IL 59 with Alice Lane TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Data

Start Time	Alice Lane Eastbound					IL 59 Northbound					IL 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	0	1	0	1	0	0	486	0	486	0	186	0	0	186	673
7:15 AM	0	0	1	0	1	0	0	382	0	382	0	203	0	0	203	586
7:30 AM	0	0	0	0	0	0	0	409	0	409	0	268	2	0	270	679
7:45 AM	0	0	3	0	3	0	0	356	0	356	0	255	2	0	257	616
Hourly Total	0	0	5	0	5	0	0	1633	0	1633	0	912	4	0	916	2554
8:00 AM	0	0	3	2	3	0	0	326	0	326	0	245	3	0	248	577
8:15 AM	0	0	2	0	2	0	0	332	0	332	0	223	0	0	223	557
8:30 AM	0	0	5	0	5	0	0	321	0	321	0	242	1	0	243	569
8:45 AM	0	0	1	0	1	0	0	319	0	319	0	241	2	0	243	563
Hourly Total	0	0	11	2	11	0	0	1298	0	1298	0	951	6	0	957	2266
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	4	0	4	0	0	332	0	332	0	452	5	0	457	793
4:15 PM	0	0	4	0	4	0	0	356	0	356	0	425	3	0	428	788
4:30 PM	0	0	5	0	5	0	0	339	0	339	0	457	2	0	459	803
4:45 PM	0	0	5	2	5	0	0	384	0	384	0	379	4	0	383	772
Hourly Total	0	0	18	2	18	0	0	1411	0	1411	0	1713	14	0	1727	3156
5:00 PM	0	0	3	0	3	0	0	308	0	308	0	495	2	0	497	808
5:15 PM	0	0	8	1	8	0	0	386	0	386	0	468	7	0	475	869
5:30 PM	0	0	5	0	5	0	0	311	0	311	0	390	2	0	392	708
5:45 PM	0	0	5	0	5	0	0	307	0	307	0	446	8	0	454	766
Hourly Total	0	0	21	1	21	0	0	1312	0	1312	0	1799	19	0	1818	3151
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	0	0	0	0	0	0	324	0	324	0	307	1	0	308	632
11:15 AM	0	0	4	0	4	0	0	343	0	343	0	346	1	0	347	694
11:30 AM	0	0	1	0	1	0	0	333	0	333	0	357	4	0	361	695
11:45 AM	0	0	6	0	6	0	0	329	0	329	0	306	1	0	307	642
Hourly Total	0	0	11	0	11	0	0	1329	0	1329	0	1316	7	0	1323	2663
12:00 PM	0	0	4	0	4	0	0	357	0	357	0	334	3	0	337	698
12:15 PM	0	0	3	0	3	0	0	300	0	300	0	316	4	0	320	623
12:30 PM	0	0	2	0	2	0	0	312	0	312	0	369	3	0	372	686
12:45 PM	0	0	4	0	4	0	0	308	0	308	0	330	4	0	334	646
Hourly Total	0	0	13	0	13	0	0	1277	0	1277	0	1349	14	0	1363	2653
1:00 PM	0	0	0	0	0	0	0	319	0	319	0	327	3	0	330	649
1:15 PM	0	0	4	0	4	0	0	273	0	273	0	326	5	0	331	608
1:30 PM	0	0	2	0	2	0	0	335	0	335	0	326	1	0	327	664
1:45 PM	0	0	2	0	2	0	0	367	0	367	0	330	6	0	336	705

Hourly Total	0	0	8	0	8	0	0	1294	0	1294	0	1309	15	0	1324	2626
Grand Total	0	0	87	5	87	0	0	9554	0	9554	0	9349	79	0	9428	19069
Approach %	0.0	0.0	100.0	-	-	0.0	0.0	100.0	-	-	0.0	99.2	0.8	-	-	-
Total %	0.0	0.0	0.5	-	0.5	0.0	0.0	50.1	-	50.1	0.0	49.0	0.4	-	49.4	-
Lights	0	0	86	-	86	0	0	9259	-	9259	0	8978	79	-	9057	18402
% Lights	-	-	98.9	-	98.9	-	-	96.9	-	96.9	-	96.0	100.0	-	96.1	96.5
Buses	0	0	0	-	0	0	0	9	-	9	0	26	0	-	26	35
% Buses	-	-	0.0	-	0.0	-	-	0.1	-	0.1	-	0.3	0.0	-	0.3	0.2
Single-Unit Trucks	0	0	1	-	1	0	0	131	-	131	0	140	0	-	140	272
% Single-Unit Trucks	-	-	1.1	-	1.1	-	-	1.4	-	1.4	-	1.5	0.0	-	1.5	1.4
Articulated Trucks	0	0	0	-	0	0	0	155	-	155	0	205	0	-	205	360
% Articulated Trucks	-	-	0.0	-	0.0	-	-	1.6	-	1.6	-	2.2	0.0	-	2.2	1.9
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	5	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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(847)518-9990 abowen@kloainc.com

Count Name: IL 59 with Alice Lane TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Alice Lane Eastbound					IL 59 Northbound					IL 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	0	1	0	1	0	0	486	0	486	0	186	0	0	186	673
7:15 AM	0	0	1	0	1	0	0	382	0	382	0	203	0	0	203	586
7:30 AM	0	0	0	0	0	0	0	409	0	409	0	268	2	0	270	679
7:45 AM	0	0	3	0	3	0	0	356	0	356	0	255	2	0	257	616
Total	0	0	5	0	5	0	0	1633	0	1633	0	912	4	0	916	2554
Approach %	0.0	0.0	100.0	-	-	0.0	0.0	100.0	-	-	0.0	99.6	0.4	-	-	-
Total %	0.0	0.0	0.2	-	0.2	0.0	0.0	63.9	-	63.9	0.0	35.7	0.2	-	35.9	-
PHF	0.000	0.000	0.417	-	0.417	0.000	0.000	0.840	-	0.840	0.000	0.851	0.500	-	0.848	0.940
Lights	0	0	4	-	4	0	0	1553	-	1553	0	807	4	-	811	2368
% Lights	-	-	80.0	-	80.0	-	-	95.1	-	95.1	-	88.5	100.0	-	88.5	92.7
Buses	0	0	0	-	0	0	0	0	-	0	0	16	0	-	16	16
% Buses	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	1.8	0.0	-	1.7	0.6
Single-Unit Trucks	0	0	1	-	1	0	0	32	-	32	0	31	0	-	31	64
% Single-Unit Trucks	-	-	20.0	-	20.0	-	-	2.0	-	2.0	-	3.4	0.0	-	3.4	2.5
Articulated Trucks	0	0	0	-	0	0	0	48	-	48	0	58	0	-	58	106
% Articulated Trucks	-	-	0.0	-	0.0	-	-	2.9	-	2.9	-	6.4	0.0	-	6.3	4.2
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: IL 59 with Alice Lane TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Alice Lane Eastbound					IL 59 Northbound					IL 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	0	0	5	0	5	0	0	339	0	339	0	457	2	0	459	803
4:45 PM	0	0	5	2	5	0	0	384	0	384	0	379	4	0	383	772
5:00 PM	0	0	3	0	3	0	0	308	0	308	0	495	2	0	497	808
5:15 PM	0	0	8	1	8	0	0	386	0	386	0	468	7	0	475	869
Total	0	0	21	3	21	0	0	1417	0	1417	0	1799	15	0	1814	3252
Approach %	0.0	0.0	100.0	-	-	0.0	0.0	100.0	-	-	0.0	99.2	0.8	-	-	-
Total %	0.0	0.0	0.6	-	0.6	0.0	0.0	43.6	-	43.6	0.0	55.3	0.5	-	55.8	-
PHF	0.000	0.000	0.656	-	0.656	0.000	0.000	0.918	-	0.918	0.000	0.909	0.536	-	0.912	0.936
Lights	0	0	21	-	21	0	0	1376	-	1376	0	1758	15	-	1773	3170
% Lights	-	-	100.0	-	100.0	-	-	97.1	-	97.1	-	97.7	100.0	-	97.7	97.5
Buses	0	0	0	-	0	0	0	3	-	3	0	3	0	-	3	6
% Buses	-	-	0.0	-	0.0	-	-	0.2	-	0.2	-	0.2	0.0	-	0.2	0.2
Single-Unit Trucks	0	0	0	-	0	0	0	17	-	17	0	11	0	-	11	28
% Single-Unit Trucks	-	-	0.0	-	0.0	-	-	1.2	-	1.2	-	0.6	0.0	-	0.6	0.9
Articulated Trucks	0	0	0	-	0	0	0	21	-	21	0	27	0	-	27	48
% Articulated Trucks	-	-	0.0	-	0.0	-	-	1.5	-	1.5	-	1.5	0.0	-	1.5	1.5
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	3	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: IL 59 with Alice Lane TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (11:45 AM)

Start Time	Alice Lane Eastbound					IL 59 Northbound					IL 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
11:45 AM	0	0	6	0	6	0	0	329	0	329	0	306	1	0	307	642
12:00 PM	0	0	4	0	4	0	0	357	0	357	0	334	3	0	337	698
12:15 PM	0	0	3	0	3	0	0	300	0	300	0	316	4	0	320	623
12:30 PM	0	0	2	0	2	0	0	312	0	312	0	369	3	0	372	686
Total	0	0	15	0	15	0	0	1298	0	1298	0	1325	11	0	1336	2649
Approach %	0.0	0.0	100.0	-	-	0.0	0.0	100.0	-	-	0.0	99.2	0.8	-	-	-
Total %	0.0	0.0	0.6	-	0.6	0.0	0.0	49.0	-	49.0	0.0	50.0	0.4	-	50.4	-
PHF	0.000	0.000	0.625	-	0.625	0.000	0.000	0.909	-	0.909	0.000	0.898	0.688	-	0.898	0.949
Lights	0	0	15	-	15	0	0	1283	-	1283	0	1304	11	-	1315	2613
% Lights	-	-	100.0	-	100.0	-	-	98.8	-	98.8	-	98.4	100.0	-	98.4	98.6
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	12	-	12	0	13	0	-	13	25
% Single-Unit Trucks	-	-	0.0	-	0.0	-	-	0.9	-	0.9	-	1.0	0.0	-	1.0	0.9
Articulated Trucks	0	0	0	-	0	0	0	3	-	3	0	8	0	-	8	11
% Articulated Trucks	-	-	0.0	-	0.0	-	-	0.2	-	0.2	-	0.6	0.0	-	0.6	0.4
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: IL 59 with Royal Mews Circle TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Data

Start Time	IL 59 Eastbound					Royal Mews Circle Northbound					IL 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	1	0	0	1	0	6	486	0	492	0	183	1	0	184	677
7:15 AM	0	3	0	0	3	0	1	364	0	365	0	219	0	0	219	587
7:30 AM	0	4	0	0	4	0	5	451	0	456	0	261	0	0	261	721
7:45 AM	0	1	2	1	3	0	2	333	0	335	0	237	0	0	237	575
Hourly Total	0	9	2	1	11	0	14	1634	0	1648	0	900	1	0	901	2560
8:00 AM	0	2	0	1	2	0	1	342	0	343	0	231	0	0	231	576
8:15 AM	0	1	1	0	2	1	1	309	0	311	0	246	0	0	246	559
8:30 AM	0	0	1	0	1	0	3	359	0	362	0	231	0	0	231	594
8:45 AM	0	0	0	0	0	0	2	337	0	339	0	255	1	0	256	595
Hourly Total	0	3	2	1	5	1	7	1347	0	1355	0	963	1	0	964	2324
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	2	4	0	6	0	4	332	0	336	0	474	3	0	477	819
4:15 PM	0	2	4	0	6	0	10	382	0	392	0	459	7	0	466	864
4:30 PM	0	2	2	0	4	0	4	343	0	347	0	427	7	0	434	785
4:45 PM	0	3	3	0	6	0	9	381	0	390	0	445	6	0	451	847
Hourly Total	0	9	13	0	22	0	27	1438	0	1465	0	1805	23	0	1828	3315
5:00 PM	0	2	6	0	8	0	7	381	0	388	0	479	10	0	489	885
5:15 PM	0	5	3	0	8	0	3	372	0	375	0	410	6	0	416	799
5:30 PM	0	1	1	0	2	0	6	361	0	367	0	404	4	0	408	777
5:45 PM	0	0	5	0	5	0	8	359	0	367	1	450	10	0	461	833
Hourly Total	0	8	15	0	23	0	24	1473	0	1497	1	1743	30	0	1774	3294
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	4	3	0	7	0	1	318	0	319	0	304	2	0	306	632
11:15 AM	0	1	3	0	4	0	1	336	0	337	0	311	2	0	313	654
11:30 AM	0	2	5	0	7	0	5	316	0	321	0	361	9	0	370	698
11:45 AM	0	0	2	0	2	0	6	326	0	332	0	343	2	0	345	679
Hourly Total	0	7	13	0	20	0	13	1296	0	1309	0	1319	15	0	1334	2663
12:00 PM	0	1	2	0	3	1	2	341	0	344	0	309	4	0	313	660
12:15 PM	0	3	2	0	5	0	5	308	0	313	1	360	6	0	367	685
12:30 PM	0	1	7	0	8	0	6	330	0	336	0	356	4	0	360	704
12:45 PM	0	2	7	0	9	1	5	319	0	325	0	309	1	0	310	644
Hourly Total	0	7	18	0	25	2	18	1298	0	1318	1	1334	15	0	1350	2693
1:00 PM	0	3	3	0	6	0	4	300	0	304	0	336	3	0	339	649
1:15 PM	0	2	2	0	4	1	4	291	0	296	0	360	4	0	364	664
1:30 PM	0	0	4	0	4	0	2	349	0	351	2	298	4	0	304	659
1:45 PM	0	1	6	0	7	0	2	354	0	356	0	344	5	0	349	712

Hourly Total	0	6	15	0	21	1	12	1294	0	1307	2	1338	16	0	1356	2684
Grand Total	0	49	78	2	127	4	115	9780	0	9899	4	9402	101	0	9507	19533
Approach %	0.0	38.6	61.4	-	-	0.0	1.2	98.8	-	-	0.0	98.9	1.1	-	-	-
Total %	0.0	0.3	0.4	-	0.7	0.0	0.6	50.1	-	50.7	0.0	48.1	0.5	-	48.7	-
Lights	0	48	77	-	125	4	114	9466	-	9584	4	9036	100	-	9140	18849
% Lights	-	98.0	98.7	-	98.4	100.0	99.1	96.8	-	96.8	100.0	96.1	99.0	-	96.1	96.5
Buses	0	0	0	-	0	0	0	17	-	17	0	21	0	-	21	38
% Buses	-	0.0	0.0	-	0.0	0.0	0.0	0.2	-	0.2	0.0	0.2	0.0	-	0.2	0.2
Single-Unit Trucks	0	1	1	-	2	0	1	141	-	142	0	138	1	-	139	283
% Single-Unit Trucks	-	2.0	1.3	-	1.6	0.0	0.9	1.4	-	1.4	0.0	1.5	1.0	-	1.5	1.4
Articulated Trucks	0	0	0	-	0	0	0	156	-	156	0	207	0	-	207	363
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.0	1.6	-	1.6	0.0	2.2	0.0	-	2.2	1.9
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	2	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: IL 59 with Royal Mews Circle TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (7:00 AM)

