DATA CENTER DEVELOPMENT

Traffic Impact Study

Joliet, Illinois

June 2025

Prepared for:

HW Technology
Park Development, LLC

Kimley»Horn

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EXECUTIVE SUMMARY

Kimley-Horn and Associates, Inc. (Kimley-Horn) was retained by HW Technology Park Development, LLC to perform a traffic impact study for a data center development proposed south of Schweitzer Road from west of Rowell Road to Ridge Road in Joliet, Illinois. The development would include 24 buildings totaling approximately 6,936,000 square feet. With the proposed data center development, Bernhard Road west of Ridge Road would be vacated. Additionally, Millsdale Road would be extended approximately 2,600 feet east to Rowell Road.

Per Illinois Department of Transportation (IDOT) standards, existing and future traffic conditions were evaluated for key intersections providing access to the development. For purposes of this analysis, Year 2032 conditions were evaluated. To assess the potential impact on the area roadway network, site-generated trips were established and added to future background traffic projections. Traffic estimated for approved development in the area was also added to the area roadway network to develop Year 2032 no-build traffic projections.

The analysis of future conditions considers improvements planned by others in the study area. Identified in the *Third Coast Intermodal Hub (TCIH) Traffic Impact Study* prepared by Kimley-Horn (dated August 2023, revised February 2024), the intersection of IL 53/Millsdale Road is planned to be signalized in Year 2032; and therefore, a signal was assumed to be installed by others for the analysis of future conditions.

Based on a review of future conditions, site-generated traffic is not expected to materially impact the study intersections. As the site plan is further refined, minor-leg stop control should be posted for outbound traffic at the site access driveways. The study results are discussed in more detail in the *Recommendations & Conclusions* section of this report.

1. INTRODUCTION

Kimley-Horn was retained by HW Technology Park Development, LLC to conduct a traffic impact study (TIS) for a proposed data center campus in Joliet, Illinois. The data center would include 24 buildings totaling approximately 6,936,000 square feet. For purposes of this analysis, the development was assumed to be completed in 2027. An aerial view of the study location and surrounding roadway network is presented in **Exhibit 1.**

For purposes of this analysis, the following site access configuration was assumed:

- Rowell Road: 18 buildings totaling 5,202,000 square feet; and
- Ridge Road: 6 buildings totaling 1,734,000 square feet.

With the proposed development, Bernhard Road west of Ridge Road would be vacated. Millsdale Road would be extended east to Rowell Road. A copy of the conceptual site plan is included in the appendix.

As part of this study, the existing roadway network was analyzed to determine the current operations at the study intersections. To assess the potential impact on the area roadway network, site-generated trips were established and added to future background traffic projections. Background traffic projections reflect traffic estimated for approved area development in addition to ambient traffic growth obtained from the Chicago Metropolitan Agency for Planning (CMAP).

This report presents and documents data collection, summarizes the evaluation of the existing and projected future traffic conditions on the surrounding roadways, and identifies recommendations, as appropriate, to address the potential impact of site-generated traffic on the adjacent roadway network.

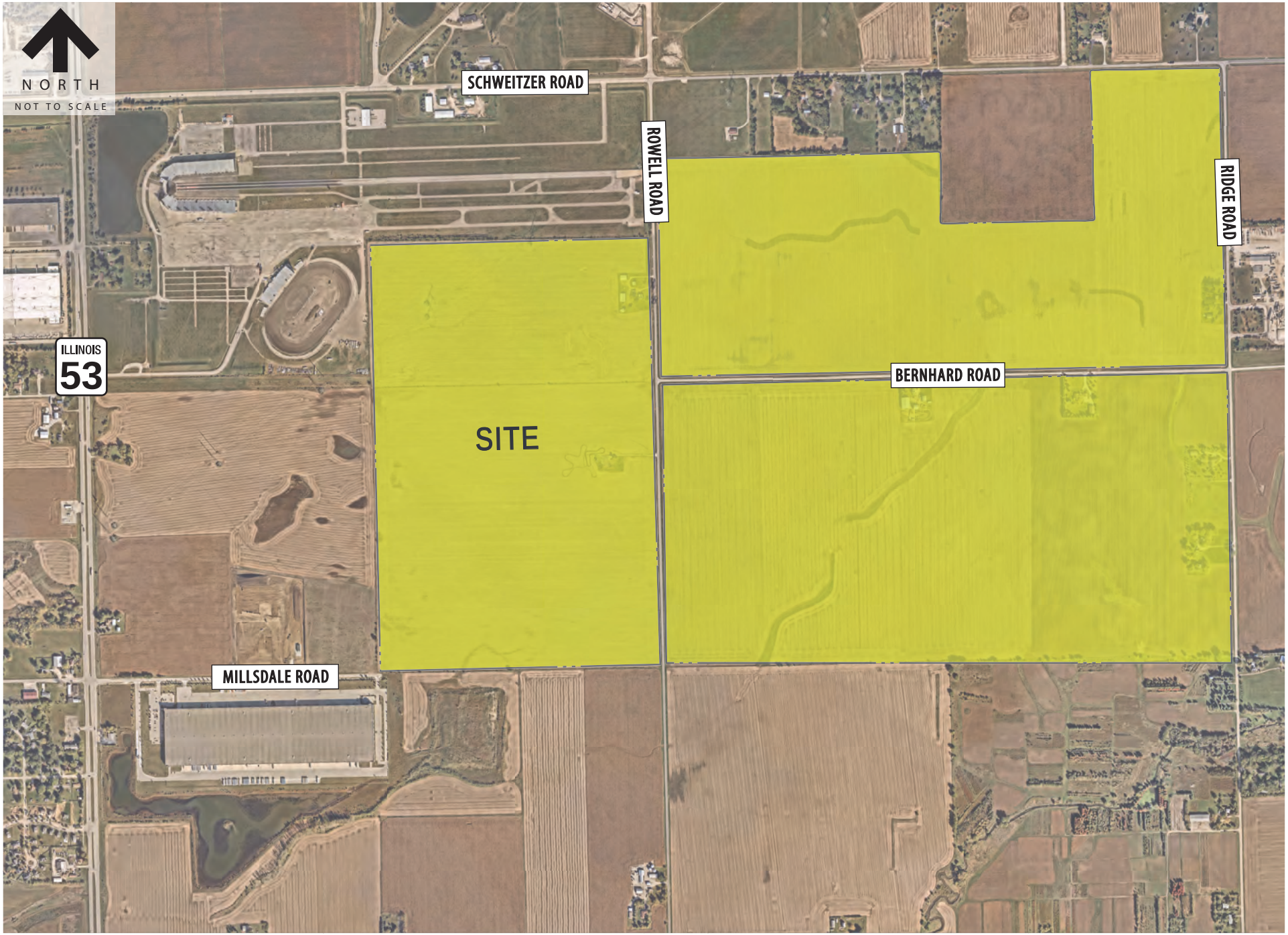

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EXHIBIT 1

SITE LOCATION MAP

2. EXISTING CONDITIONS

Kimley-Horn conducted a review of the subject site including existing land uses in the surrounding area, the adjacent street system, current traffic volumes and operating conditions, lane configurations and traffic controls at nearby intersections, and other key roadway characteristics. This section of the report details information on the existing conditions.

Area Land Uses & Connectivity

The subject property is currently undeveloped agricultural land. The Dirt Oval 66 racecourse is located northwest of the site. The Chicago Speedway is located north of the site. The area west of IL 53 is predominantly industrial development, including the CenterPoint Intermodal Center, Union Pacific Railroad-Global IV intermodal terminal, and NorthPoint Third Coast Intermodal Hub. The area to the southeast of the site is residential. Undeveloped agricultural land is located immediately east, south, and west of the site.