Start Time	IL 59 Eastbound					Royal Mews Circle Northbound					IL 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	1	0	0	1	0	6	486	0	492	0	183	1	0	184	677
7:15 AM	0	3	0	0	3	0	1	364	0	365	0	219	0	0	219	587
7:30 AM	0	4	0	0	4	0	5	451	0	456	0	261	0	0	261	721
7:45 AM	0	1	2	1	3	0	2	333	0	335	0	237	0	0	237	575
Total	0	9	2	1	11	0	14	1634	0	1648	0	900	1	0	901	2560
Approach %	0.0	81.8	18.2	-	-	0.0	0.8	99.2	-	-	0.0	99.9	0.1	-	-	-
Total %	0.0	0.4	0.1	-	0.4	0.0	0.5	63.8	-	64.4	0.0	35.2	0.0	-	35.2	-
PHF	0.000	0.563	0.250	-	0.688	0.000	0.583	0.841	-	0.837	0.000	0.862	0.250	-	0.863	0.888
Lights	0	9	2	-	11	0	14	1537	-	1551	0	799	1	-	800	2362
% Lights	-	100.0	100.0	-	100.0	-	100.0	94.1	-	94.1	-	88.8	100.0	-	88.8	92.3
Buses	0	0	0	-	0	0	0	6	-	6	0	12	0	-	12	18
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.4	-	0.4	-	1.3	0.0	-	1.3	0.7
Single-Unit Trucks	0	0	0	-	0	0	0	44	-	44	0	33	0	-	33	77
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	2.7	-	2.7	-	3.7	0.0	-	3.7	3.0
Articulated Trucks	0	0	0	-	0	0	0	47	-	47	0	56	0	-	56	103
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	2.9	-	2.9	-	6.2	0.0	-	6.2	4.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: IL 59 with Royal Mews Circle TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (4:30 PM)

Start Time	IL 59 Eastbound					Royal Mews Circle Northbound					IL 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	0	2	2	0	4	0	4	343	0	347	0	427	7	0	434	785
4:45 PM	0	3	3	0	6	0	9	381	0	390	0	445	6	0	451	847
5:00 PM	0	2	6	0	8	0	7	381	0	388	0	479	10	0	489	885
5:15 PM	0	5	3	0	8	0	3	372	0	375	0	410	6	0	416	799
Total	0	12	14	0	26	0	23	1477	0	1500	0	1761	29	0	1790	3316
Approach %	0.0	46.2	53.8	-	-	0.0	1.5	98.5	-	-	0.0	98.4	1.6	-	-	-
Total %	0.0	0.4	0.4	-	0.8	0.0	0.7	44.5	-	45.2	0.0	53.1	0.9	-	54.0	-
PHF	0.000	0.600	0.583	-	0.813	0.000	0.639	0.969	-	0.962	0.000	0.919	0.725	-	0.915	0.937
Lights	0	12	14	-	26	0	23	1440	-	1463	0	1720	29	-	1749	3238
% Lights	-	100.0	100.0	-	100.0	-	100.0	97.5	-	97.5	-	97.7	100.0	-	97.7	97.6
Buses	0	0	0	-	0	0	0	2	-	2	0	2	0	-	2	4
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.1	-	0.1	-	0.1	0.0	-	0.1	0.1
Single-Unit Trucks	0	0	0	-	0	0	0	11	-	11	0	12	0	-	12	23
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.7	-	0.7	-	0.7	0.0	-	0.7	0.7
Articulated Trucks	0	0	0	-	0	0	0	24	-	24	0	27	0	-	27	51
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	1.6	-	1.6	-	1.5	0.0	-	1.5	1.5
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: IL 59 with Royal Mews Circle TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (11:45 AM)

Start Time	IL 59 Eastbound					Royal Mews Circle Northbound					IL 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
11:45 AM	0	0	2	0	2	0	6	326	0	332	0	343	2	0	345	679
12:00 PM	0	1	2	0	3	1	2	341	0	344	0	309	4	0	313	660
12:15 PM	0	3	2	0	5	0	5	308	0	313	1	360	6	0	367	685
12:30 PM	0	1	7	0	8	0	6	330	0	336	0	356	4	0	360	704
Total	0	5	13	0	18	1	19	1305	0	1325	1	1368	16	0	1385	2728
Approach %	0.0	27.8	72.2	-	-	0.1	1.4	98.5	-	-	0.1	98.8	1.2	-	-	-
Total %	0.0	0.2	0.5	-	0.7	0.0	0.7	47.8	-	48.6	0.0	50.1	0.6	-	50.8	-
PHF	0.000	0.417	0.464	-	0.563	0.250	0.792	0.957	-	0.963	0.250	0.950	0.667	-	0.943	0.969
Lights	0	5	13	-	18	1	18	1293	-	1312	1	1347	16	-	1364	2694
% Lights	-	100.0	100.0	-	100.0	100.0	94.7	99.1	-	99.0	100.0	98.5	100.0	-	98.5	98.8
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	1	9	-	10	0	12	0	-	12	22
% Single-Unit Trucks	-	0.0	0.0	-	0.0	0.0	5.3	0.7	-	0.8	0.0	0.9	0.0	-	0.9	0.8
Articulated Trucks	0	0	0	-	0	0	0	3	-	3	0	9	0	-	9	12
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.0	0.2	-	0.2	0.0	0.7	0.0	-	0.6	0.4
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: IL 59 with Royal Worlington Drive
TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Data

Start Time	Royal Worlington Drive Eastbound						Royal Worlington Drive Westbound						IL 59 Northbound						IL 59 Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	23	0	1	0	24	0	2	2	41	0	45	0	7	444	0	0	451	0	3	166	5	0	174	694
7:15 AM	0	13	2	0	0	15	0	4	2	11	0	17	0	6	373	1	0	380	0	5	236	9	0	250	662
7:30 AM	0	14	3	3	0	20	0	9	2	12	0	23	0	2	406	4	0	412	0	2	242	9	0	253	708
7:45 AM	0	12	2	7	0	21	0	4	2	11	0	17	0	4	350	4	0	358	0	8	257	17	0	282	678
Hourly Total	0	62	7	11	0	80	0	19	8	75	0	102	0	19	1573	9	0	1601	0	18	901	40	0	959	2742
8:00 AM	0	13	1	7	0	21	0	0	1	16	0	17	0	11	296	6	0	313	0	15	188	15	0	218	569
8:15 AM	0	15	0	4	0	19	0	0	2	6	0	8	0	1	329	6	0	336	0	6	226	9	0	241	604
8:30 AM	0	9	2	5	0	16	0	5	4	9	0	18	0	6	351	3	0	360	0	6	225	14	0	245	639
8:45 AM	0	14	3	3	0	20	0	5	0	18	0	23	0	5	307	5	0	317	0	10	236	13	0	259	619
Hourly Total	0	51	6	19	0	76	0	10	7	49	0	66	0	23	1283	20	0	1326	0	37	875	51	0	963	2431
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	17	1	7	0	25	0	7	3	18	0	28	0	7	329	7	0	343	0	14	452	24	0	490	886
4:15 PM	1	18	4	6	0	29	0	6	3	17	0	26	0	6	330	7	0	343	0	14	422	20	0	456	854
4:30 PM	0	11	0	5	0	16	0	2	2	16	0	20	0	9	300	7	0	316	0	13	395	23	0	431	783
4:45 PM	1	22	3	7	0	33	0	3	3	14	0	20	0	12	368	7	0	387	1	10	411	36	0	458	898
Hourly Total	2	68	8	25	0	103	0	18	11	65	0	94	0	34	1327	28	0	1389	1	51	1680	103	0	1835	3421
5:00 PM	0	12	3	9	0	24	0	9	0	33	0	42	1	15	310	7	0	333	0	25	390	35	0	450	849
5:15 PM	1	14	2	6	0	23	0	4	2	18	0	24	0	11	352	8	0	371	1	12	403	29	0	445	863
5:30 PM	0	13	3	4	0	20	0	7	0	13	0	20	0	6	360	8	0	374	0	15	374	23	0	412	826
5:45 PM	0	9	1	4	0	14	0	4	1	21	0	26	1	2	308	10	0	321	1	25	397	12	0	435	796
Hourly Total	1	48	9	23	0	81	0	24	3	85	0	112	2	34	1330	33	0	1399	2	77	1564	99	0	1742	3334
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	4	1	3	0	8	0	2	0	11	0	13	0	4	298	5	0	307	0	10	257	19	0	286	614
11:15 AM	0	11	0	6	0	17	0	9	0	17	0	26	0	6	310	2	0	318	0	11	321	7	0	339	700
11:30 AM	0	13	1	3	0	17	0	4	1	14	0	19	1	19	305	9	0	334	0	20	319	6	0	345	715
11:45 AM	0	10	0	11	0	21	0	9	0	16	0	25	0	1	332	10	0	343	0	9	323	8	0	340	729
Hourly Total	0	38	2	23	0	63	0	24	1	58	0	83	1	30	1245	26	0	1302	0	50	1220	40	0	1310	2758
12:00 PM	0	7	1	6	0	14	0	6	0	11	0	17	0	2	335	3	0	340	0	18	305	7	0	330	701
12:15 PM	0	10	0	2	0	12	0	3	0	13	0	16	0	1	292	6	0	299	0	8	348	6	0	362	689
12:30 PM	0	10	0	4	0	14	0	2	0	23	0	25	0	0	292	5	0	297	0	18	308	8	0	334	670
12:45 PM	0	15	1	8	0	24	0	11	0	13	0	24	0	4	313	8	0	325	0	10	329	12	0	351	724
Hourly Total	0	42	2	20	0	64	0	22	0	60	0	82	0	7	1232	22	0	1261	0	54	1290	33	0	1377	2784
1:00 PM	0	10	1	5	0	16	0	5	1	9	0	15	2	1	275	7	0	285	0	16	307	9	0	332	648
1:15 PM	0	11	0	5	0	16	0	6	1	14	0	21	1	2	269	8	0	280	0	9	352	9	0	370	687
1:30 PM	0	12	5	3	0	20	0	9	1	15	0	25	1	2	329	4	0	336	0	14	263	6	0	283	664

1:45 PM	0	11	0	3	0	14	0	5	1	15	0	21	0	2	348	11	0	361	0	16	341	8	0	365	761
Hourly Total	0	44	6	16	0	66	0	25	4	53	0	82	4	7	1221	30	0	1262	0	55	1263	32	0	1350	2760
Grand Total	3	353	40	137	0	533	0	142	34	445	0	621	7	154	9211	168	0	9540	3	342	8793	398	0	9536	20230
Approach %	0.6	66.2	7.5	25.7	-	-	0.0	22.9	5.5	71.7	-	-	0.1	1.6	96.6	1.8	-	-	0.0	3.6	92.2	4.2	-	-	-
Total %	0.0	1.7	0.2	0.7	-	2.6	0.0	0.7	0.2	2.2	-	3.1	0.0	0.8	45.5	0.8	-	47.2	0.0	1.7	43.5	2.0	-	47.1	-
Lights	3	344	33	136	-	516	0	137	31	440	-	608	7	153	8889	166	-	9215	3	337	8410	393	-	9143	19482
% Lights	100.0	97.5	82.5	99.3	-	96.8	-	96.5	91.2	98.9	-	97.9	100.0	99.4	96.5	98.8	-	96.6	100.0	98.5	95.6	98.7	-	95.9	96.3
Buses	0	1	0	1	-	2	0	2	0	5	-	7	0	0	22	0	-	22	0	2	27	1	-	30	61
% Buses	0.0	0.3	0.0	0.7	-	0.4	-	1.4	0.0	1.1	-	1.1	0.0	0.0	0.2	0.0	-	0.2	0.0	0.6	0.3	0.3	-	0.3	0.3
Single-Unit Trucks	0	8	0	0	-	8	0	3	0	0	-	3	0	1	133	2	-	136	0	2	145	4	-	151	298
% Single-Unit Trucks	0.0	2.3	0.0	0.0	-	1.5	-	2.1	0.0	0.0	-	0.5	0.0	0.6	1.4	1.2	-	1.4	0.0	0.6	1.6	1.0	-	1.6	1.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	167	0	-	167	0	1	211	0	-	212	379
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	1.8	0.0	-	1.8	0.0	0.3	2.4	0.0	-	2.2	1.9
Bicycles on Road	0	0	7	0	-	7	0	0	3	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	10
% Bicycles on Road	0.0	0.0	17.5	0.0	-	1.3	-	0.0	8.8	0.0	-	0.5	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: IL 59 with Royal Worlington Drive
TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Royal Worlington Drive Eastbound						Royal Worlington Drive Westbound						IL 59 Northbound						IL 59 Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	23	0	1	0	24	0	2	2	41	0	45	0	7	444	0	0	451	0	3	166	5	0	174	694
7:15 AM	0	13	2	0	0	15	0	4	2	11	0	17	0	6	373	1	0	380	0	5	236	9	0	250	662
7:30 AM	0	14	3	3	0	20	0	9	2	12	0	23	0	2	406	4	0	412	0	2	242	9	0	253	708
7:45 AM	0	12	2	7	0	21	0	4	2	11	0	17	0	4	350	4	0	358	0	8	257	17	0	282	678
Total	0	62	7	11	0	80	0	19	8	75	0	102	0	19	1573	9	0	1601	0	18	901	40	0	959	2742
Approach %	0.0	77.5	8.8	13.8	-	-	0.0	18.6	7.8	73.5	-	-	0.0	1.2	98.3	0.6	-	-	0.0	1.9	94.0	4.2	-	-	-
Total %	0.0	2.3	0.3	0.4	-	2.9	0.0	0.7	0.3	2.7	-	3.7	0.0	0.7	57.4	0.3	-	58.4	0.0	0.7	32.9	1.5	-	35.0	-
PHF	0.000	0.674	0.583	0.393	-	0.833	0.000	0.528	1.000	0.457	-	0.567	0.000	0.679	0.886	0.563	-	0.887	0.000	0.563	0.876	0.588	-	0.850	0.968
Lights	0	60	7	10	-	77	0	18	8	74	-	100	0	19	1477	9	-	1505	0	18	796	37	-	851	2533
% Lights	-	96.8	100.0	90.9	-	96.3	-	94.7	100.0	98.7	-	98.0	-	100.0	93.9	100.0	-	94.0	-	100.0	88.3	92.5	-	88.7	92.4
Buses	0	0	0	1	-	1	0	1	0	1	-	2	0	0	4	0	-	4	0	0	14	1	-	15	22
% Buses	-	0.0	0.0	9.1	-	1.3	-	5.3	0.0	1.3	-	2.0	-	0.0	0.3	0.0	-	0.2	-	0.0	1.6	2.5	-	1.6	0.8
Single-Unit Trucks	0	2	0	0	-	2	0	0	0	0	-	0	0	0	44	0	-	44	0	0	29	2	-	31	77
% Single-Unit Trucks	-	3.2	0.0	0.0	-	2.5	-	0.0	0.0	0.0	-	0.0	-	0.0	2.8	0.0	-	2.7	-	0.0	3.2	5.0	-	3.2	2.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	48	0	-	48	0	0	62	0	-	62	110
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	3.1	0.0	-	3.0	-	0.0	6.9	0.0	-	6.5	4.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: IL 59 with Royal Worlington Drive
TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Royal Worlington Drive Eastbound						Royal Worlington Drive Westbound						IL 59 Northbound						IL 59 Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	0	11	0	5	0	16	0	2	2	16	0	20	0	9	300	7	0	316	0	13	395	23	0	431	783
4:45 PM	1	22	3	7	0	33	0	3	3	14	0	20	0	12	368	7	0	387	1	10	411	36	0	458	898
5:00 PM	0	12	3	9	0	24	0	9	0	33	0	42	1	15	310	7	0	333	0	25	390	35	0	450	849
5:15 PM	1	14	2	6	0	23	0	4	2	18	0	24	0	11	352	8	0	371	1	12	403	29	0	445	863
Total	2	59	8	27	0	96	0	18	7	81	0	106	1	47	1330	29	0	1407	2	60	1599	123	0	1784	3393
Approach %	2.1	61.5	8.3	28.1	-	-	0.0	17.0	6.6	76.4	-	-	0.1	3.3	94.5	2.1	-	-	0.1	3.4	89.6	6.9	-	-	-
Total %	0.1	1.7	0.2	0.8	-	2.8	0.0	0.5	0.2	2.4	-	3.1	0.0	1.4	39.2	0.9	-	41.5	0.1	1.8	47.1	3.6	-	52.6	-
PHF	0.500	0.670	0.667	0.750	-	0.727	0.000	0.500	0.583	0.614	-	0.631	0.250	0.783	0.904	0.906	-	0.909	0.500	0.600	0.973	0.854	-	0.974	0.945
Lights	2	58	8	27	-	95	0	16	6	81	-	103	1	47	1292	27	-	1367	2	59	1556	123	-	1740	3305
% Lights	100.0	98.3	100.0	100.0	-	99.0	-	88.9	85.7	100.0	-	97.2	100.0	100.0	97.1	93.1	-	97.2	100.0	98.3	97.3	100.0	-	97.5	97.4
Buses	0	0	0	0	-	0	0	1	0	0	-	1	0	0	2	0	-	2	0	1	3	0	-	4	7
% Buses	0.0	0.0	0.0	0.0	-	0.0	-	5.6	0.0	0.0	-	0.9	0.0	0.0	0.2	0.0	-	0.1	0.0	1.7	0.2	0.0	-	0.2	0.2
Single-Unit Trucks	0	1	0	0	-	1	0	1	0	0	-	1	0	0	11	2	-	13	0	0	13	0	-	13	28
% Single-Unit Trucks	0.0	1.7	0.0	0.0	-	1.0	-	5.6	0.0	0.0	-	0.9	0.0	0.0	0.8	6.9	-	0.9	0.0	0.0	0.8	0.0	-	0.7	0.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	25	0	-	25	0	0	27	0	-	27	52
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	1.9	0.0	-	1.8	0.0	0.0	1.7	0.0	-	1.5	1.5
Bicycles on Road	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	14.3	0.0	-	0.9	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: IL 59 with Royal Worlington Drive
TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (11:45 AM)

Start Time	Royal Worlington Drive Eastbound						Royal Worlington Drive Westbound						IL 59 Northbound						IL 59 Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
11:45 AM	0	10	0	11	0	21	0	9	0	16	0	25	0	1	332	10	0	343	0	9	323	8	0	340	729
12:00 PM	0	7	1	6	0	14	0	6	0	11	0	17	0	2	335	3	0	340	0	18	305	7	0	330	701
12:15 PM	0	10	0	2	0	12	0	3	0	13	0	16	0	1	292	6	0	299	0	8	348	6	0	362	689
12:30 PM	0	10	0	4	0	14	0	2	0	23	0	25	0	0	292	5	0	297	0	18	308	8	0	334	670
Total	0	37	1	23	0	61	0	20	0	63	0	83	0	4	1251	24	0	1279	0	53	1284	29	0	1366	2789
Approach %	0.0	60.7	1.6	37.7	-	-	0.0	24.1	0.0	75.9	-	-	0.0	0.3	97.8	1.9	-	-	0.0	3.9	94.0	2.1	-	-	-
Total %	0.0	1.3	0.0	0.8	-	2.2	0.0	0.7	0.0	2.3	-	3.0	0.0	0.1	44.9	0.9	-	45.9	0.0	1.9	46.0	1.0	-	49.0	-
PHF	0.000	0.925	0.250	0.523	-	0.726	0.000	0.556	0.000	0.685	-	0.830	0.000	0.500	0.934	0.600	-	0.932	0.000	0.736	0.922	0.906	-	0.943	0.956
Lights	0	35	1	23	-	59	0	18	0	63	-	81	0	4	1232	24	-	1260	0	53	1265	29	-	1347	2747
% Lights	-	94.6	100.0	100.0	-	96.7	-	90.0	-	100.0	-	97.6	-	100.0	98.5	100.0	-	98.5	-	100.0	98.5	100.0	-	98.6	98.5
Buses	0	1	0	0	-	1	0	0	0	0	-	0	0	0	9	0	-	9	0	0	3	0	-	3	13
% Buses	-	2.7	0.0	0.0	-	1.6	-	0.0	-	0.0	-	0.0	-	0.0	0.7	0.0	-	0.7	-	0.0	0.2	0.0	-	0.2	0.5
Single-Unit Trucks	0	1	0	0	-	1	0	2	0	0	-	2	0	0	7	0	-	7	0	0	11	0	-	11	21
% Single-Unit Trucks	-	2.7	0.0	0.0	-	1.6	-	10.0	-	0.0	-	2.4	-	0.0	0.6	0.0	-	0.5	-	0.0	0.9	0.0	-	0.8	0.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	3	0	-	3	0	0	5	0	-	5	8
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2	0.0	-	0.2	-	0.0	0.4	0.0	-	0.4	0.3
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: IL+59+with+103rd+Street TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Data

Start Time	103rd Street Eastbound						103rd Street Westbound						IL 59 Northbound						IL 59 Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	42	16	2	0	60	0	7	16	95	0	118	0	8	466	6	0	480	0	20	158	7	0	185	843
7:15 AM	0	32	20	2	0	54	0	2	20	15	0	37	0	6	424	7	0	437	0	15	239	25	0	279	807
7:30 AM	0	19	13	6	0	38	0	11	19	21	0	51	0	13	412	6	0	431	0	12	232	37	0	281	801
7:45 AM	0	39	26	6	0	71	0	11	23	20	0	54	0	13	347	7	0	367	0	20	244	41	0	305	797
Hourly Total	0	132	75	16	0	223	0	31	78	151	0	260	0	40	1649	26	0	1715	0	67	873	110	0	1050	3248
8:00 AM	0	28	23	7	0	58	0	7	10	24	0	41	0	4	355	6	0	365	0	20	202	12	0	234	698
8:15 AM	0	25	23	6	0	54	0	9	4	19	1	32	0	9	314	7	0	330	0	14	212	18	0	244	660
8:30 AM	0	19	13	5	0	37	0	13	9	10	0	32	0	6	357	12	0	375	0	7	216	7	0	230	674
8:45 AM	0	29	20	2	0	51	0	16	9	29	0	54	0	11	297	11	0	319	0	20	233	10	0	263	687
Hourly Total	0	101	79	20	0	200	0	45	32	82	1	159	0	30	1323	36	0	1389	0	61	863	47	0	971	2719
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	31	25	14	0	70	0	15	27	23	0	65	0	17	342	8	0	367	0	31	451	22	0	504	1006
4:15 PM	0	45	32	13	0	90	0	16	27	32	0	75	1	16	302	11	0	330	1	17	403	16	0	437	932
4:30 PM	0	42	15	11	0	68	0	18	30	23	0	71	0	12	298	6	1	316	0	23	405	31	0	459	914
4:45 PM	0	59	22	8	0	89	0	17	31	21	0	69	0	17	402	19	0	438	0	13	407	38	1	458	1054
Hourly Total	0	177	94	46	0	317	0	66	115	99	0	280	1	62	1344	44	1	1451	1	84	1666	107	1	1858	3906
5:00 PM	0	55	37	14	0	106	0	26	28	27	0	81	0	19	242	9	0	270	0	27	409	25	0	461	918
5:15 PM	0	31	21	9	0	61	0	14	16	30	0	60	0	16	353	13	0	382	0	29	424	22	0	475	978
5:30 PM	0	26	29	7	0	62	0	23	28	23	0	74	0	17	322	5	0	344	0	23	377	20	0	420	900
5:45 PM	0	29	14	5	0	48	0	21	23	25	0	69	0	15	270	11	0	296	0	22	403	15	0	440	853
Hourly Total	0	141	101	35	0	277	0	84	95	105	0	284	0	67	1187	38	0	1292	0	101	1613	82	0	1796	3649
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	24	11	18	0	53	0	15	15	23	0	53	0	7	296	5	0	308	1	15	248	15	1	279	693
11:15 AM	0	26	14	12	0	52	0	5	13	14	0	32	0	5	350	8	0	363	4	16	320	11	0	351	798
11:30 AM	0	21	13	11	0	45	0	4	10	22	0	36	1	13	309	8	0	331	0	22	328	14	0	364	776
11:45 AM	0	20	14	8	0	42	0	10	11	29	0	50	0	13	343	7	0	363	0	23	339	15	0	377	832
Hourly Total	0	91	52	49	0	192	0	34	49	88	0	171	1	38	1298	28	0	1365	5	76	1235	55	1	1371	3099
12:00 PM	0	24	12	4	0	40	0	20	18	29	0	67	0	11	316	6	0	333	0	39	277	13	0	329	769
12:15 PM	0	23	10	4	0	37	0	15	16	21	0	52	0	4	299	12	0	315	2	34	334	14	0	384	788
12:30 PM	0	30	20	4	0	54	0	15	18	37	0	70	0	7	301	10	0	318	0	24	299	17	0	340	782
12:45 PM	0	18	15	6	0	39	0	8	16	22	0	46	0	11	313	11	0	335	0	27	320	13	0	360	780
Hourly Total	0	95	57	18	0	170	0	58	68	109	0	235	0	33	1229	39	0	1301	2	124	1230	57	0	1413	3119
1:00 PM	0	21	14	6	0	41	0	14	13	26	0	53	0	8	288	2	0	298	1	20	315	13	0	349	741
1:15 PM	0	19	14	6	0	39	0	17	7	14	0	38	1	6	285	10	0	302	0	24	345	8	0	377	756
1:30 PM	0	11	6	1	0	18	0	6	5	11	0	22	0	3	155	2	0	160	0	10	103	8	0	121	321

Grand Total	0	788	492	197	0	1477	0	355	462	685	1	1502	3	287	8758	225	1	9273	9	567	8243	487	2	9306	21558
Approach %	0.0	53.4	33.3	13.3	-	-	0.0	23.6	30.8	45.6	-	-	0.0	3.1	94.4	2.4	-	-	0.1	6.1	88.6	5.2	-	-	-
Total %	0.0	3.7	2.3	0.9	-	6.9	0.0	1.6	2.1	3.2	-	7.0	0.0	1.3	40.6	1.0	-	43.0	0.0	2.6	38.2	2.3	-	43.2	-
Lights	0	774	480	195	-	1449	0	344	449	673	-	1466	3	284	8459	218	-	8964	9	553	7905	465	-	8932	20811
% Lights	-	98.2	97.6	99.0	-	98.1	-	96.9	97.2	98.2	-	97.6	100.0	99.0	96.6	96.9	-	96.7	100.0	97.5	95.9	95.5	-	96.0	96.5
Buses	0	7	5	1	-	13	0	6	4	6	-	16	0	0	19	2	-	21	0	7	15	16	-	38	88
% Buses	-	0.9	1.0	0.5	-	0.9	-	1.7	0.9	0.9	-	1.1	0.0	0.0	0.2	0.9	-	0.2	0.0	1.2	0.2	3.3	-	0.4	0.4
Single-Unit Trucks	0	6	3	1	-	10	0	5	7	6	-	18	0	2	130	5	-	137	0	6	128	6	-	140	305
% Single-Unit Trucks	-	0.8	0.6	0.5	-	0.7	-	1.4	1.5	0.9	-	1.2	0.0	0.7	1.5	2.2	-	1.5	0.0	1.1	1.6	1.2	-	1.5	1.4
Articulated Trucks	0	1	1	0	-	2	0	0	0	0	-	0	0	1	150	0	-	151	0	1	195	0	-	196	349
% Articulated Trucks	-	0.1	0.2	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	0.0	0.3	1.7	0.0	-	1.6	0.0	0.2	2.4	0.0	-	2.1	1.6
Bicycles on Road	0	0	3	0	-	3	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	5
% Bicycles on Road	-	0.0	0.6	0.0	-	0.2	-	0.0	0.4	0.0	-	0.1	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: IL+59+with+103rd+Street TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (7:00 AM)

Start Time	103rd Street Eastbound						103rd Street Westbound						IL 59 Northbound						IL 59 Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	42	16	2	0	60	0	7	16	95	0	118	0	8	466	6	0	480	0	20	158	7	0	185	843
7:15 AM	0	32	20	2	0	54	0	2	20	15	0	37	0	6	424	7	0	437	0	15	239	25	0	279	807
7:30 AM	0	19	13	6	0	38	0	11	19	21	0	51	0	13	412	6	0	431	0	12	232	37	0	281	801
7:45 AM	0	39	26	6	0	71	0	11	23	20	0	54	0	13	347	7	0	367	0	20	244	41	0	305	797
Total	0	132	75	16	0	223	0	31	78	151	0	260	0	40	1649	26	0	1715	0	67	873	110	0	1050	3248
Approach %	0.0	59.2	33.6	7.2	-	-	0.0	11.9	30.0	58.1	-	-	0.0	2.3	96.2	1.5	-	-	0.0	6.4	83.1	10.5	-	-	-
Total %	0.0	4.1	2.3	0.5	-	6.9	0.0	1.0	2.4	4.6	-	8.0	0.0	1.2	50.8	0.8	-	52.8	0.0	2.1	26.9	3.4	-	32.3	-
PHF	0.000	0.786	0.721	0.667	-	0.785	0.000	0.705	0.848	0.397	-	0.551	0.000	0.769	0.885	0.929	-	0.893	0.000	0.838	0.894	0.671	-	0.861	0.963
Lights	0	125	72	15	-	212	0	23	76	151	-	250	0	40	1546	25	-	1611	0	60	779	94	-	933	3006
% Lights	-	94.7	96.0	93.8	-	95.1	-	74.2	97.4	100.0	-	96.2	-	100.0	93.8	96.2	-	93.9	-	89.6	89.2	85.5	-	88.9	92.5
Buses	0	7	3	1	-	11	0	5	2	0	-	7	0	0	6	0	-	6	0	5	8	15	-	28	52
% Buses	-	5.3	4.0	6.3	-	4.9	-	16.1	2.6	0.0	-	2.7	-	0.0	0.4	0.0	-	0.3	-	7.5	0.9	13.6	-	2.7	1.6
Single-Unit Trucks	0	0	0	0	-	0	0	3	0	0	-	3	0	0	49	1	-	50	0	1	34	1	-	36	89
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	9.7	0.0	0.0	-	1.2	-	0.0	3.0	3.8	-	2.9	-	1.5	3.9	0.9	-	3.4	2.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	48	0	-	48	0	1	52	0	-	53	101
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	2.9	0.0	-	2.8	-	1.5	6.0	0.0	-	5.0	3.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: IL+59+with+103rd+Street TMC
Site Code:
Start Date: 05/04/2023

Turning Movement Peak Hour Data (4:30 PM)