Regional access is provided via Interstate 80 (I-80) located approximately 5 miles north of the site. Interstate 80 provides east-west access across the northern portion of the state of Illinois. A full interchange is provided at IL 53. IL 53, located approximately one-half mile west of the site, provides north-south regional activity in northeast Illinois. US 52, located approximately one and one-third miles east of the site, provides regional northwest-southeast connectivity.

Existing Roadway Characteristics

Illinois Route 53 (IL 53) is a north-south divided roadway located approximately one-half mile west of the site. The Illinois Department of Transportation (IDOT) classifies IL 53 as a Strategic Regional Arterial (SRA) roadway. The SRA system was established by IDOT to promote mobility on key routes throughout the Chicago area by applying various strategies such as access control and limited signalization. At its unsignalized intersection with Schweitzer Road, IL 53 operates under a free-flow condition and provides a shared left/through lane and a shared through/right lane on the south leg; on the north leg, IL 53 provides a dedicated left-turn lane, one through lane, and a shared through/right-turn lane. At its unsignalized intersection with Millsdale Road, IL 53 operates under a free-flow condition and provides a dedicated left-turn lane, two through lanes, and a dedicated right-turn lane on the north and south legs. South of Schweitzer Road, IL 53 has an annual average daily traffic (AADT) volume of 15,800 vehicles per day (vpd) (2023). North of Schweitzer Road, IL 53 has an AADT volume of 21,600 vpd (2023). The posted speed limit is 55 miles per hour (mph).

Schweitzer Road is an east-west roadway located along the northern boundary of the site. Schweitzer Road provides two lanes in each direction between IL 53 and Rowell Road. East of Rowell Road, Schweitzer Road provides one travel lane in each direction. At its unsignalized intersection with IL 53, Schweitzer Road operates under minor-leg stop-control and provides a single shared lane on the west leg; on the east leg, Schweitzer Road provides a shared left-turn/through lane and a shared through/right-turn lane. Based on field observations, the shared through/right-turn lane was used as a de facto right-turn lane; and therefore, for purposes of the analysis, the east leg was assumed to provide a shared left-turn/through lane and dedicated right-turn lane. At its unsignalized intersection with Rowell Road, Schweitzer Road operates under a free-flow condition and provides a shared left-turn/through lane and a dedicated right-turn lane on both legs. At its unsignalized T-

intersection with Ridge Road, Schweitzer Road operates under a free-flow condition and provides a single shared lane on each leg. According to IDOT, Schweizer Road is classified as a Local Road under the jurisdiction of the City of Joliet. West of IL 53, Schweitzer Road has an AADT volume of 200 vpd (2023). West of US 52, Schweitzer Road has an AADT volume of 450 vpd (2016). The posted speed limit on Schweitzer Road is 45 mph.

Millsdale Road is an east-west roadway located southwest of the site. Millsdale Road provides one lane of travel in each direction. At its unsignalized intersection with IL 53, Millsdale Road operates under minor-leg stop control and provides a single shared lane in each direction. IDOT classifies Millsdale Road as a Local Road under the jurisdiction of the City of Joliet. West of IL 53, Millsdale Road has an AADT volume of 5,000 vpd (2023). The posted speed limit is 35 mph.

Rowell Road is a north-south roadway. Classified by IDOT as a Local Road, Rowell Road provides a single lane of travel in each direction. At its unsignalized intersection with Schweitzer Road, Rowell Road operates under minor-leg stop control and provides a single shared lane on each leg. The north leg of the intersection is a gated access drive to Chicagoland Speedway. For purposes of this analysis, the intersection of Rowell Road/Schweitzer Road was evaluated as a T-intersection due to the gated access drive, which is closed under typical weekday conditions. According to IDOT, Rowell Road is under the jurisdiction of Jackson Township. There is no posted speed limit, and so a speed limit of 45 mph was assumed.

Bernhard Road is an east-west roadway that extends east from Rowell Road to Cherry Hill Road. In the site vicinity, Bernhard Road provides a single travel lane in each direction. IDOT classifies Bernhard Road as a Local Road under the jurisdiction of Jackson Township. At its unsignalized intersection with Ridge Road, Bernhard Road operates under minor-leg stop control and provides a single shared lane in each direction. At its unsignalized T-intersection with Rowell Road, Bernhard Road operates under minor-leg stop control and provides a single shared lane on the east leg. East of Rowell Road, Bernhard Road has an AADT volume of 20 vpd (2016). The posted speed limit is 40 mph.

Ridge Road is a north-south roadway located along the eastern boundary of the site, extending from Schweitzer Road to Hoff Road. Classified as a Local Road, Ridge Road is under the jurisdiction of Jackson Township. Ridge Road provides one lane of travel in each direction. At its unsignalized T-intersection with Schweitzer Road, Ridge Road operates under minor-leg stop-control and provides a single shared lane. At its unsignalized intersection with Bernhard Road, Ridge Road operates under a free-flow condition and provides a single shared lane on both legs. Near its intersection with Bernhard Road, Ridge Road has an AADT volume of 600 vpd (2023). The posted speed limit is 45 mph.

Traffic Count Data

Turning movement count data was collected in December 2024 at the following intersections. The counts were conducted on a typical weekday from 6:00 to 9:00AM and 3:00 to 6:00PM. These periods coincide with the typical peak traffic periods of the surrounding roadway network.

- IL 53 / Schweitzer Road
- IL 53 / Millsdale Road
- Rowell Road / Schweitzer Road
- Ridge Road / Schweitzer Road
- Ridge Road / Bernhard Road

The traffic count data indicates that weekday peak traffic volumes occur within the study area from 6:00 to 7:00AM and 3:15 to 4:15PM.

For purposes of this analysis, the existing peak hour volumes were rounded to the nearest multiple of five and balanced between intersections with two exceptions. Due to commercial driveways along IL 53 and Ridge Road, existing traffic volumes were not balanced between the intersections of IL 53/Schweitzer Road and IL 53/Millsdale Road, and Ridge Road/Schweitzer Road and Ridge Road/Bernhard Road. Existing peak traffic volumes are presented in **Exhibit 2.** A summary of the count data is provided in the appendix.

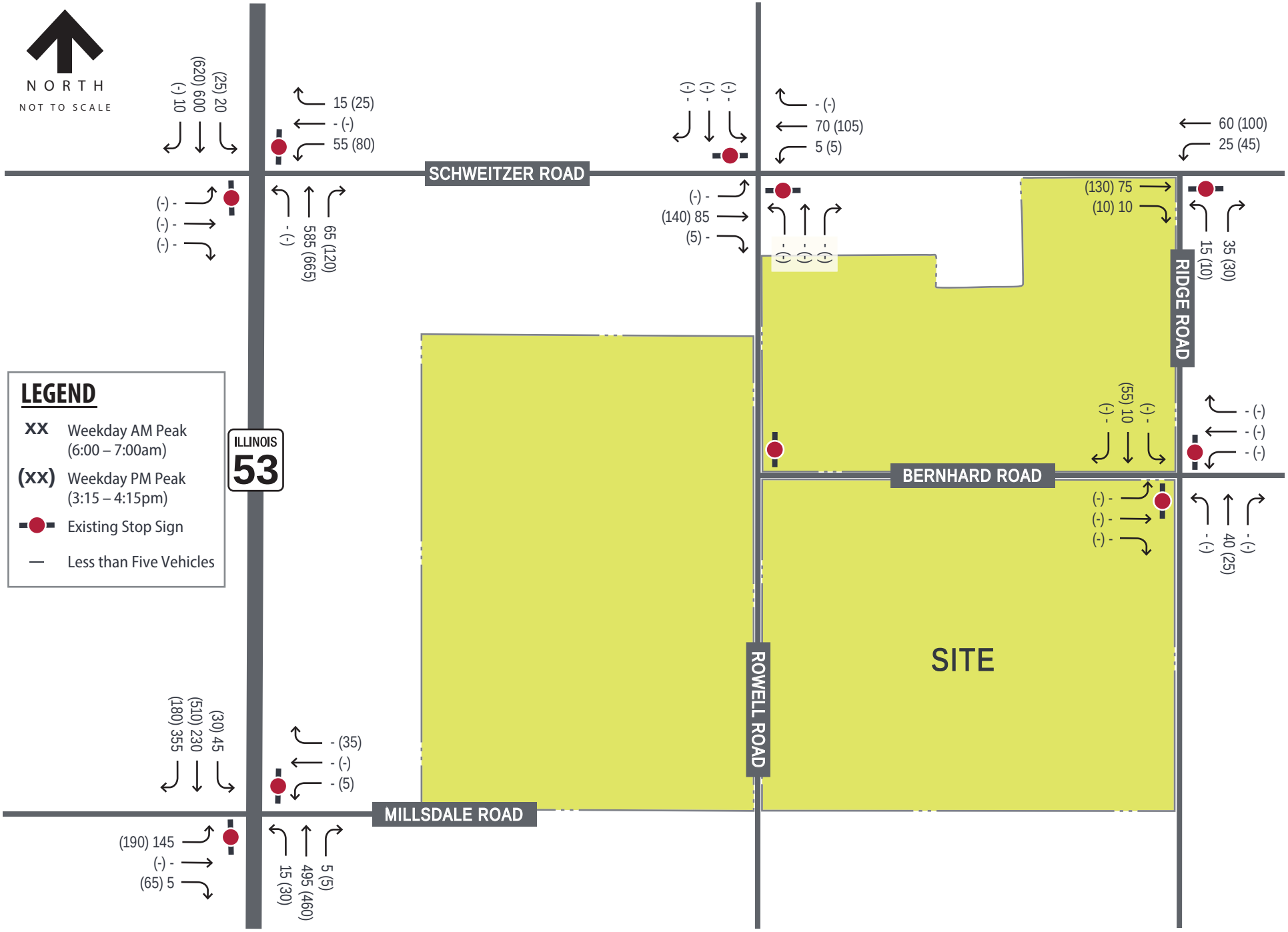

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EXHIBIT 2

EXISTING (2024) TRAFFIC VOLUMES

Existing Capacity Analysis

Capacity analyses were conducted to assess existing and future build operating conditions at the study intersections during the weekday and Saturday midday peak hours. The capacity of an intersection quantifies its ability to accommodate traffic volumes and is expressed in terms of level of service (LOS), measured in average delay per vehicle. LOS grades range from A to F, with LOS A as the highest (best traffic flow and least delay), LOS E as saturated or at-capacity conditions, and LOS F as the lowest (oversaturated) conditions. The lowest LOS grade typically accepted by jurisdictional agencies in Northeastern Illinois is LOS D. For through traffic on an SRA route such as IL 53, the lowest LOS grade is LOS C.

The LOS grades shown below, which are provided in the Transportation Research Board's Highway Capacity Manual (HCM), quantify and categorize the driver's discomfort, frustration, fuel consumption, and travel times experienced as a result of intersection control and the resulting traffic queuing. A detailed description of each LOS rating can be found in **Table 2.1**.

Table 2.1 Level of Service Grading Descriptions[1]

Level of Service	Description
A	Minimal control delay; traffic operates at primarily free-flow conditions; unimpeded movement within traffic stream.
B	Minor control delay at signalized intersections; traffic operates at a fairly unimpeded level with slightly restricted movement within traffic stream.
C	Moderate control delay; movement within traffic stream more restricted than at LOS B; formation of queues contributes to lower average travel speeds.
D	Considerable control delay that may be substantially increased by small increases in flow; average travel speeds continue to decrease.
E	High control delay; average travel speed no more than 33 percent of free flow speed.
F	Extremely high control delay; extensive queuing and high volumes create exceedingly restricted traffic flow.

[1]Highway Capacity Manual, 7th Edition.

The range of control delay for each rating (as detailed in the HCM) is shown in **Table 2.2**.

Table 2.2 Level of Service Grading Criteria

Level of Service[1]	Average Control Delay (s/veh) at:	
	Unsignalized Intersections	Signalized Intersections
A	0 – 10	0 – 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F[2]	> 50	> 80

[1]Highway Capacity Manual, 7th Edition

[2]All movements with a Volume to Capacity (v/C) ratio greater than 1 receive a rating of LOS F.

Based on these standards, the results of the capacity analysis for existing conditions are summarized in **Table 2.3**. In this table, operation on each approach is quantified according to the average delay per vehicle and the corresponding level of service. The results are based on Synchro's HCM 7th Edition. Copies of the Synchro reports are provided in the appendix.

Table 2.3 Existing (2024) Levels of Service

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
IL 53 / Schweitzer Road △				
Eastbound	22	C	25	D
Westbound	28	D	48	E
Northbound (Left)	9	A	9	A
Southbound (Left)	9	A	10+	B
IL 53 / Millsdale Road △				
Eastbound	22	C	>120	F
Westbound	18	C	13	B
Northbound (Left)	9	A	10-	A
Southbound (Left)	9	A	9	A
Rowell Road / Schweitzer Road △				
Eastbound (Left)	7	A	7	A
Westbound (Left)	7	A	8	A
Northbound	9	A	10+	B
Southbound	9	A	10-	A
Ridge Road / Schweitzer Road △				
Westbound (Left)	8	A	8	A
Northbound	10-	A	10-	A
Ridge Road / Bernhard Road △				
Eastbound	9	A	9	A
Westbound	9	A	9	A
Northbound (Left)	7	A	7	A
Southbound (Left)	7	A	7	A

△ - Minor-Leg Stop-Controlled Intersection

Under existing conditions, all movements and approaches operate with acceptable delay (LOS D or better) with two exceptions noted in the evening peak hour. At the intersection of IL 53/Schweitzer Road, the westbound approach operates at LOS E. This delay is largely attributable to left-turn movements to southbound IL 53, which operates at LOS F. At the intersection of IL 53/Millsdale Road, the eastbound approach operates at LOS F. The estimated delay is not uncommon for minor-leg stop-controlled intersections with heavily traveled arterials such as IL 53.

For each intersection, the 95th percentile queues are accommodated within the existing storage lanes. This is consistent with field observations. At the intersections of IL 53/Schweitzer Road and IL 53/Millsdale Road, estimated queues on the minor-leg approaches are approximately 75 feet (3 vehicles) or less during the evening peak hour.

3. DEVELOPMENT CHARACTERISTICS

This section of the report outlines the proposed development plan and summarizes site-specific traffic characteristics.

Development Characteristics

The proposed data center development includes 24 buildings, totaling approximately 6,936,000 square feet. For purposes of this analysis, the following site access configuration was assumed:

- Rowell Road Access: 18 buildings totaling 5,202,000 square feet; and
- Ridge Road Access: 6 buildings totaling 1,734,000 square feet.

With the proposed development, Bernhard Road west of Ridge Road would be vacated. Additionally, Millsdale Road would be extended approximately 2,600 feet east to Rowell Road. A copy of the site plan is provided in the appendix.

Trip Generation

In order to calculate trips generated by the proposed development, data was referenced from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. Trip generation rates for the ITE Land Use Code (LUC) corresponding to the proposed use are shown in **Table 3.1**. A copy of the ITE data is provided in the appendix.

Table 3.1 ITE Trip Generation Data

ITE Land Use	Unit	Weekday		
		Daily	AM Peak Hour	PM Peak Hour
Data Center (LUC 160)	Per 1,000 SF	T = 0.99X 50% in/50% out	T = 0.13X-5.63 55% in/45% out	T = 0.11X-5.65 30% in/70% out

T = number of trips X = 1,000 sq. ft.

The site-generated trips generated during the peak hours were rounded to the nearest multiple of five for the purposes of this analysis, and daily trips were rounded to the nearest multiple of ten. Projected site traffic volumes are summarized in **Table 3.2**.