Start Time	103rd Street Eastbound						103rd Street Westbound						IL 59 Northbound						IL 59 Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	42	15	11	0	68	0	18	30	23	0	71	0	12	298	6	1	316	0	23	405	31	0	459	914
4:45 PM	0	59	22	8	0	89	0	17	31	21	0	69	0	17	402	19	0	438	0	13	407	38	1	458	1054
5:00 PM	0	55	37	14	0	106	0	26	28	27	0	81	0	19	242	9	0	270	0	27	409	25	0	461	918
5:15 PM	0	31	21	9	0	61	0	14	16	30	0	60	0	16	353	13	0	382	0	29	424	22	0	475	978
Total	0	187	95	42	0	324	0	75	105	101	0	281	0	64	1295	47	1	1406	0	92	1645	116	1	1853	3864
Approach %	0.0	57.7	29.3	13.0	-	-	0.0	26.7	37.4	35.9	-	-	0.0	4.6	92.1	3.3	-	-	0.0	5.0	88.8	6.3	-	-	-
Total %	0.0	4.8	2.5	1.1	-	8.4	0.0	1.9	2.7	2.6	-	7.3	0.0	1.7	33.5	1.2	-	36.4	0.0	2.4	42.6	3.0	-	48.0	-
PHF	0.000	0.792	0.642	0.750	-	0.764	0.000	0.721	0.847	0.842	-	0.867	0.000	0.842	0.805	0.618	-	0.803	0.000	0.793	0.970	0.763	-	0.975	0.917
Lights	0	186	94	42	-	322	0	75	104	99	-	278	0	63	1260	47	-	1370	0	91	1606	116	-	1813	3783
% Lights	-	99.5	98.9	100.0	-	99.4	-	100.0	99.0	98.0	-	98.9	-	98.4	97.3	100.0	-	97.4	-	98.9	97.6	100.0	-	97.8	97.9
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	2	0	-	2	0	0	3	0	-	3	5
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.2	0.0	-	0.1	-	0.0	0.2	0.0	-	0.2	0.1
Single-Unit Trucks	0	1	1	0	-	2	0	0	0	2	-	2	0	1	14	0	-	15	0	1	10	0	-	11	30
% Single-Unit Trucks	-	0.5	1.1	0.0	-	0.6	-	0.0	0.0	2.0	-	0.7	-	1.6	1.1	0.0	-	1.1	-	1.1	0.6	0.0	-	0.6	0.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	19	0	-	19	0	0	26	0	-	26	45
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	1.5	0.0	-	1.4	-	0.0	1.6	0.0	-	1.4	1.2
Bicycles on Road	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	1.0	0.0	-	0.4	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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9575 W. Higgins Rd., Suite 400

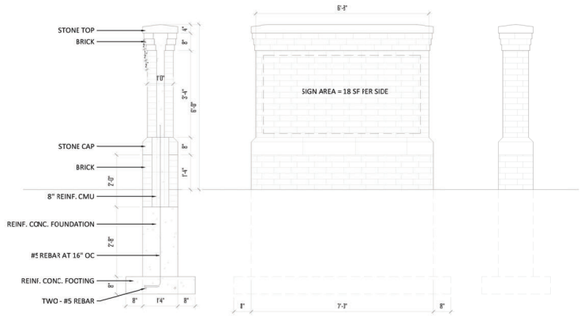
Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: IL+59+with+103rd+Street TMC
Site Code:
Start Date: 05/04/2023

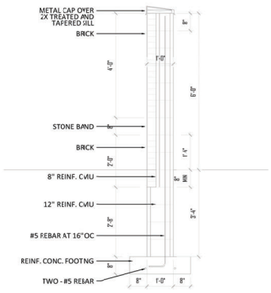
Turning Movement Peak Hour Data (11:45 AM)

Start Time	103rd Street Eastbound						103rd Street Westbound						IL 59 Northbound						IL 59 Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
11:45 AM	0	20	14	8	0	42	0	10	11	29	0	50	0	13	343	7	0	363	0	23	339	15	0	377	832
12:00 PM	0	24	12	4	0	40	0	20	18	29	0	67	0	11	316	6	0	333	0	39	277	13	0	329	769
12:15 PM	0	23	10	4	0	37	0	15	16	21	0	52	0	4	299	12	0	315	2	34	334	14	0	384	788
12:30 PM	0	30	20	4	0	54	0	15	18	37	0	70	0	7	301	10	0	318	0	24	299	17	0	340	782
Total	0	97	56	20	0	173	0	60	63	116	0	239	0	35	1259	35	0	1329	2	120	1249	59	0	1430	3171
Approach %	0.0	56.1	32.4	11.6	-	-	0.0	25.1	26.4	48.5	-	-	0.0	2.6	94.7	2.6	-	-	0.1	8.4	87.3	4.1	-	-	-
Total %	0.0	3.1	1.8	0.6	-	5.5	0.0	1.9	2.0	3.7	-	7.5	0.0	1.1	39.7	1.1	-	41.9	0.1	3.8	39.4	1.9	-	45.1	-
PHF	0.000	0.808	0.700	0.625	-	0.801	0.000	0.750	0.875	0.784	-	0.854	0.000	0.673	0.918	0.729	-	0.915	0.250	0.769	0.921	0.868	-	0.931	0.953
Lights	0	96	56	20	-	172	0	60	63	116	-	239	0	35	1249	34	-	1318	2	120	1232	59	-	1413	3142
% Lights	-	99.0	100.0	100.0	-	99.4	-	100.0	100.0	100.0	-	100.0	-	100.0	99.2	97.1	-	99.2	100.0	100.0	98.6	100.0	-	98.8	99.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	2	0	-	2	0	0	0	0	-	0	2
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.2	0.0	-	0.2	0.0	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	1	0	0	-	1	0	0	0	0	-	0	0	0	7	1	-	8	0	0	11	0	-	11	20
% Single-Unit Trucks	-	1.0	0.0	0.0	-	0.6	-	0.0	0.0	0.0	-	0.0	-	0.0	0.6	2.9	-	0.6	0.0	0.0	0.9	0.0	-	0.8	0.6
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	6	0	-	6	7
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.1	0.0	-	0.1	0.0	0.0	0.5	0.0	-	0.4	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

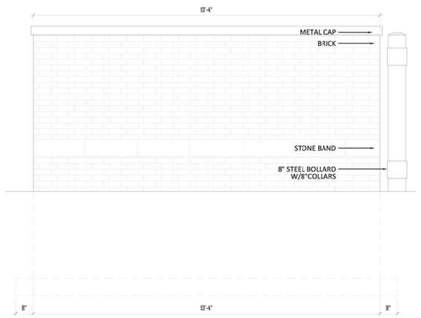
Preliminary Site Plan



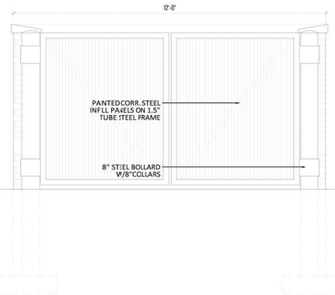
3 MONUMENT SIGN
3/8"=1'-0"



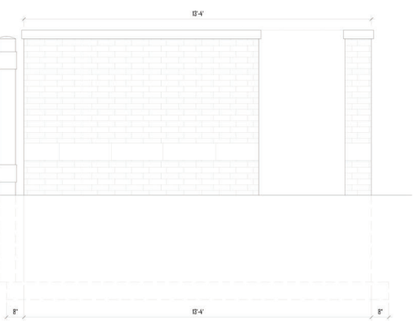
4 T.E. WALL SECTION
3/8"=1'-0"



5 T.E. SIDE ELEVATION
3/8"=1'-0"



6 T.E. FRONT ELEVATION
3/8"=1'-0"

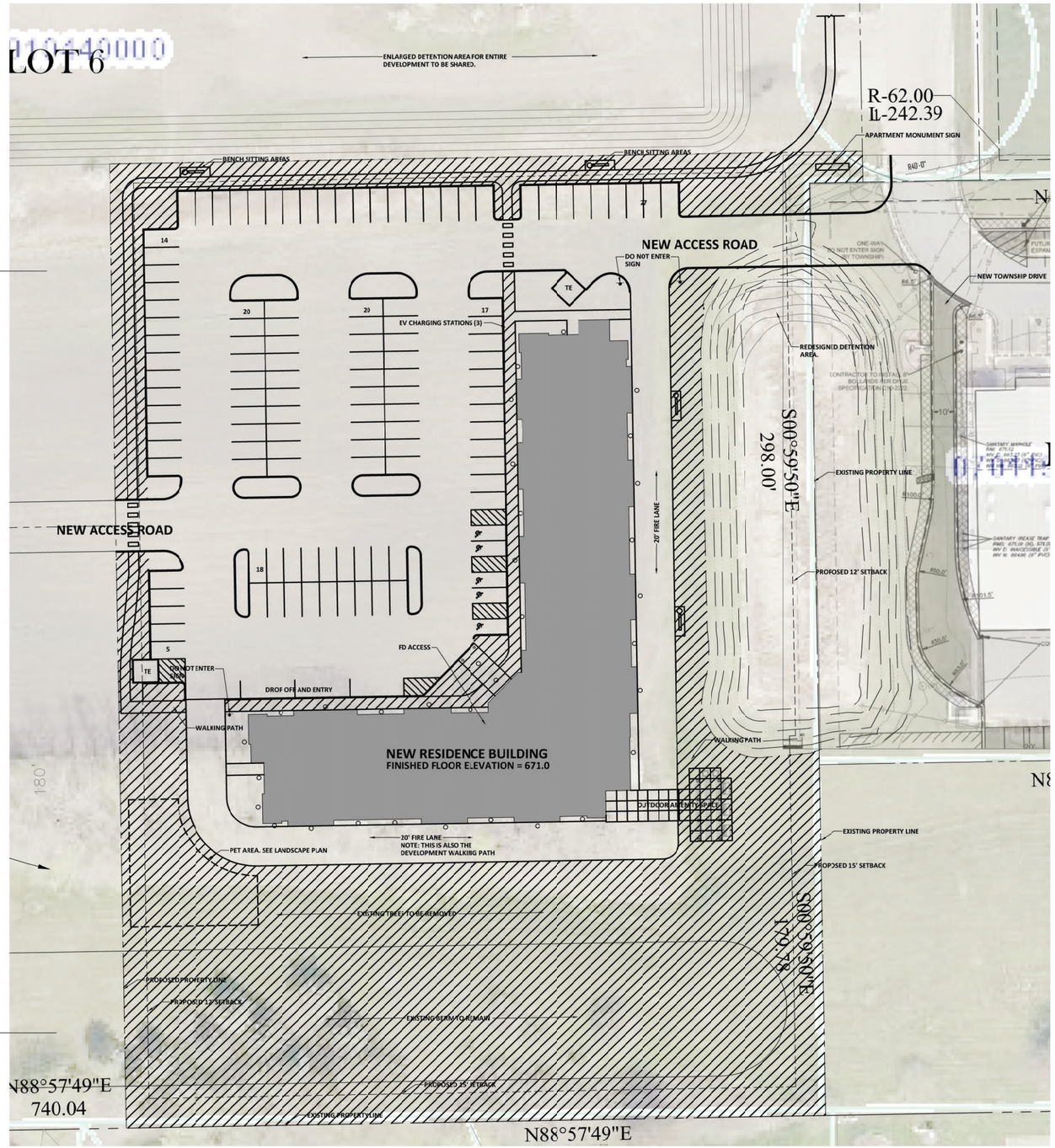


7 T.E. SIDE ELEVATION
3/8"=1'-0"

UNIT MATRIX
3 bedroom unit - 1
2 bedroom units - 18
1 bedroom units - 52
Total Units - 71
Unit Type
Type B Adaptable - 60 units
Type A Accessible - 13 units
Total Units - 71 units
Unit Areas
3 bedroom unit - 1073 sf
2 bedroom units - 13,608 sf
1 bedroom units - 28,134 sf
Total Unit Area - 44,444 sf
Common Space Area
Total Common Area -19,969 sf
Total Building Area
Total Gross Building Area -64,413 sf

SITE MATRIX
Property Size
174,859
4.014 acres
OPEN SPACE AREA
73,051
1.677 acres
41.78% of Property Area
Property Unit Density
Zoning - PUD, Guided R3
Maximum Density -
204,195/2,600 = 79 units
71 units provided
15.15 Units/Acre Provided
PARKING COUNT
Parking Required
Multifamily - 2 stalls per unit
71 x 2.25 = 160 stalls req'd
Parking Provided
Standard Stalls - 114 stalls
Accessible Stalls -7 stalls
Total Parking - 121 stalls
Total Loading - 4 stalls

2 PROPERTY MATRIX
N.T.S.



N 1 SITE PLAN
1" = 20'-0"

GORMAN ARCHITECTURAL
GORMAN ARCHITECTURAL, LLC

CORPORATE OFFICE
200 N. MAIN STREET
OREGON, WI 53575

Seal

Consultant

Naperville Development Proposal

HIGHWAY 59 AND 103RD STREET NW
NAPERVILLE, IL

CONCEPT SITE PLAN

Issue Dates:

DATE	DESCRIPTION
11.30.2023	IHDA PPA APPLICATION
12.06.2023	PUD APPLICATION
03.26.2024	IHDA FULL APPLICATION
04.24.2024	PUD REVISION 1
08.05.2024	PUD REVISION 2

Project No. 21-NAPE-00-01
Plot Date: 04.24.2024
Drawn by: PDO
Checked by: PDO
Approved by: PDO

Sheet Title

AS100

2050 CMAP Projections Letter

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

May 10, 2023

Ryan May
Project Coordinator
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: ***IL 59 @ 103rd Street***
IDOT

Dear Ms. May:

In response to a request made on your behalf and dated May 9, 2023, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
IL 59, at 103rd St	34,500	41,600
103rd St west of IL 59	4,300	6,200
103rd St east of IL 59	4,550	6,550

Traffic projections are developed using existing ADT data provided in the request letter and the results from the October 2022 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Rios (IDOT)
2023_TrafficForecasts\Naperville\wi-22-23\wi-22-23.docx

Level of Service Criteria

LEVEL OF SERVICE CRITERIA

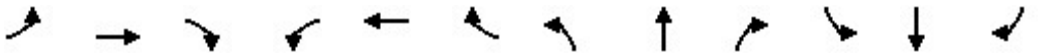
Signalized Intersections		
Level of Service	**Interpretation**	**Average Control Delay (seconds per vehicle)**
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0

Unsignalized Intersections	
Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 6th Edition.