Table 3.2 Site-Generated Traffic Projections

Land Use	Size	Daily	Weekday[1]					
			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Data Center (LUC 160)	6,936,000 SF	6,870	495	405	900	225	530	755

[1] In/Out volumes are rounded to the nearest multiple of five. For rounding purposes, the total volumes are a sum of in and out trips.

Directional Distribution

The estimated distribution of site-generated traffic on the surrounding roadway network as it approaches and departs the site is a function of several variables, such as the nature of surrounding land uses, prevailing traffic volumes/patterns, characteristics of the street system, and the ease with which motorists can travel over various sections of that system. Additionally, information from the *Third Coast Intermodal Hub (TCIH) Traffic Impact Study* prepared by Kimley-Horn (dated August 2023, revised February 2024) was used to corroborate the directional distribution. The anticipated directional distribution is outlined in **Table 3.3**.

Table 3.3 Estimated Trip Distribution

Traveling to/from	Estimated Trip Distribution
North on IL 53	50%
South on IL 53	40%
East on Schweitzer Road	10%
Total	100%

Based on the site development plan, it was assumed 18 buildings would be accessed via Rowell Road and 6 buildings via Ridge Road. Internal site access would be provided. Based on a review of existing traffic volumes on IL 53 and trip navigation services, vehicles traveling to/from the south are expected to use Millsdale Road (current trip navigation services direct vehicles to Manhattan Road). For purposes of this analysis, it was assumed that 80 percent of vehicles traveling to/from the south would use Millsdale Road and 20 percent would travel via Schweitzer Road. For vehicles traveling to/from the north, all vehicles traveling to the 6 buildings along Rowell Road were assumed to access the site via Schweitzer Road; vehicles traveling to/from the 12 buildings along Rowell Road, south of Bernhard Road, were assumed to access the site via Millsdale Road. Based on these assumptions, the site trip assignment is illustrated in **Exhibit 3.**

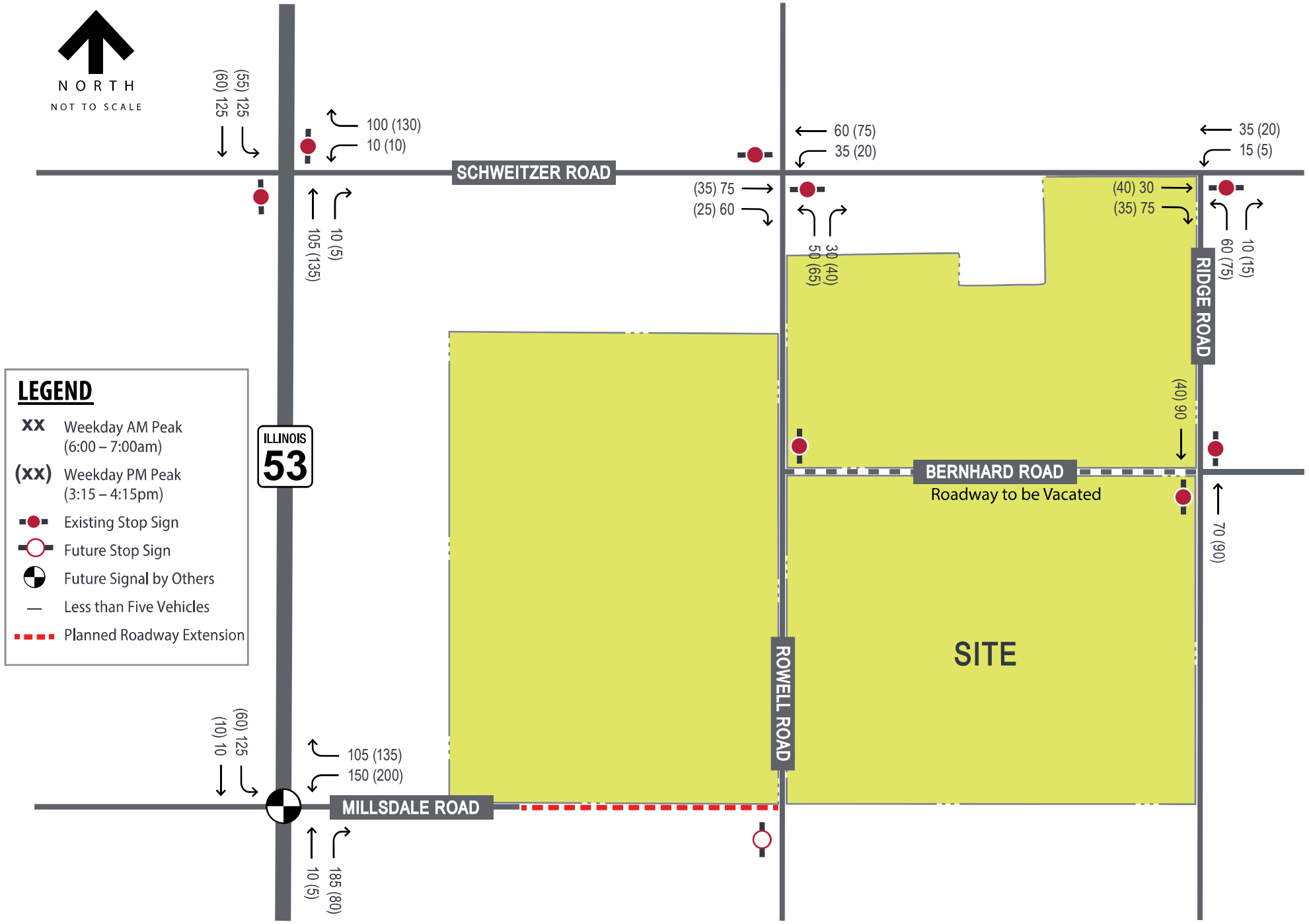

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EXHIBIT 3

SITE TRIP ASSIGNMENT

4. FUTURE CONDITIONS

This section of the report develops future traffic projections for analysis. For purposes of this analysis, the proposed development was assumed to be completed by Year 2027; and therefore, Kimley-Horn evaluated future traffic conditions for a Year 2032 design horizon (typical IDOT build-plus-five conditions).

Future (2032) Background Traffic Projections

Background traffic growth estimates were developed using data from the Chicago Metropolitan Agency for Planning (CMAP). An official letter documenting the projected Year 2050 traffic volume on the study roadways is provided in the appendix. A summary of the growth rates is presented in **Table 4.1**.

Table 4.1 CMAP Projected Growth Rates

Roadway Segment	CMAP Projected Annual Growth Rate
IL 53, north of Laraway Road	0.75%
IL 53, south of Laraway Road	1.22%
Laraway Road, east of IL 53	0.52%
Laraway Road, west of IL 53	1.04%
Millsdale Road, west of IL 53	1.03%
Schweitzer Road, west of IL 53	1.05%
Bernhard Road, east of Rowell Road	1.51%
Network Average	1.02%

As shown in the table, an average growth rate of one percent was applied to existing traffic volumes (Exhibit 2) for a period of eight years to reflect traffic growth between existing Year 2024 and future Year 2032.

Based on input from CMAP, and for purposes of a conservative analysis, site-generated traffic estimated for the NorthPoint Third Coast Intermodal Hub was added to the background traffic projections. These traffic projections were obtained from *Third Coast Intermodal Hub (TCIH) Traffic Impact Study* prepared by Kimley-Horn (submitted August 2023, revised February 2024). Traffic projections for the planned area development is presented in **Exhibit 4**.

Traffic projections for the Future (2032) No-Build scenario were calculated by adding the area development traffic (Exhibit 4) to the background traffic projections derived from CMAP data. Traffic projections for the Future (2032) No-Build scenario are illustrated in **Exhibit 5**.

Future (2032) Build Traffic Projections

Traffic projections for the Future (2032) Build scenario were calculated by adding the total site-generated trips (Exhibit 3) to the no-build traffic projections (Exhibit 5). Traffic projections for the Future (2032) Build scenario are illustrated in **Exhibit 6**.

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EXHIBIT 4

SITE TRIP ASSIGNMENT - OFFSITE DEVELOPMENT

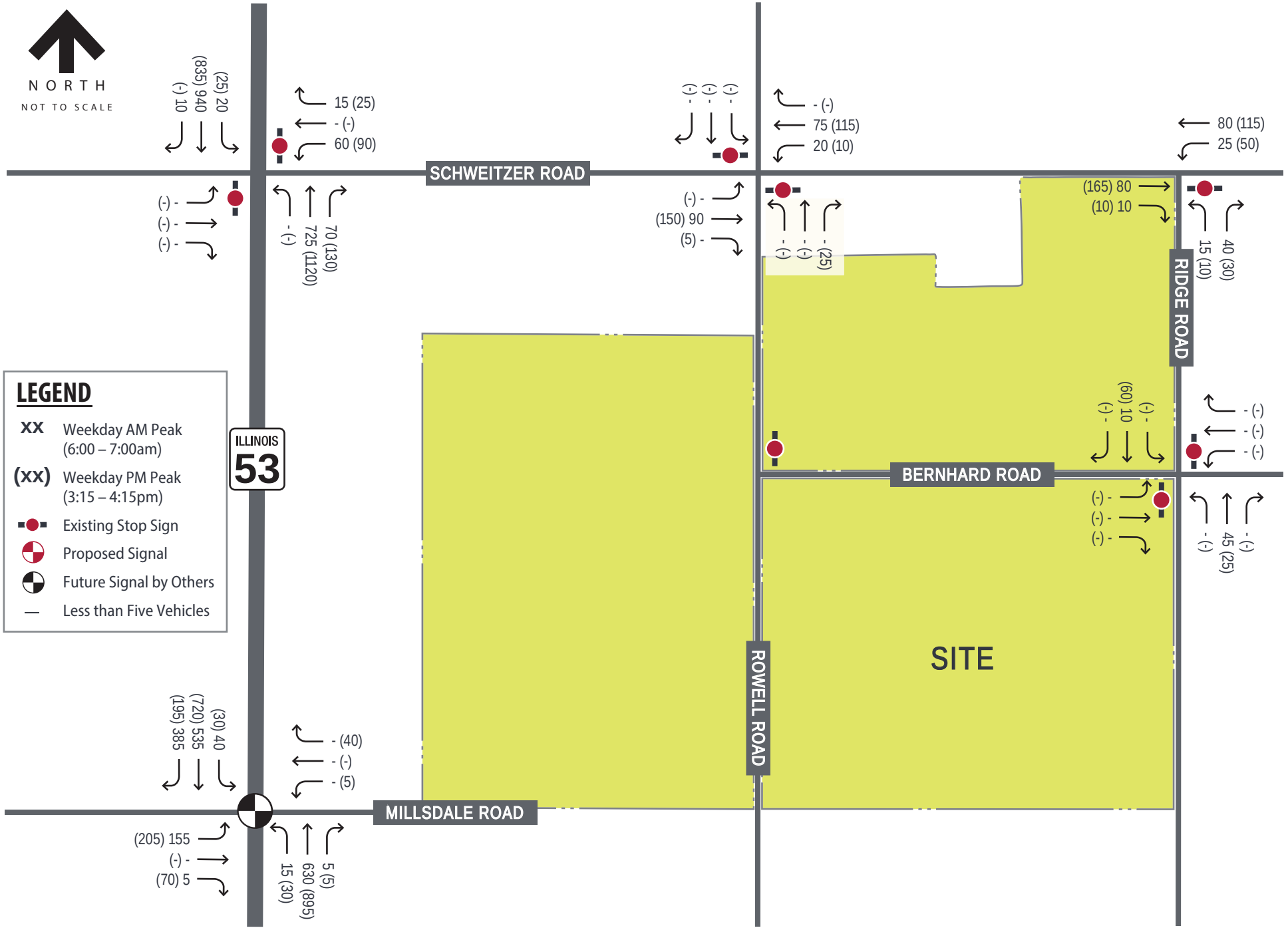

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EXHIBIT 5

FUTURE (2032) NO-BUILD TRAFFIC PROJECTIONS

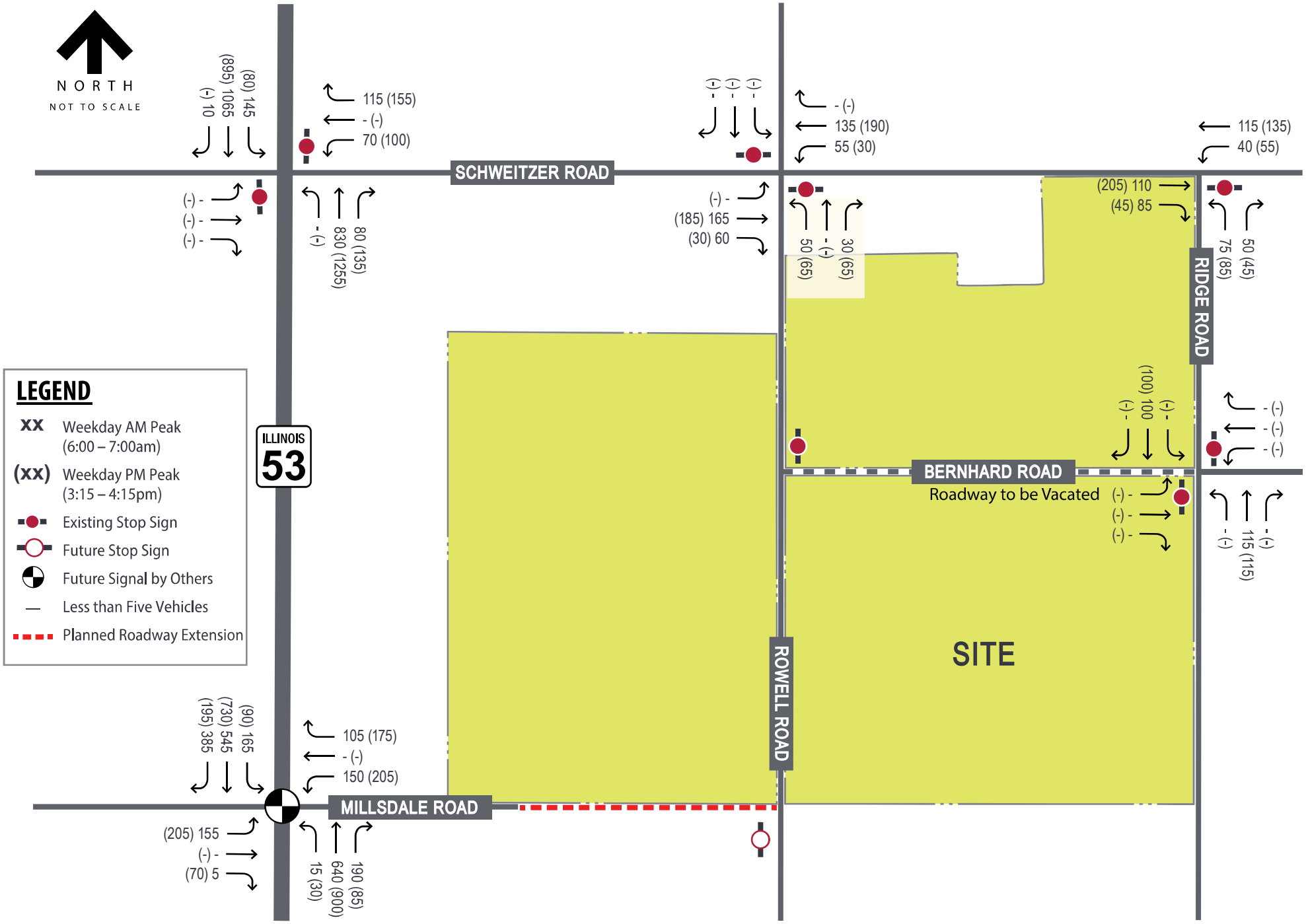

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EXHIBIT 6

FUTURE (2032) BUILD TRAFFIC PROJECTIONS

Future Geometry

The following provides a summary of future geometry and traffic control at the study intersections. A review of turn lane warrant criteria was also completed to assess potential offsite improvements to accommodate site-generated traffic.