Capacity Analysis Summary Sheets

2023 Base Weekday Morning Peak Hour Conditions



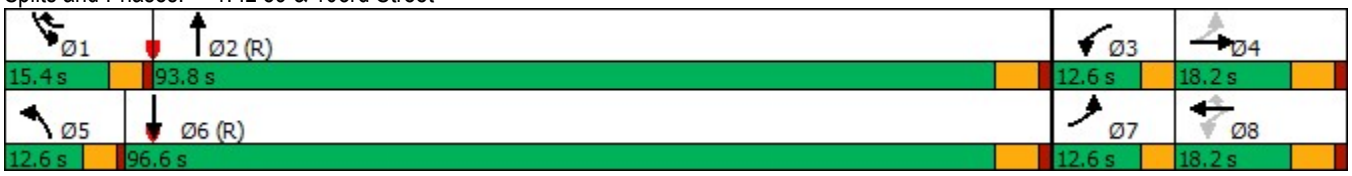
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	75	16	31	78	151	40	1649	26	67	910	110
Future Volume (vph)	132	75	16	31	78	151	40	1649	26	67	910	110
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	140		0	185		250	350		0	355		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	195			195			125			125		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.973				0.850		0.998			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1771	0	1433	1942	1615	1805	3400	0	1641	3191	0
Flt Permitted	0.549			0.695			0.950			0.950		
Satd. Flow (perm)	993	1771	0	1048	1942	1615	1805	3400	0	1641	3191	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		3839			449			423			1822	
Travel Time (s)		74.8			7.7			6.4			27.6	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	4%	6%	26%	3%	0%	0%	6%	4%	10%	11%	14%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	95	0	32	81	157	42	1745	0	70	1063	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	12.6	18.2		12.6	18.2	15.4	12.6	93.8		15.4	96.6	
Total Split (%)	9.0%	13.0%		9.0%	13.0%	11.0%	9.0%	67.0%		11.0%	69.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	24.2	16.3		21.2	11.0	26.8	7.4	90.1		9.8	94.5	
Actuated g/C Ratio	0.17	0.12		0.15	0.08	0.19	0.05	0.64		0.07	0.68	

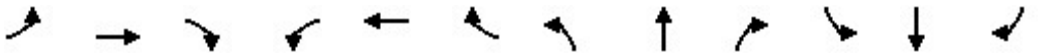
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.63	0.46		0.18	0.53	0.51	0.44	0.80		0.61	0.49	
Control Delay	64.8	67.5		49.4	74.7	56.4	79.8	12.9		85.5	12.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	64.8	67.5		49.4	74.7	56.4	79.8	12.9		85.5	12.7	
LOS	E	E		D	E	E	E	B		F	B	
Approach Delay		65.9			61.0			14.5			17.2	
Approach LOS		E			E			B			B	
Queue Length 50th (ft)	111	84		24	72	127	40	222		63	252	
Queue Length 95th (ft)	179	#153		55	128	201	m63	240		117	305	
Internal Link Dist (ft)		3759			369			343			1742	
Turn Bay Length (ft)	140			185		250	350			355		
Base Capacity (vph)	219	205		194	169	321	104	2188		127	2153	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.63	0.46		0.16	0.48	0.49	0.40	0.80		0.55	0.49	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 25.2 (18%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 22.6 Intersection LOS: C
Intersection Capacity Utilization 77.9% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 59 & 103rd Street





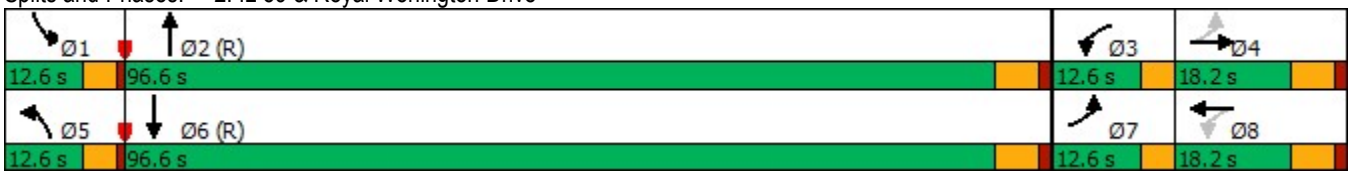
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	7	11	19	8	75	19	1583	9	18	901	40
Future Volume (vph)	62	7	11	19	8	75	19	1583	9	18	901	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	55		0	95		0	365		0	370		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	50			50			95			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.908			0.864			0.999			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1635	0	1719	1627	0	1805	3403	0	1805	3210	0
Flt Permitted	0.538			0.746			0.950			0.950		
Satd. Flow (perm)	992	1635	0	1350	1627	0	1805	3403	0	1805	3210	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		987			1450			882			1042	
Travel Time (s)		26.9			39.5			13.4			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	0%	9%	5%	0%	1%	0%	6%	0%	0%	12%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	18	0	20	85	0	20	1641	0	19	970	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	12.6	18.2		12.6	18.2		12.6	96.6		12.6	96.6	
Total Split (%)	9.0%	13.0%		9.0%	13.0%		9.0%	69.0%		9.0%	69.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	22.8	16.7		19.7	11.4		6.9	99.4		6.9	99.3	
Actuated g/C Ratio	0.16	0.12		0.14	0.08		0.05	0.71		0.05	0.71	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.31	0.09		0.10	0.65		0.22	0.68		0.22	0.43	
Control Delay	52.1	57.2		47.4	84.7		69.6	15.1		64.8	8.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	52.1	57.2		47.4	84.7		69.6	15.1		64.8	8.6	
LOS	D	E		D	F		E	B		E	A	
Approach Delay		53.2			77.6			15.8			9.7	
Approach LOS		D			E			B			A	
Queue Length 50th (ft)	49	14		15	76		18	488		17	151	
Queue Length 95th (ft)	94	42		39	#142		46	593		m37	173	
Internal Link Dist (ft)		907			1370			802			962	
Turn Bay Length (ft)	55			95			365			370		
Base Capacity (vph)	211	203		227	141		104	2415		104	2277	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.30	0.09		0.09	0.60		0.19	0.68		0.18	0.43	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 14 (10%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 17.0 Intersection LOS: B
Intersection Capacity Utilization 64.1% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL 59 & Royal Worlington Drive



Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	5	0	1715	953	4
Future Vol, veh/h	0	5	0	1715	953	4
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	94	94	94	94	94	94
Heavy Vehicles, %	0	20	0	5	11	0
Mvmt Flow	0	5	0	1824	1014	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	509	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.3	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.5	-	-	-	-
Pot Cap-1 Maneuver	0	465	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	465	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	465	-	-
HCM Lane V/C Ratio	-	0.011	-	-
HCM Control Delay (s)	-	12.8	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	2	14	1706	957	1
Future Vol, veh/h	9	2	14	1706	957	1
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	70	0	200	-	-	200
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	6	11	0
Mvmt Flow	10	2	16	1917	1075	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2067	539	1077	0	-	0
Stage 1	1076	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	48	492	655	-	-	-
Stage 1	293	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	47	492	654	-	-	-
Mov Cap-2 Maneuver	160	-	-	-	-	-
Stage 1	286	-	-	-	-	-
Stage 2	325	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	26	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	654	-	160	492	-	-
HCM Lane V/C Ratio	0.024	-	0.063	0.005	-	-
HCM Control Delay (s)	10.6	-	29	12.4	-	-
HCM Lane LOS	B	-	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↰	↱
Traffic Vol, veh/h	5	159	4	1	234	4	6	0	2	5	0	20
Future Vol, veh/h	5	159	4	1	234	4	6	0	2	5	0	20
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	7	0	0	2	0	50	0	0	20	0	10
Mvmt Flow	7	221	6	1	325	6	8	0	3	7	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	227	0	0	582	575	225	575	575	332
Stage 1	-	-	-	-	-	-	238	238	-	334	334	-
Stage 2	-	-	-	-	-	-	344	337	-	241	241	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.6	6.5	6.2	7.3	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.5	-	6.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.5	-	6.3	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.95	4	3.3	3.68	4	3.39
Pot Cap-1 Maneuver	1236	-	-	1353	-	-	361	431	819	403	431	692
Stage 1	-	-	-	-	-	-	669	712	-	644	647	-
Stage 2	-	-	-	-	-	-	582	645	-	724	710	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1231	-	-	1353	-	-	344	426	818	397	426	689
Mov Cap-2 Maneuver	-	-	-	-	-	-	344	426	-	397	426	-
Stage 1	-	-	-	-	-	-	664	707	-	637	644	-
Stage 2	-	-	-	-	-	-	558	642	-	716	705	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	14.2	11.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	402	1231	-	-	1353	-	-	397	689
HCM Lane V/C Ratio	0.028	0.006	-	-	0.001	-	-	0.017	0.04
HCM Control Delay (s)	14.2	7.9	0	-	7.7	0	-	14.2	10.4
HCM Lane LOS	B	A	A	-	A	A	-	B	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	140	21	5	180	12	42	4	12	16	5	17
Future Vol, veh/h	5	140	21	5	180	12	42	4	12	16	5	17
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	2	2	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	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	8	5	20	2	17	0	25	0	6	0	18
Mvmt Flow	7	194	29	7	250	17	58	6	17	22	7	24

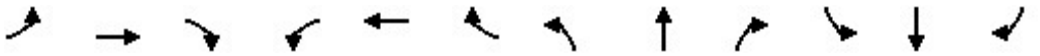
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	269	0	0	225	0	0	513	508	213	511	514	261
Stage 1	-	-	-	-	-	-	225	225	-	275	275	-
Stage 2	-	-	-	-	-	-	288	283	-	236	239	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.75	6.2	7.16	6.5	6.38
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.75	-	6.16	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.75	-	6.16	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4.225	3.3	3.554	4	3.462
Pot Cap-1 Maneuver	1306	-	-	1244	-	-	475	436	832	467	467	740
Stage 1	-	-	-	-	-	-	782	677	-	723	686	-
Stage 2	-	-	-	-	-	-	724	637	-	758	711	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1304	-	-	1242	-	-	449	429	828	446	459	739
Mov Cap-2 Maneuver	-	-	-	-	-	-	449	429	-	446	459	-
Stage 1	-	-	-	-	-	-	776	672	-	717	680	-
Stage 2	-	-	-	-	-	-	689	631	-	730	705	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	13.7	12.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	494	1304	-	-	1242	-	-	545
HCM Lane V/C Ratio	0.163	0.005	-	-	0.006	-	-	0.097
HCM Control Delay (s)	13.7	7.8	0	-	7.9	0	-	12.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.3

Capacity Analysis Summary Sheets

2023 Base Weekday Evening Peak Hour Conditions



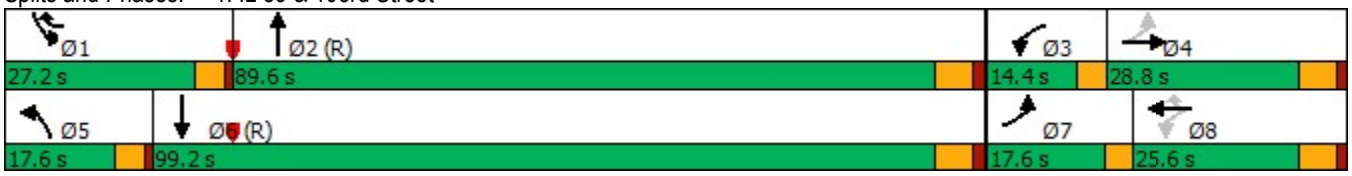
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	187	101	42	75	121	101	64	1378	47	92	1697	116
Future Volume (vph)	187	101	42	75	121	101	64	1378	47	92	1697	116
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	140		0	185		250	350		0	355		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	195			195			125			125		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00		0.99						
Frt		0.956				0.850		0.995			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1796	0	1805	1980	1583	1770	3491	0	1787	3508	0
Flt Permitted	0.373			0.532			0.950			0.950		
Satd. Flow (perm)	701	1796	0	1010	1980	1561	1770	3491	0	1787	3508	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		3839			449			423			1822	
Travel Time (s)		74.8			7.7			6.4			27.6	
Confl. Peds. (#/hr)	1		1	1		1						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	0%	1%	2%	2%	3%	0%	1%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	203	156	0	82	132	110	70	1549	0	100	1971	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	17.6	28.8		14.4	25.6	27.2	17.6	89.6		27.2	99.2	
Total Split (%)	11.0%	18.0%		9.0%	16.0%	17.0%	11.0%	56.0%		17.0%	62.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	36.3	20.5		28.8	16.4	32.2	11.0	95.2		14.3	98.5	
Actuated g/C Ratio	0.23	0.13		0.18	0.10	0.20	0.07	0.60		0.09	0.62	

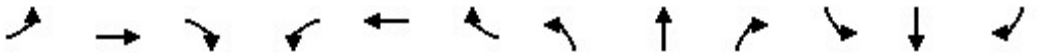
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.80	0.68		0.35	0.65	0.35	0.58	0.75		0.63	0.91	
Control Delay	76.9	81.7		53.7	83.9	52.7	82.8	20.5		86.9	35.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	76.9	81.7		53.7	83.9	52.7	82.8	20.5		86.9	35.4	
LOS	E	F		D	F	D	F	C		F	D	
Approach Delay		79.0			65.7			23.2			37.9	
Approach LOS		E			E			C			D	
Queue Length 50th (ft)	186	159		70	135	96	76	349		103	933	
Queue Length 95th (ft)	#285	238		119	208	147	m125	449		164	#1213	
Internal Link Dist (ft)		3759			369			343			1742	
Turn Bay Length (ft)	140			185		250	350			355		
Base Capacity (vph)	254	255		242	242	399	144	2078		253	2160	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.80	0.61		0.34	0.55	0.28	0.49	0.75		0.40	0.91	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 40 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 37.9 Intersection LOS: D
Intersection Capacity Utilization 88.3% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 59 & 103rd Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	8	27	18	7	81	48	1358	29	62	1620	123
Future Volume (vph)	61	8	27	18	7	81	48	1358	29	62	1620	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	55		0	95		0	365		0	370		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	50			50			95			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor					0.99							
Frt		0.883			0.861			0.997			0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1678	0	1626	1597	0	1805	3491	0	1770	3473	0
Flt Permitted	0.497			0.734			0.950			0.950		
Satd. Flow (perm)	926	1678	0	1256	1597	0	1805	3491	0	1770	3473	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		987			1450			882			1042	
Travel Time (s)		26.9			39.5			13.4			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	0%	11%	14%	0%	0%	3%	7%	2%	3%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	36	0	19	92	0	51	1460	0	65	1834	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	14.4	22.4		14.4	22.4		14.4	102.4		20.8	108.8	
Total Split (%)	9.0%	14.0%		9.0%	14.0%		9.0%	64.0%		13.0%	68.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	27.4	18.5		22.7	14.2		8.8	109.2		11.2	111.4	
Actuated g/C Ratio	0.17	0.12		0.14	0.09		0.06	0.68		0.07	0.70	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.30	0.19		0.10	0.65		0.52	0.61		0.53	0.76	
Control Delay	58.0	65.7		52.8	91.3		91.4	17.6		86.4	7.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	58.0	65.7		52.8	91.3		91.4	17.6		86.4	7.7	
LOS	E	E		D	F		F	B		F	A	
Approach Delay		60.8			84.7			20.1			10.4	
Approach LOS		E			F			C			B	
Queue Length 50th (ft)	56	35		16	94		53	470		71	149	
Queue Length 95th (ft)	101	74		41	158		102	602		m81	214	
Internal Link Dist (ft)		907			1370			802			962	
Turn Bay Length (ft)	55			95			365			370		
Base Capacity (vph)	216	207		225	163		111	2382		180	2418	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.30	0.17		0.08	0.56		0.46	0.61		0.36	0.76	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 46.4 (29%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 18.1		Intersection LOS: B	
Intersection Capacity Utilization 71.6%		ICU Level of Service C	
Analysis Period (min) 15			

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

Splits and Phases: 2: IL 59 & Royal Worlington Drive

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	21	0	1489	1799	15
Future Vol, veh/h	0	21	0	1489	1799	15
Conflicting Peds, #/hr	0	0	3	0	0	3
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	2	0
Mvmt Flow	0	22	0	1584	1914	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	968	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	257	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	256	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	256	-	-
HCM Lane V/C Ratio	-	0.087	-	-
HCM Control Delay (s)	-	20.4	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	14	23	1477	1791	29
Future Vol, veh/h	12	14	23	1477	1791	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	70	0	200	-	-	200
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	13	15	24	1571	1905	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2739	953	1936	0	-	0
Stage 1	1905	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	17	263	308	-	-	-
Stage 1	105	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	16	263	308	-	-	-
Mov Cap-2 Maneuver	75	-	-	-	-	-
Stage 1	97	-	-	-	-	-
Stage 2	392	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	39.4	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	308	-	75	263	-	-
HCM Lane V/C Ratio	0.079	-	0.17	0.057	-	-
HCM Control Delay (s)	17.7	-	62.6	19.5	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	0.6	0.2	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↰	↱
Traffic Vol, veh/h	13	227	0	1	280	7	0	0	2	13	0	17
Future Vol, veh/h	13	227	0	1	280	7	0	0	2	13	0	17
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	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	100	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	14	244	0	1	301	8	0	0	2	14	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	311	0	0	244	0	0	588	585	244	582	581	307
Stage 1	-	-	-	-	-	-	272	272	-	309	309	-
Stage 2	-	-	-	-	-	-	316	313	-	273	272	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
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	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1261	-	-	1334	-	-	423	426	800	427	428	738
Stage 1	-	-	-	-	-	-	738	688	-	705	663	-
Stage 2	-	-	-	-	-	-	699	661	-	737	688	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1259	-	-	1334	-	-	408	419	800	421	421	737
Mov Cap-2 Maneuver	-	-	-	-	-	-	408	419	-	421	421	-
Stage 1	-	-	-	-	-	-	728	679	-	694	661	-
Stage 2	-	-	-	-	-	-	681	659	-	725	679	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0	9.5	11.6
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	800	1259	-	-	1334	-	-	421	737
HCM Lane V/C Ratio	0.003	0.011	-	-	0.001	-	-	0.033	0.025
HCM Control Delay (s)	9.5	7.9	0	-	7.7	0	-	13.8	10
HCM Lane LOS	A	A	A	-	A	A	-	B	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1	0.1

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	16	202	24	10	243	12	31	5	5	15	5	14
Future Vol, veh/h	16	202	24	10	243	12	31	5	5	15	5	14
Conflicting Peds, #/hr	2	0	0	0	0	2	3	0	8	8	0	3
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	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	2	0	0	20	20	0	20	0
Mvmt Flow	17	215	26	11	259	13	33	5	5	16	5	15

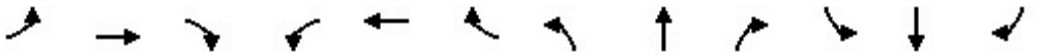
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	274	0	0	241	0	0	563	558	236	565	565	271
Stage 1	-	-	-	-	-	-	262	262	-	290	290	-
Stage 2	-	-	-	-	-	-	301	296	-	275	275	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.7	6.4	7.1	6.7	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.7	-	6.1	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.7	-	6.1	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.18	3.48	3.5	4.18	3.3
Pot Cap-1 Maneuver	1301	-	-	1337	-	-	440	414	761	439	410	773
Stage 1	-	-	-	-	-	-	747	660	-	722	641	-
Stage 2	-	-	-	-	-	-	712	637	-	736	651	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1299	-	-	1337	-	-	418	403	753	418	399	769
Mov Cap-2 Maneuver	-	-	-	-	-	-	418	403	-	418	399	-
Stage 1	-	-	-	-	-	-	736	650	-	710	633	-
Stage 2	-	-	-	-	-	-	683	629	-	707	641	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.3	14.1	12.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	440	1299	-	-	1337	-	-	510
HCM Lane V/C Ratio	0.099	0.013	-	-	0.008	-	-	0.071
HCM Control Delay (s)	14.1	7.8	0	-	7.7	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.2

Capacity Analysis Summary Sheets

2029 No Build Weekday Morning Peak Hour Conditions



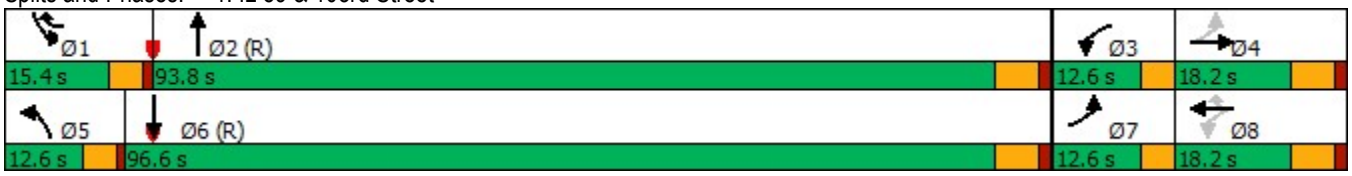
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	81	17	33	84	162	43	1710	28	72	944	118
Future Volume (vph)	142	81	17	33	84	162	43	1710	28	72	944	118
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	140		0	185		250	350		0	355		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	195			195			125			125		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.974				0.850		0.998			0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1773	0	1433	1942	1615	1805	3400	0	1641	3187	0
Flt Permitted	0.524			0.691			0.950			0.950		
Satd. Flow (perm)	948	1773	0	1042	1942	1615	1805	3400	0	1641	3187	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		3839			449			423			1822	
Travel Time (s)		74.8			7.7			6.4			27.6	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	4%	6%	26%	3%	0%	0%	6%	4%	10%	11%	14%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	148	102	0	34	88	169	45	1810	0	75	1106	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	12.6	18.2		12.6	18.2	15.4	12.6	93.8		15.4	96.6	
Total Split (%)	9.0%	13.0%		9.0%	13.0%	11.0%	9.0%	67.0%		11.0%	69.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	24.3	16.4		21.4	11.2	27.1	7.5	89.8		9.9	94.3	
Actuated g/C Ratio	0.17	0.12		0.15	0.08	0.19	0.05	0.64		0.07	0.67	

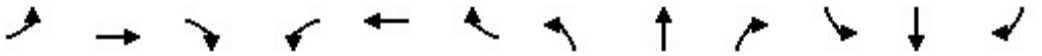
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.69	0.49		0.19	0.57	0.54	0.47	0.83		0.65	0.52	
Control Delay	68.7	68.3		49.5	76.5	57.4	79.9	13.8		88.0	13.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	68.7	68.3		49.5	76.5	57.4	79.9	13.8		88.0	13.2	
LOS	E	E		D	E	E	E	B		F	B	
Approach Delay		68.6			62.2			15.4			17.9	
Approach LOS		E			E			B			B	
Queue Length 50th (ft)	120	91		26	78	138	43	228		67	268	
Queue Length 95th (ft)	#204	#170		59	137	215	m65	249		#129	324	
Internal Link Dist (ft)		3759			369			343			1742	
Turn Bay Length (ft)	140			185		250	350			355		
Base Capacity (vph)	215	207		194	169	323	104	2181		127	2146	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.69	0.49		0.18	0.52	0.52	0.43	0.83		0.59	0.52	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 25.2 (18%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 23.8 Intersection LOS: C
Intersection Capacity Utilization 80.4% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 59 & 103rd Street





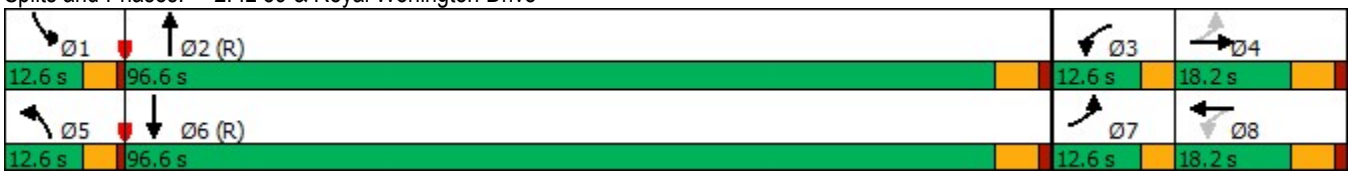
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	7	11	19	8	75	19	1649	9	18	938	40
Future Volume (vph)	62	7	11	19	8	75	19	1649	9	18	938	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	55		0	95		0	365		0	370		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	50			50			95			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.908			0.864			0.999			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1635	0	1719	1627	0	1805	3403	0	1805	3210	0
Flt Permitted	0.538			0.746			0.950			0.950		
Satd. Flow (perm)	992	1635	0	1350	1627	0	1805	3403	0	1805	3210	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		987			1450			882			1042	
Travel Time (s)		26.9			39.5			13.4			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	0%	9%	5%	0%	1%	0%	6%	0%	0%	12%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	18	0	20	85	0	20	1709	0	19	1008	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	12.6	18.2		12.6	18.2		12.6	96.6		12.6	96.6	
Total Split (%)	9.0%	13.0%		9.0%	13.0%		9.0%	69.0%		9.0%	69.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	22.8	16.7		19.7	11.4		6.9	99.4		6.9	99.3	
Actuated g/C Ratio	0.16	0.12		0.14	0.08		0.05	0.71		0.05	0.71	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.31	0.09		0.10	0.65		0.22	0.71		0.22	0.44	
Control Delay	52.1	57.2		47.4	84.7		69.6	15.9		64.5	8.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	52.1	57.2		47.4	84.7		69.6	15.9		64.5	8.7	
LOS	D	E		D	F		E	B		E	A	
Approach Delay		53.2			77.6			16.6			9.7	
Approach LOS		D			E			B			A	
Queue Length 50th (ft)	49	14		15	76		18	530		18	156	
Queue Length 95th (ft)	94	42		39	#142		46	643		m36	181	
Internal Link Dist (ft)		907			1370			802			962	
Turn Bay Length (ft)	55			95			365			370		
Base Capacity (vph)	211	203		227	141		104	2415		104	2277	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.30	0.09		0.09	0.60		0.19	0.71		0.18	0.44	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 14 (10%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 17.4 Intersection LOS: B
Intersection Capacity Utilization 66.0% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL 59 & Royal Worlington Drive



Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	5	0	1781	990	4
Future Vol, veh/h	0	5	0	1781	990	4
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	94	94	94	94	94	94
Heavy Vehicles, %	0	20	0	5	11	0
Mvmt Flow	0	5	0	1895	1053	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	529	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.3	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.5	-	-	-	-
Pot Cap-1 Maneuver	0	450	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	450	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	450	-	-
HCM Lane V/C Ratio	-	0.012	-	-
HCM Control Delay (s)	-	13.1	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	2	14	1772	994	1
Future Vol, veh/h	9	2	14	1772	994	1
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	70	0	200	-	-	200
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	6	11	0
Mvmt Flow	10	2	16	1991	1117	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2146	560	1119	0	-	0
Stage 1	1118	-	-	-	-	-
Stage 2	1028	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	43	477	632	-	-	-
Stage 1	279	-	-	-	-	-
Stage 2	310	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	42	477	631	-	-	-
Mov Cap-2 Maneuver	151	-	-	-	-	-
Stage 1	272	-	-	-	-	-
Stage 2	310	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.2	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	631	-	151	477	-	-
HCM Lane V/C Ratio	0.025	-	0.067	0.005	-	-
HCM Control Delay (s)	10.9	-	30.5	12.6	-	-
HCM Lane LOS	B	-	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	172	4	1	253	4	6	0	2	5	0	20
Future Vol, veh/h	5	172	4	1	253	4	6	0	2	5	0	20
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	7	0	0	2	0	50	0	0	20	0	10
Mvmt Flow	7	239	6	1	351	6	8	0	3	7	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	361	0	0	245	0	0	626	619	243	619	619	358
Stage 1	-	-	-	-	-	-	256	256	-	360	360	-
Stage 2	-	-	-	-	-	-	370	363	-	259	259	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.6	6.5	6.2	7.3	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.5	-	6.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.5	-	6.3	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.95	4	3.3	3.68	4	3.39
Pot Cap-1 Maneuver	1209	-	-	1333	-	-	336	407	801	376	407	669
Stage 1	-	-	-	-	-	-	654	699	-	623	630	-
Stage 2	-	-	-	-	-	-	563	628	-	708	697	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1204	-	-	1333	-	-	320	402	800	370	402	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	320	402	-	370	402	-
Stage 1	-	-	-	-	-	-	649	694	-	616	627	-
Stage 2	-	-	-	-	-	-	539	625	-	700	692	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	14.9	11.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	376	1204	-	-	1333	-	-	370	666
HCM Lane V/C Ratio	0.03	0.006	-	-	0.001	-	-	0.019	0.042
HCM Control Delay (s)	14.9	8	0	-	7.7	0	-	14.9	10.6
HCM Lane LOS	B	A	A	-	A	A	-	B	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	153	21	5	199	12	42	4	12	16	5	17
Future Vol, veh/h	5	153	21	5	199	12	42	4	12	16	5	17
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	2	2	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	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	8	5	20	2	17	0	25	0	6	0	18
Mvmt Flow	7	213	29	7	276	17	58	6	17	22	7	24

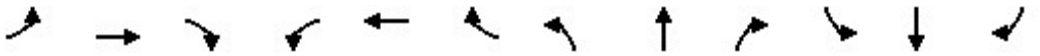
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	295	0	0	244	0	0	558	553	232	556	559	287
Stage 1	-	-	-	-	-	-	244	244	-	301	301	-
Stage 2	-	-	-	-	-	-	314	309	-	255	258	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.75	6.2	7.16	6.5	6.38
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.75	-	6.16	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.75	-	6.16	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4.225	3.3	3.554	4	3.462
Pot Cap-1 Maneuver	1278	-	-	1224	-	-	443	411	812	436	440	716
Stage 1	-	-	-	-	-	-	764	664	-	700	669	-
Stage 2	-	-	-	-	-	-	701	620	-	741	698	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1276	-	-	1222	-	-	418	404	808	416	433	715
Mov Cap-2 Maneuver	-	-	-	-	-	-	418	404	-	416	433	-
Stage 1	-	-	-	-	-	-	758	659	-	694	663	-
Stage 2	-	-	-	-	-	-	666	614	-	713	692	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	14.4	12.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	463	1276	-	-	1222	-	-	515
HCM Lane V/C Ratio	0.174	0.005	-	-	0.006	-	-	0.102
HCM Control Delay (s)	14.4	7.8	0	-	8	0	-	12.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.3