Planned Improvements

According to *Third Coast Intermodal Hub (TCIH) Traffic Impact Study* prepared by Kimley-Horn (submitted August 2023, revised February 2024), the intersection of IL 53/Millsdale Road is planned to be signalized by Year 2032. In addition, an eastbound left-turn lane will be installed at the intersection. The west leg was assumed to provide a dedicated left-turn lane and shared through/right-turn lane. These planned improvements were included in the analysis of Year 2032 no-build and build conditions. For purposes of the analysis, signal timings for the intersection of IL 53/Millsdale Road were obtained from the *Brandon Road Business Park Traffic Impact Analysis* prepared by TranSystems (published March 2019); a copy of the signal timings are included in the appendix.

The planned NorthPoint Third Coast Intermodal Hub connection to Millsdale Road west of the Union Pacific Railroad (UPRR) mainline will facilitate truck access to the NorthPoint development. Bridges will be constructed over the UPRR mainline, over IL 53, and over Manhattan Road to facilitate car and truck access to the NorthPoint development. These bridges are not expected to impact traffic distribution assumptions for the proposed data center development. Further, regional improvements, including the planned opening of the Houbolt Road toll bridge and the potential closure of the south leg of the intersection of CenterPoint Way/Laraway Road to truck traffic, were assumed to be captured in the Year 2050 traffic projections provided by CMAP. These improvements are not expected to materially impact site-generated traffic distribution patterns.

Turn Lane Warrants

Based on the projected traffic volumes and guidance outlined in the IDOT *Bureau of Design and Environment* (*BDE) Manual*, the following turn lane warrants were evaluated at the study intersections.

- **IL 53 / Schweitzer Road:** Based on IDOT *BDE Manual* guidelines for an unsignalized intersection on a four-lane highway with a design speed of 60 mph (posted speed limit on IL 53 is 55 mph), existing and no-build traffic volumes satisfy criteria for installation of a northbound right-turn lane. However, there are no known plans for installation of this turn lane; and therefore, the turn lane was not included in the analysis of future conditions.
- **Rowell Road / Schweitzer Road:** IDOT *BDE Manual* guidelines for an unsignalized intersection on a two-lane roadway with a design speed of 50 mph (posted speed limit on Schweitzer Road is 45 mph) were referenced. Future build traffic projections (Exhibit 6) do not satisfy warrant criteria for installation of a westbound left-turn lane. An eastbound right-turn lane is currently provided on Schweitzer Road at Rowell Road. Therefore, existing lane geometry was assumed in the analysis of future conditions.
- **Ridge Road / Schweitzer Road:** A westbound left-turn lane and an eastbound right-turn lane were evaluated using IDOT criteria for an unsignalized intersection on a two-lane roadway with a design speed of 50 mph (posted speed limit on Schweitzer Road is 45 mph). Under the

build scenario, projected traffic volumes do not satisfy IDOT criteria for installation of an eastbound right-turn lane. Therefore, existing lane geometry was assumed in the analysis of future conditions.

Signal Warrant

In addition to the turn lane warrants, signal warrant analyses were performed, according to criteria set by the *Manual on Uniform Traffic Control Devices* (MUTCD), for future traffic projections at the intersection of IL 53/Schweitzer Road.

Signal warrant analyses were performed according to criteria set for Warrant 1 (Eight-Hour Warrant), Condition A (Minimum Vehicular Volume) and Condition B (Interruption of Continuous Traffic). Warrant 1 can be satisfied by meeting any one of these conditions: Condition A (Minimum Vehicular Volume), Condition B (Interruption of Continuous Traffic). The combined Condition A & B cannot be used if the major route is an SRA route such as IL 53. Typical IDOT practice allows a signal warrant to be evaluated by reducing peak hour volumes to 55 percent of their projected total to represent the minimum volume during a given eight-hour period. Minor-street right-turning volumes were also reduced at the study intersections in accordance with Pagone's Theorem, per IDOT requirements. These reduced volumes were compared to MUTCD criteria for signal warrant analysis. **Table 4.2** reports the signal warrant analyses conducted for traffic conditions.

Table 4.3 Summary of Signal Warrant Analyses – IL 53 / Schweitzer Road

Intersection / Scenario	Major Street	Higher-Volume Minor-Leg Approach	Meets Warrant?
MUTCD Criteria – IL 53 / Schweitzer Road			
Warrant 1A	600	200	--
Warrant 1B	900	150	--
Existing (2024)	787	47	No
Future (2032) No-Build	1,155	61	No
Future (2032) Build	1,301	98	No

As shown in Table 4.2, Future (2032) Build traffic projections do not satisfy the signal warrant criteria; and therefore, existing minor-leg stop control was assumed for IL 53/Schweitzer Road in the analysis of future conditions.

Future (2032) No-Build Capacity Analysis

Based on the traffic projections presented in Exhibit 5 and the improvements planned by others at the intersection of IL 53/Millsdale Road, capacity results were identified for the study intersections under Future (2032) No-Build conditions. The results of the capacity analysis are summarized in **Table 4.3**. Copies of the Synchro reports are provided in the appendix.

Table 4.3 Future (2032) No-Build Levels of Service

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
IL 53 / Schweitzer Road △				
Eastbound	39	E	58	F
Westbound	69	F	>120	F
Northbound (Left)	10+	B	10-	A
Southbound (Left)	10-	A	14	B
IL 53 / Millsdale Road ★				
Eastbound	19	C	21	C
Westbound	24	C	30	C
Northbound (Left)	14	B	17	B
Southbound (Left)	11	B	14	B
Intersection	*13*	*B*	*17*	*B*
Rowell Road / Schweitzer Road △				
Eastbound (Left)	7	A	8	A
Westbound (Left)	7	A	8	A
Northbound	10-	A	9	A
Southbound	10-	A	10+	B
Ridge Road / Schweitzer Road △				
Westbound (Left)	8	A	8	A
Northbound	10-	A	10+	B
Ridge Road / Bernhard Road △				
Eastbound	9	A	9	A
Westbound	9	A	9	A
Northbound (Left)	7	A	7	A
Southbound (Left)	7	A	7	A

★ - Signalized Intersection △ - Minor-Leg Stop-Controlled Intersection

With the addition of background traffic growth and traffic estimated for area development, all movements and approaches at the study intersections are projected to continue to operate at LOS C or better with exceptions noted at the intersection of IL 53/Schweitzer Road. In the morning peak hour, the eastbound and westbound approaches are projected to operate at LOS E and LOS F, respectively. In the evening peak hour, the eastbound and westbound approaches would operate at LOS F. Consistent with existing conditions, these delays are not uncommon for minor-leg streets at their intersection with heavily traveled arterial roadways such as IL 53.

With the installation of the signal planned by others at the intersection of IL 53/Millsdale Road, the eastbound and westbound approach would operate at LOS C, as compared to LOS F in existing conditions.

The 95th percentile queues would be accommodated within the existing and proposed storage lanes. At the intersection of IL 53/Schweitzer Road, the 95th percentile queues for the eastbound approach would be approximately 25 feet (one vehicle) or less during the peak hours. For the westbound shared left-turn/through lane, the projected 95th percentile queue is 75 feet (3 vehicles) in the morning peak hour and approximately 240 feet (10 vehicles) in the evening peak hour.