Capacity Analysis Summary Sheets

2029 No Build Weekday Evening Peak Hour Conditions



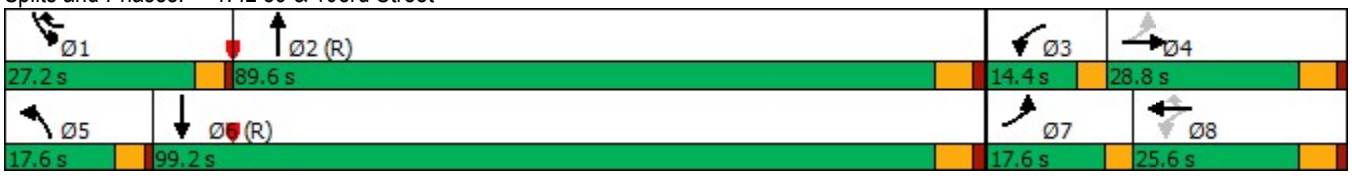
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	108	45	81	130	108	69	1429	50	99	1760	125
Future Volume (vph)	201	108	45	81	130	108	69	1429	50	99	1760	125
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	140		0	185		250	350		0	355		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	195			195			125			125		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00		0.99						
Frt		0.956				0.850		0.995			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1796	0	1805	1980	1583	1770	3491	0	1787	3508	0
Flt Permitted	0.349			0.491			0.950			0.950		
Satd. Flow (perm)	656	1796	0	932	1980	1561	1770	3491	0	1787	3508	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		3839			449			423			1822	
Travel Time (s)		74.8			7.7			6.4			27.6	
Confl. Peds. (#/hr)	1		1	1		1						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	0%	1%	2%	2%	3%	0%	1%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	218	166	0	88	141	117	75	1607	0	108	2049	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	17.6	28.8		14.4	25.6	27.2	17.6	89.6		27.2	99.2	
Total Split (%)	11.0%	18.0%		9.0%	16.0%	17.0%	11.0%	56.0%		17.0%	62.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	36.7	20.8		29.4	16.8	33.3	11.2	94.1		15.0	97.9	
Actuated g/C Ratio	0.23	0.13		0.18	0.10	0.21	0.07	0.59		0.09	0.61	

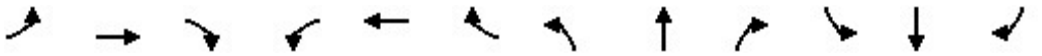
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.87	0.71		0.39	0.68	0.36	0.61	0.78		0.65	0.95	
Control Delay	86.6	83.9		54.4	85.2	52.1	83.8	22.6		87.1	40.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	86.6	83.9		54.4	85.2	52.1	83.8	22.6		87.1	40.9	
LOS	F	F		D	F	D	F	C		F	D	
Approach Delay		85.4			66.2			25.3			43.2	
Approach LOS		F			E			C			D	
Queue Length 50th (ft)	200	169		75	144	101	81	361		111	1043	
Queue Length 95th (ft)	#335	252		125	220	153	m130	484		174	#1300	
Internal Link Dist (ft)		3759			369			343			1742	
Turn Bay Length (ft)	140			185		250	350			355		
Base Capacity (vph)	250	255		235	242	403	144	2053		253	2146	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.87	0.65		0.37	0.58	0.29	0.52	0.78		0.43	0.95	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 40 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 41.9 Intersection LOS: D
Intersection Capacity Utilization 91.3% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 59 & 103rd Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	8	27	18	7	81	48	1417	29	62	1692	123
Future Volume (vph)	61	8	27	18	7	81	48	1417	29	62	1692	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	55		0	95		0	365		0	370		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	50			50			95			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor					0.99							
Frt		0.883			0.861			0.997			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1678	0	1626	1597	0	1805	3492	0	1770	3477	0
Flt Permitted	0.497			0.734			0.950			0.950		
Satd. Flow (perm)	926	1678	0	1256	1597	0	1805	3492	0	1770	3477	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		987			1450			882			1042	
Travel Time (s)		26.9			39.5			13.4			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	0%	11%	14%	0%	0%	3%	7%	2%	3%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	36	0	19	92	0	51	1523	0	65	1910	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	14.4	22.4		14.4	22.4		14.4	102.4		20.8	108.8	
Total Split (%)	9.0%	14.0%		9.0%	14.0%		9.0%	64.0%		13.0%	68.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	27.4	18.5		22.7	14.2		8.8	109.2		11.2	111.4	
Actuated g/C Ratio	0.17	0.12		0.14	0.09		0.06	0.68		0.07	0.70	

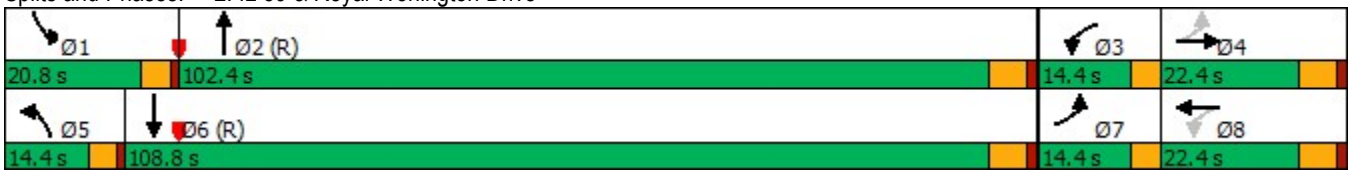
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.30	0.19		0.10	0.65		0.52	0.64		0.53	0.79	
Control Delay	58.0	65.7		52.8	91.3		91.4	18.3		84.7	8.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	58.0	65.7		52.8	91.3		91.4	18.3		84.7	8.1	
LOS	E	E		D	F		F	B		F	A	
Approach Delay		60.8			84.7			20.6			10.6	
Approach LOS		E			F			C			B	
Queue Length 50th (ft)	56	35		16	94		53	505		71	182	
Queue Length 95th (ft)	101	74		41	158		102	647		m77	m222	
Internal Link Dist (ft)		907			1370			802			962	
Turn Bay Length (ft)	55			95			365			370		
Base Capacity (vph)	216	207		225	163		111	2383		180	2421	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.30	0.17		0.08	0.56		0.46	0.64		0.36	0.79	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 46.4 (29%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 18.3 Intersection LOS: B
Intersection Capacity Utilization 71.6% ICU Level of Service C
Analysis Period (min) 15

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

Splits and Phases: 2: IL 59 & Royal Worlington Drive



Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	21	0	1548	1871	15
Future Vol, veh/h	0	21	0	1548	1871	15
Conflicting Peds, #/hr	0	0	3	0	0	3
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	2	0
Mvmt Flow	0	22	0	1647	1990	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1006	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	243	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	242	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	242	-	-
HCM Lane V/C Ratio	-	0.092	-	-
HCM Control Delay (s)	-	21.4	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	14	23	1536	1863	29
Future Vol, veh/h	12	14	23	1536	1863	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	70	0	200	-	-	200
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	13	15	24	1634	1982	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2847	991	2013	0	-	0
Stage 1	1982	-	-	-	-	-
Stage 2	865	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	14	248	287	-	-	-
Stage 1	95	-	-	-	-	-
Stage 2	377	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	13	248	287	-	-	-
Mov Cap-2 Maneuver	68	-	-	-	-	-
Stage 1	87	-	-	-	-	-
Stage 2	377	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	43.2	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	287	-	68	248	-	-
HCM Lane V/C Ratio	0.085	-	0.188	0.06	-	-
HCM Control Delay (s)	18.7	-	69.8	20.4	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	0.6	0.2	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	244	0	1	302	7	0	0	2	13	0	17
Future Vol, veh/h	13	244	0	1	302	7	0	0	2	13	0	17
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	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	100	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	14	262	0	1	325	8	0	0	2	14	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	262	0	0	630	627	262	624	623	331
Stage 1	-	-	-	-	-	-	290	290	-	333	333	-
Stage 2	-	-	-	-	-	-	340	337	-	291	290	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
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	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1236	-	-	1314	-	-	397	403	782	401	405	715
Stage 1	-	-	-	-	-	-	722	676	-	685	647	-
Stage 2	-	-	-	-	-	-	679	645	-	721	676	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1234	-	-	1314	-	-	383	397	782	395	399	714
Mov Cap-2 Maneuver	-	-	-	-	-	-	383	397	-	395	399	-
Stage 1	-	-	-	-	-	-	713	667	-	675	645	-
Stage 2	-	-	-	-	-	-	661	643	-	710	667	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0	9.6	12
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	782	1234	-	-	1314	-	-	395	714
HCM Lane V/C Ratio	0.003	0.011	-	-	0.001	-	-	0.035	0.026
HCM Control Delay (s)	9.6	8	0	-	7.7	0	-	14.4	10.2
HCM Lane LOS	A	A	A	-	A	A	-	B	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1	0.1

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	16	219	24	10	265	12	31	5	5	15	5	14
Future Vol, veh/h	16	219	24	10	265	12	31	5	5	15	5	14
Conflicting Peds, #/hr	2	0	0	0	0	2	3	0	8	8	0	3
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	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	2	0	0	20	20	0	20	0
Mvmt Flow	17	233	26	11	282	13	33	5	5	16	5	15

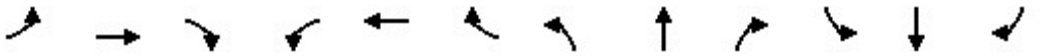
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	297	0	0	259	0	0	604	599	254	606	606	294
Stage 1	-	-	-	-	-	-	280	280	-	313	313	-
Stage 2	-	-	-	-	-	-	324	319	-	293	293	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.7	6.4	7.1	6.7	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.7	-	6.1	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.7	-	6.1	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.18	3.48	3.5	4.18	3.3
Pot Cap-1 Maneuver	1276	-	-	1317	-	-	413	392	743	412	388	750
Stage 1	-	-	-	-	-	-	731	648	-	702	626	-
Stage 2	-	-	-	-	-	-	692	622	-	719	639	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1274	-	-	1317	-	-	391	381	735	392	377	746
Mov Cap-2 Maneuver	-	-	-	-	-	-	391	381	-	392	377	-
Stage 1	-	-	-	-	-	-	719	638	-	689	618	-
Stage 2	-	-	-	-	-	-	663	615	-	689	629	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.3	14.7	13
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	413	1274	-	-	1317	-	-	484
HCM Lane V/C Ratio	0.106	0.013	-	-	0.008	-	-	0.075
HCM Control Delay (s)	14.7	7.9	0	-	7.8	0	-	13
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.2

Capacity Analysis Summary Sheets

2029 Projected Weekday Morning Peak Hour Conditions



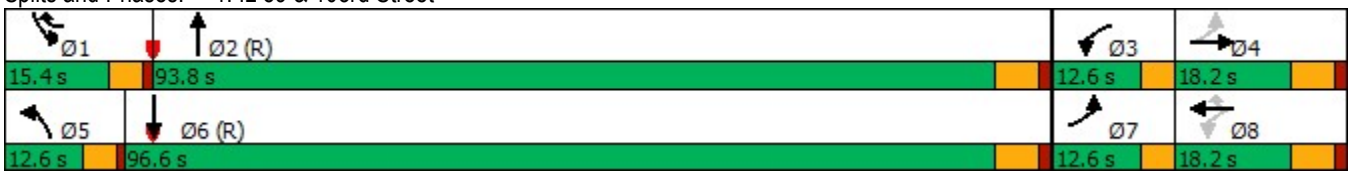
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	81	17	34	84	163	43	1713	28	72	947	118
Future Volume (vph)	142	81	17	34	84	163	43	1713	28	72	947	118
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	140		0	185		250	350		0	355		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	195			195			125			125		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.974				0.850		0.998			0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1773	0	1433	1942	1615	1805	3400	0	1641	3187	0
Flt Permitted	0.554			0.691			0.950			0.950		
Satd. Flow (perm)	1002	1773	0	1042	1942	1615	1805	3400	0	1641	3187	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		3839			449			423			1822	
Travel Time (s)		74.8			7.7			6.4			27.6	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	4%	6%	26%	3%	0%	0%	6%	4%	10%	11%	14%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	148	102	0	35	88	170	45	1813	0	75	1109	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	12.6	18.2		12.6	18.2	15.4	12.6	93.8		15.4	96.6	
Total Split (%)	9.0%	13.0%		9.0%	13.0%	11.0%	9.0%	67.0%		11.0%	69.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	24.0	14.3		21.5	11.2	27.1	7.5	89.8		9.9	94.3	
Actuated g/C Ratio	0.17	0.10		0.15	0.08	0.19	0.05	0.64		0.07	0.67	

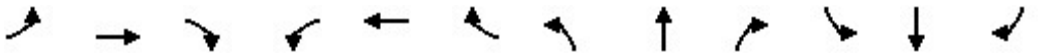
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.68	0.57		0.19	0.57	0.54	0.47	0.83		0.65	0.52	
Control Delay	67.8	73.9		49.6	76.5	57.5	80.1	13.9		88.0	13.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	67.8	73.9		49.6	76.5	57.5	80.1	13.9		88.0	13.2	
LOS	E	E		D	E	E	F	B		F	B	
Approach Delay		70.3			62.3			15.5			17.9	
Approach LOS		E			E			B			B	
Queue Length 50th (ft)	120	91		27	78	138	42	228		67	270	
Queue Length 95th (ft)	#198	#170		60	137	217	m64	250		#129	325	
Internal Link Dist (ft)		3759			369			343			1742	
Turn Bay Length (ft)	140			185		250	350			355		
Base Capacity (vph)	218	180		194	169	323	104	2181		127	2146	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.68	0.57		0.18	0.52	0.53	0.43	0.83		0.59	0.52	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 25.2 (18%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 23.9 Intersection LOS: C
Intersection Capacity Utilization 80.5% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 59 & 103rd Street





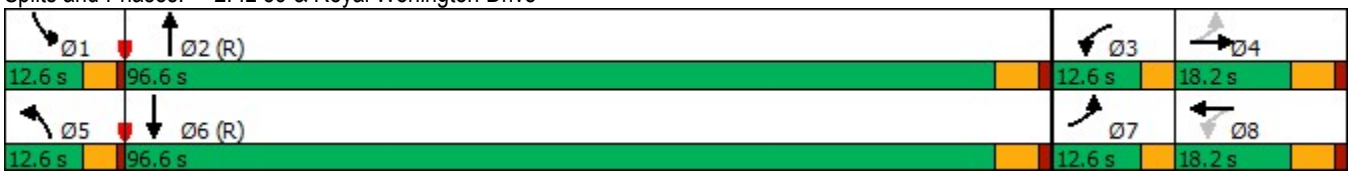
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	7	11	19	8	75	19	1651	9	18	941	40
Future Volume (vph)	62	7	11	19	8	75	19	1651	9	18	941	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	55		0	95		0	365		0	370		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	50			50			95			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.908			0.864			0.999			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1635	0	1719	1627	0	1805	3403	0	1805	3210	0
Flt Permitted	0.538			0.746			0.950			0.950		
Satd. Flow (perm)	992	1635	0	1350	1627	0	1805	3403	0	1805	3210	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		987			1450			882			1042	
Travel Time (s)		26.9			39.5			13.4			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	0%	9%	5%	0%	1%	0%	6%	0%	0%	12%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	18	0	20	85	0	20	1711	0	19	1011	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	12.6	18.2		12.6	18.2		12.6	96.6		12.6	96.6	
Total Split (%)	9.0%	13.0%		9.0%	13.0%		9.0%	69.0%		9.0%	69.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	22.8	16.7		19.7	11.4		6.9	99.4		6.9	99.3	
Actuated g/C Ratio	0.16	0.12		0.14	0.08		0.05	0.71		0.05	0.71	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.31	0.09		0.10	0.65		0.22	0.71		0.22	0.44	
Control Delay	52.1	57.2		47.4	84.7		69.6	16.0		64.7	8.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	52.1	57.2		47.4	84.7		69.6	16.0		64.7	8.7	
LOS	D	E		D	F		E	B		E	A	
Approach Delay		53.2			77.6			16.6			9.7	
Approach LOS		D			E			B			A	
Queue Length 50th (ft)	49	14		15	76		18	530		18	157	
Queue Length 95th (ft)	94	42		39	#142		46	643		m36	181	
Internal Link Dist (ft)		907			1370			802			962	
Turn Bay Length (ft)	55			95			365			370		
Base Capacity (vph)	211	203		227	141		104	2415		104	2277	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.30	0.09		0.09	0.60		0.19	0.71		0.18	0.44	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 14 (10%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 17.4 Intersection LOS: B
Intersection Capacity Utilization 66.0% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL 59 & Royal Worlington Drive



Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	5	0	1784	994	4
Future Vol, veh/h	0	5	0	1784	994	4
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	94	94	94	94	94	94
Heavy Vehicles, %	0	20	0	5	11	0
Mvmt Flow	0	5	0	1898	1057	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	531	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.3	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.5	-	-	-	-
Pot Cap-1 Maneuver	0	449	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	449	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	449	-	-
HCM Lane V/C Ratio	-	0.012	-	-
HCM Control Delay (s)	-	13.1	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	0	2	2	0	3	14	1772	2	3	995	1
Future Vol, veh/h	9	0	2	2	0	3	14	1772	2	3	995	1
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	70	-	-	150	-	-	200	-	-	200	-	200
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	6	0	0	11	0
Mvmt Flow	10	0	2	2	0	3	16	1991	2	3	1118	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2153	3150	560	2589	3150	997	1120	0	0	1993	0	0
Stage 1	1125	1125	-	2024	2024	-	-	-	-	-	-	-
Stage 2	1028	2025	-	565	1126	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	28	11	477	13	11	246	631	-	-	292	-	-
Stage 1	222	283	-	61	103	-	-	-	-	-	-	-
Stage 2	254	103	-	482	282	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	27	11	477	13	11	246	630	-	-	292	-	-
Mov Cap-2 Maneuver	116	70	-	50	70	-	-	-	-	-	-	-
Stage 1	216	280	-	59	100	-	-	-	-	-	-	-
Stage 2	244	100	-	475	279	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	34.2	44	0.1	0.1
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	630	-	-	116	477	50	246	292	-	-
HCM Lane V/C Ratio	0.025	-	-	0.087	0.005	0.045	0.014	0.012	-	-
HCM Control Delay (s)	10.9	-	-	39	12.6	80.4	19.8	17.5	-	-
HCM Lane LOS	B	-	-	E	B	F	C	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↰	↱
Traffic Vol, veh/h	5	172	4	2	253	4	8	0	3	5	0	20
Future Vol, veh/h	5	172	4	2	253	4	8	0	3	5	0	20
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	7	0	0	2	0	50	0	0	20	0	10
Mvmt Flow	7	239	6	3	351	6	11	0	4	7	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	361	0	0	245	0	0	630	623	243	623	623	358
Stage 1	-	-	-	-	-	-	256	256	-	364	364	-
Stage 2	-	-	-	-	-	-	374	367	-	259	259	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.6	6.5	6.2	7.3	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.5	-	6.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.5	-	6.3	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.95	4	3.3	3.68	4	3.39
Pot Cap-1 Maneuver	1209	-	-	1333	-	-	334	405	801	374	405	669
Stage 1	-	-	-	-	-	-	654	699	-	620	627	-
Stage 2	-	-	-	-	-	-	560	626	-	708	697	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1204	-	-	1333	-	-	318	399	800	367	399	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	318	399	-	367	399	-
Stage 1	-	-	-	-	-	-	649	694	-	613	623	-
Stage 2	-	-	-	-	-	-	535	622	-	698	692	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	14.8	11.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	381	1204	-	-	1333	-	-	367	666
HCM Lane V/C Ratio	0.04	0.006	-	-	0.002	-	-	0.019	0.042
HCM Control Delay (s)	14.8	8	0	-	7.7	0	-	15	10.6
HCM Lane LOS	B	A	A	-	A	A	-	C	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	154	21	5	200	12	42	4	12	16	5	17
Future Vol, veh/h	5	154	21	5	200	12	42	4	12	16	5	17
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	2	2	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	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	8	5	20	2	17	0	25	0	6	0	18
Mvmt Flow	7	214	29	7	278	17	58	6	17	22	7	24

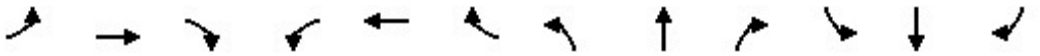
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	297	0	0	245	0	0	561	556	233	559	562	289
Stage 1	-	-	-	-	-	-	245	245	-	303	303	-
Stage 2	-	-	-	-	-	-	316	311	-	256	259	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.75	6.2	7.16	6.5	6.38
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.75	-	6.16	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.75	-	6.16	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4.225	3.3	3.554	4	3.462
Pot Cap-1 Maneuver	1276	-	-	1223	-	-	441	409	811	434	439	714
Stage 1	-	-	-	-	-	-	763	663	-	698	667	-
Stage 2	-	-	-	-	-	-	699	619	-	740	697	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1274	-	-	1221	-	-	416	402	807	414	432	713
Mov Cap-2 Maneuver	-	-	-	-	-	-	416	402	-	414	432	-
Stage 1	-	-	-	-	-	-	757	658	-	692	661	-
Stage 2	-	-	-	-	-	-	664	613	-	712	691	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	14.5	12.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	461	1274	-	-	1221	-	-	513
HCM Lane V/C Ratio	0.175	0.005	-	-	0.006	-	-	0.103
HCM Control Delay (s)	14.5	7.8	0	-	8	0	-	12.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.3

Capacity Analysis Summary Sheets

2029 Projected Weekday Evening Peak Hour Conditions



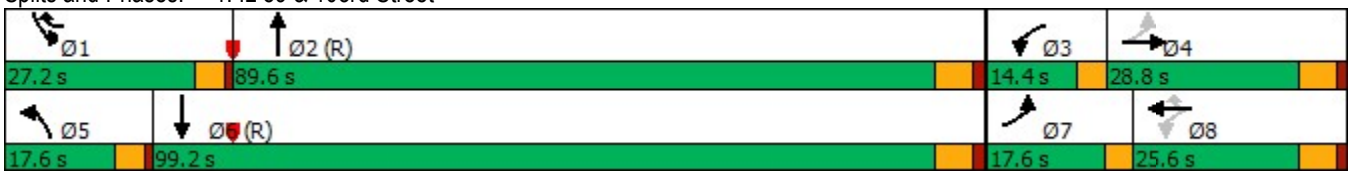
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	108	45	82	130	109	69	1432	50	99	1765	125
Future Volume (vph)	201	108	45	82	130	109	69	1432	50	99	1765	125
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	140		0	185		250	350		0	355		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	195			195			125			125		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00		0.99						
Frt		0.956				0.850		0.995			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1796	0	1805	1980	1583	1770	3491	0	1787	3508	0
Flt Permitted	0.349			0.491			0.950			0.950		
Satd. Flow (perm)	656	1796	0	932	1980	1561	1770	3491	0	1787	3508	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		3839			449			423			1822	
Travel Time (s)		74.8			7.7			6.4			27.6	
Confl. Peds. (#/hr)	1		1	1		1						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	0%	1%	2%	2%	3%	0%	1%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	218	166	0	89	141	118	75	1611	0	108	2054	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	17.6	28.8		14.4	25.6	27.2	17.6	89.6		27.2	99.2	
Total Split (%)	11.0%	18.0%		9.0%	16.0%	17.0%	11.0%	56.0%		17.0%	62.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	36.7	20.8		29.4	16.8	33.3	11.2	94.1		15.0	97.9	
Actuated g/C Ratio	0.23	0.13		0.18	0.10	0.21	0.07	0.59		0.09	0.61	

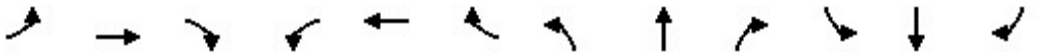
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.87	0.72		0.39	0.68	0.36	0.61	0.78		0.65	0.96	
Control Delay	86.6	84.0		54.5	85.2	52.2	83.8	22.7		87.1	41.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	86.6	84.0		54.5	85.2	52.2	83.8	22.7		87.1	41.3	
LOS	F	F		D	F	D	F	C		F	D	
Approach Delay		85.5			66.2			25.4			43.6	
Approach LOS		F			E			C			D	
Queue Length 50th (ft)	200	169		76	144	102	81	362		111	1048	
Queue Length 95th (ft)	#335	252		127	220	155	m128	487		174	#1306	
Internal Link Dist (ft)		3759			369			343			1742	
Turn Bay Length (ft)	140			185		250	350			355		
Base Capacity (vph)	250	255		235	242	403	144	2053		253	2146	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.87	0.65		0.38	0.58	0.29	0.52	0.78		0.43	0.96	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 40 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 42.1 Intersection LOS: D
Intersection Capacity Utilization 91.5% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 59 & 103rd Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	8	27	18	7	81	48	1420	29	62	1695	123
Future Volume (vph)	61	8	27	18	7	81	48	1420	29	62	1695	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	55		0	95		0	365		0	370		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	50			50			95			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor					0.99							
Frt		0.883			0.861			0.997			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1678	0	1626	1597	0	1805	3492	0	1770	3477	0
Flt Permitted	0.497			0.734			0.950			0.950		
Satd. Flow (perm)	926	1678	0	1256	1597	0	1805	3492	0	1770	3477	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		987			1450			882			1042	
Travel Time (s)		26.9			39.5			13.4			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	0%	11%	14%	0%	0%	3%	7%	2%	3%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	36	0	19	92	0	51	1526	0	65	1913	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	14.4	22.4		14.4	22.4		14.4	102.4		20.8	108.8	
Total Split (%)	9.0%	14.0%		9.0%	14.0%		9.0%	64.0%		13.0%	68.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	27.4	18.5		22.7	14.2		8.8	109.2		11.2	111.4	
Actuated g/C Ratio	0.17	0.12		0.14	0.09		0.06	0.68		0.07	0.70	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.30	0.19		0.10	0.65		0.52	0.64		0.53	0.79	
Control Delay	58.0	65.7		52.8	91.3		91.4	18.3		84.6	8.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	58.0	65.7		52.8	91.3		91.4	18.3		84.6	8.2	
LOS	E	E		D	F		F	B		F	A	
Approach Delay		60.8			84.7			20.7			10.7	
Approach LOS		E			F			C			B	
Queue Length 50th (ft)	56	35		16	94		53	507		71	185	
Queue Length 95th (ft)	101	74		41	158		102	649		m77	m222	
Internal Link Dist (ft)		907			1370			802			962	
Turn Bay Length (ft)	55			95			365			370		
Base Capacity (vph)	216	207		225	163		111	2383		180	2421	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.30	0.17		0.08	0.56		0.46	0.64		0.36	0.79	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 46.4 (29%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 18.4 Intersection LOS: B
Intersection Capacity Utilization 71.6% ICU Level of Service C
Analysis Period (min) 15

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

Splits and Phases: 2: IL 59 & Royal Worlington Drive

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	21	0	1551	1877	15
Future Vol, veh/h	0	21	0	1551	1877	15
Conflicting Peds, #/hr	0	0	3	0	0	3
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	2	0
Mvmt Flow	0	22	0	1650	1997	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1010	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	241	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	240	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	240	-	-
HCM Lane V/C Ratio	-	0.093	-	-
HCM Control Delay (s)	-	21.5	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	0	14	2	0	3	23	1536	3	5	1864	29
Future Vol, veh/h	12	0	14	2	0	3	23	1536	3	5	1864	29
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	70	-	-	150	-	-	200	-	-	200	-	200
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	0	2	0	2	2	2	0	2	2	2	2	0
Mvmt Flow	13	0	15	2	0	3	24	1634	3	5	1983	31

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2858	3678	992	2686	3708	819	2014	0	0	1637	0	0
Stage 1	1993	1993	-	1684	1684	-	-	-	-	-	-	-
Stage 2	865	1685	-	1002	2024	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.54	6.9	7.54	6.54	6.94	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.02	3.3	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 8	5	248	10	4	319	287	-	-	392	-	-
Stage 1	64	104	-	98	149	-	-	-	-	-	-	-
Stage 2	319	149	-	260	100	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 7	5	248	9	4	319	287	-	-	392	-	-
Mov Cap-2 Maneuver	46	55	-	61	46	-	-	-	-	-	-	-
Stage 1	59	103	-	90	136	-	-	-	-	-	-	-
Stage 2	289	136	-	241	99	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	62.2	36.3	0.3	0
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	287	-	-	46	248	61	319	392	-	-
HCM Lane V/C Ratio	0.085	-	-	0.278	0.06	0.036	0.01	0.014	-	-
HCM Control Delay (s)	18.7	-	-	111	20.4	66.2	16.4	14.3	-	-
HCM Lane LOS	C	-	-	F	C	F	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.9	0.2	0.1	0	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↰	↱
Traffic Vol, veh/h	13	244	0	2	302	7	2	0	3	13	0	17
Future Vol, veh/h	13	244	0	2	302	7	2	0	3	13	0	17
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	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	100	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	14	262	0	2	325	8	2	0	3	14	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	262	0	0	632	629	262	627	625	331
Stage 1	-	-	-	-	-	-	290	290	-	335	335	-
Stage 2	-	-	-	-	-	-	342	339	-	292	290	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
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	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1236	-	-	1314	-	-	396	402	782	399	404	715
Stage 1	-	-	-	-	-	-	722	676	-	683	646	-
Stage 2	-	-	-	-	-	-	677	643	-	720	676	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1234	-	-	1314	-	-	381	395	782	392	397	714
Mov Cap-2 Maneuver	-	-	-	-	-	-	381	395	-	392	397	-
Stage 1	-	-	-	-	-	-	713	667	-	673	643	-
Stage 2	-	-	-	-	-	-	658	640	-	708	667	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0	11.6	12.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	550	1234	-	-	1314	-	-	392	714
HCM Lane V/C Ratio	0.01	0.011	-	-	0.002	-	-	0.036	0.026
HCM Control Delay (s)	11.6	8	0	-	7.7	0	-	14.5	10.2
HCM Lane LOS	B	A	A	-	A	A	-	B	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1	0.1

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	16	220	24	10	266	12	31	5	5	15	5	14
Future Vol, veh/h	16	220	24	10	266	12	31	5	5	15	5	14
Conflicting Peds, #/hr	2	0	0	0	0	2	3	0	8	8	0	3
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	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	2	0	0	20	20	0	20	0
Mvmt Flow	17	234	26	11	283	13	33	5	5	16	5	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	298	0	0	260	0	0	606	601	255	608	608	295
Stage 1	-	-	-	-	-	-	281	281	-	314	314	-
Stage 2	-	-	-	-	-	-	325	320	-	294	294	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.7	6.4	7.1	6.7	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.7	-	6.1	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.7	-	6.1	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.18	3.48	3.5	4.18	3.3
Pot Cap-1 Maneuver	1275	-	-	1316	-	-	412	391	742	411	387	749
Stage 1	-	-	-	-	-	-	730	647	-	701	625	-
Stage 2	-	-	-	-	-	-	692	621	-	719	638	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1273	-	-	1316	-	-	390	380	734	391	376	745
Mov Cap-2 Maneuver	-	-	-	-	-	-	390	380	-	391	376	-
Stage 1	-	-	-	-	-	-	718	637	-	688	618	-
Stage 2	-	-	-	-	-	-	663	614	-	689	628	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.3	14.8	13.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	412	1273	-	-	1316	-	-	483
HCM Lane V/C Ratio	0.106	0.013	-	-	0.008	-	-	0.075
HCM Control Delay (s)	14.8	7.9	0	-	7.8	0	-	13.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.2