Future (2032) Build Capacity Analysis

Based on the traffic projections presented in Exhibit 6, capacity results were identified for the study intersections under Future (2032) Build conditions. Based on the limited background traffic on Rowell Road and Ridge Road, capacity analysis was not completed for the site access driveways. The site access driveways are expected to operate with limited delay and queues. The results of the capacity analysis are summarized in **Table 4.4**. Copies of the Synchro reports are provided in the appendix.

Table 4.4 Future (2032) Build Levels of Service

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
IL 53 / Schweitzer Road △				
Eastbound	115	F	>120	F
Westbound	>120	F	>120	F
Northbound (Left)	11	B	10	A
Southbound (Left)	12	B	17	C
IL 53 / Millsdale Road ★				
Eastbound	20-	B	24	C
Westbound	25	C	69	E
Northbound (Left)	17	B	20	B
Southbound (Left)	15	B	16	B
Intersection	*17*	*B*	*26*	*C*
Rowell Road / Schweitzer Road △				
Eastbound (Left)	8	A	8	A
Westbound (Left)	8	A	8	A
Northbound	12	B	12	B
Southbound	11	B	12	B
Ridge Road / Schweitzer Road △				
Westbound (Left)	8	A	8	A
Northbound	13	B	14	B
Ridge Road / Bernhard Road △				
Eastbound	10-	A	10-	A
Westbound	10-	A	10-	A
Northbound (Left)	7	A	7	A
Southbound (Left)	8	A	8	A

★ - Signalized Intersection △-Minor-Leg Stop-Controlled Intersection

With the addition of site-generated traffic and the installation of planned improvements, through movements on the IL 53 corridor would operate at LOS C or better, consistent with IDOT standards for SRA routes. Further, the study intersections would operate with acceptable delays and queues, with a few exceptions. At the intersection of IL 53/Schweitzer Road, the eastbound and westbound approaches would operate at LOS F during peak hours, similar to no-build conditions. At the intersection of IL 53/Millsdale Road, the westbound approach would operate at LOS E during the evening peak hour. The results of this analysis are considered conservative as RTOR movements were not included per IDOT standards. Consistent with existing and no-build conditions, the delay

projected on the minor-leg approaches is not uncommon at intersections with heavily traveled arterial roadways such as IL 53.

Projected 95th percentile queues would be accommodated within the existing and future storage lanes. At the intersection of IL 53/Schweitzer Road, the 95th percentile queues for the westbound shared left-turn/through lane are projected to increase by approximately three vehicles (75 feet) or less in the peak hours. At the intersection of IL 53/Millsdale Road, the 95th percentile queues for the westbound left-turn movement are approximately three vehicles (75 feet) in the morning peak hour and seven vehicles (175 feet) in the evening peak hour. These queues would not spillback to the existing driveway on the south side of Millsdale Road.

5. RECOMMENDATIONS & CONCLUSIONS

Based on Kimley-Horn's review of the proposed site plan and evaluation of existing and future traffic conditions, the study intersections are projected to adequately accommodate the proposed development. With the proposed development, Bernhard Road west of Ridge Road would be vacated. Additionally, Millsdale Road would be extended approximately 2,600 feet east to Rowell Road. Minor-leg stop-control should be posted for outbound traffic at each site access driveway.

Regardless of the final configuration of the intersection geometrics, several additional items should be taken into consideration when preparing site and roadway improvement plans for the subject development. As the site design progresses, care should be taken with landscaping, signage, and monumentation at the site access locations to ensure that adequate horizontal sight distance is maintained. If alterations to the site plan or land use should occur, changes to the analysis provided within this traffic impact study may be needed.

APPENDIX

Conceptual Site Plan

Traffic Count Data

Existing Year (2024) Capacity Reports

Data from ITE Trip Generation Manual, 11th Edition

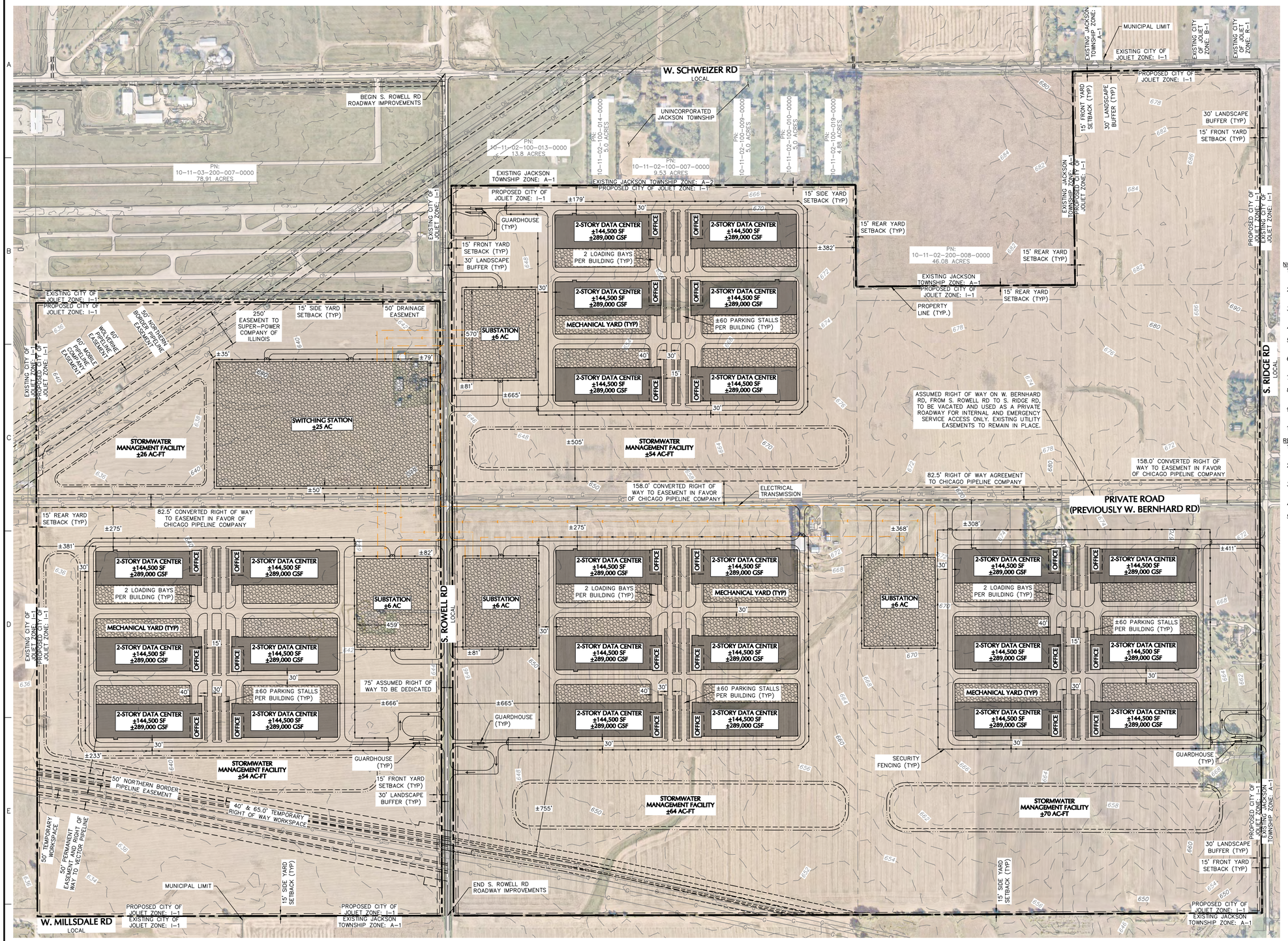
CMAP Year 2050 Traffic Projections

Signal Timings – *Brandon Road Business Park Traffic Impact Analysis*

Future Year (2032) No-Build Capacity Reports

Future Year (2032) Build Capacity Reports

CONCEPTUAL SITE PLAN



ZONING CHART - CITY OF JOLIET

EXISTING: JACKSON TOWNSHIP, WILL COUNTY, IL ZONE: A-1
PROPOSED: CITY OF JOLIET, WILL COUNTY, IL ZONE: I-1
REFERENCE: CITY OF JOLIET ZONING ORDINANCE (ADOPTED DECEMBER 5, 1968)

LOT 1 - WEST OF S. ROWELL RD, WILL COUNTY

ITEM	REQUIRED	PROPOSED	REFERENCE
LOT SIZE (ACRES)	NONE	±235	---
MINIMUM LOT FRONTAGE (FEET)	NONE	±1,310	---
MAXIMUM BUILDING HEIGHT (FEET)	120[1]	100	47-14.5
MAXIMUM BUILDING COVERAGE (%)	NONE	±10	---
MINIMUM OPEN SPACE	NONE	N/A	---
LANDSCAPE EASEMENT (FEET)	30	30	47-15E.12A
REQUIRED YARD (FEET)[2]			
FRONT	15	±666	47-14.4
SIDE		±233	
REAR		±381	

LOT 2 - EAST OF S. ROWELL RD, WILL COUNTY

ITEM	REQUIRED	PROPOSED	REFERENCE
LOT SIZE (ACRES)	NONE	±368	---
MINIMUM LOT FRONTAGE (FEET)	NONE	±6,030	---
MAXIMUM BUILDING HEIGHT (FEET)	120[1]	100	47-14.5
MAXIMUM BUILDING COVERAGE (%)	NONE	±16	---
MINIMUM OPEN SPACE	NONE	N/A	---
LANDSCAPE EASEMENT (FEET)	30	30	47-15E.12A
REQUIRED YARD (FEET)[2]			
FRONT	15	±411	47-14.4
SIDE		±179	
REAR		±382	

PARKING CHART (PER BUILDING)

EMPLOYEE/VISITOR PARKING	TBD[3]	57[4]	---
ACCESSIBLE PARKING	TBD[3]	3[4]	---
LOADING DOCK PARKING	6[5]	2	47-17.16

NOTES:

1. MAXIMUM BUILDING HEIGHT SHALL NOT EXCEED HORIZONTAL DISTANCE SET BACK FROM NEAREST RESIDENTIAL, R-B, OR B-1 DISTRICT, OR 120 FT, WHICHEVER IS LESS. 120 FEET CONTROLS.
2. WHEN ADJACENT TO/ACROSS A STREET OR UTILITY RIGHT-OF-WAY FROM RESIDENTIAL, R-1, B-1, OR B-2 DISTRICTS, THE MINIMUM FRONT, SIDE, AND READ YARDS SHALL BE 15 FEET.
3. EMPLOYEE/VISITOR PARKING REQUIREMENTS: 180 SF, 9 FT WIDE MINIMUM. 9 FT X 20 FT PROVIDED. ±29,000 GSF OFFICE SPACE, ±260,000 GSF DATA HALL & SUPPORT SPACE.
4. CURRENTLY PROPOSING 60 STALLS PER BUILDING WITH CAPACITY TO INCREASE TO 80 STALLS.
5. LOADING DOCK PARKING REQUIREMENTS: 5 LOADING SPACES UP TO 200,000 GSF, ONE ADDITIONAL FOR EACH 100,000 SF OVER 200,000. 6 LOADING DOCK PARKING STALLS REQUIRED PER BUILDING.
6. COORDINATES SHOWN HEREON ARE BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD83.
7. DRAFT CONCEPTUAL SITE LAYOUT FOR PLANNING PURPOSES ONLY.
8. DETAILED ANALYSIS OF EARTHWORK, OR THE NEED FOR RETAINING WALLS, HAS NOT BEEN PERFORMED. SITE LAYOUT SHOWN WILL REQUIRE ADJUSTMENT TO ACCOMMODATE TOPOGRAPHY.
9. BASE FILE INFORMATION SURVEY ENTITLED "ALTA/NSPS LAND TITLE SURVEY" DATED 09/17/2024 FROM JACOB & HEFNER ASSOCIATES.
10. APPROXIMATE UTILITY LOCATIONS OBTAINED FROM PUBLICLY AVAILABLE GIS DATA.

REQUESTS AND VARIANCES:

1. A VARIANCE WILL BE REQUIRED TO REDUCE THE NUMBER OF REQUIRED LOADING DOCK PARKING PER BUILDING FROM 6 TO 2.
2. A VARIANCE MAY BE REQUIRED DEPENDENT ON THE NUMBER OF PARKING STALLS REQUIRED PER BUILDING.
   2.1. DATA CENTER USE PARKING REQUIREMENTS CURRENTLY UNDEFINED.
3. A VARIANCE MAY BE REQUIRED TO ALLOW FOR 40' DRIVEWAY APRONS.
   3.1. I-1 LIGHT INDUSTRIAL MAXIMUM DRIVEWAY WIDTH CURRENTLY UNDEFINED (MAX. 30' FOR COMM.)
4. ±5,200 LINEAR FEET OF W. BERNHARD RD. IS INTENDED TO BE MADE PRIVATE.
5. ±5,400 LINEAR FEET OF S. ROWELL RD. TO BE IMPROVED.

Date	Description	No.
Revisions		

LANGAN
Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology, D.P.C.
200 W Madison Street, Suite 1920
Chicago, IL 60606
T: 312.547.7700 F: 312.547.7701 www.langan.com

Project
HILLWOOD PROJECT BERNHARD FARM
UNINCORPORATED WILL COUNTY
WILL COUNTY ILLINOIS

Drawing Title
CONCEPTUAL SITE PLAN

Project No. 541046701	Drawing No. CP-04
Date 02/24/2025	
Drawn By AAS	
Checked By TDO	Sheet 1 of 1

LANGAN
Project No. 541046701

TRAFFIC COUNT DATA

01_IL 53 & Schweitzer Road - TMC

Tue Dec 17, 2024
Full Length (6 AM-9 AM, 3 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258626, Location: 41.466312, -88.079616

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Schweitzer Rd						Schweitzer Rd						IL 53						IL 53						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2024-12-17 6:00AM	0	0	0	0	**0**	0	5	0	2	0	**7**	0	0	157	12	0	**169**	0	2	104	0	1	**107**	0	**283**
6:15AM	0	0	0	0	**0**	0	11	0	2	0	**13**	0	0	151	17	0	**168**	0	7	134	0	1	**142**	0	**323**
6:30AM	0	0	0	0	**0**	0	20	0	5	0	**25**	0	0	158	18	0	**176**	0	7	184	3	0	**194**	0	**395**
6:45AM	0	0	0	0	**0**	0	13	0	5	0	**18**	0	0	117	13	0	**130**	0	6	175	5	0	**186**	0	**334**
Hourly Total	0	0	0	0	**0**	0	49	0	14	0	**63**	0	0	583	60	0	**643**	0	22	597	8	2	**629**	0	**1335**
7:00AM	0	0	1	0	**1**	0	16	0	6	0	**22**	0	1	93	16	0	**110**	0	8	95	0	0	**103**	0	**236**
7:15AM	0	0	0	0	**0**	0	13	0	7	0	**20**	0	0	136	16	0	**152**	0	2	97	0	0	**99**	0	**271**
7:30AM	1	0	0	0	**1**	0	8	0	9	0	**17**	0	1	123	15	0	**139**	0	1	110	0	0	**111**	0	**268**
7:45AM	2	0	0	0	**2**	0	11	0	5	0	**16**	0	1	128	12	1	**142**	0	0	113	2	0	**115**	0	**275**
Hourly Total	3	0	1	0	**4**	0	48	0	27	0	**75**	0	3	480	59	1	**543**	0	11	415	2	0	**428**	0	**1050**
8:00AM	0	0	1	0	**1**	0	11	0	3	0	**14**	0	1	99	7	0	**107**	0	2	81	2	0	**85**	0	**207**
8:15AM	1	0	0	0	**1**	0	4	0	4	0	**8**	0	0	96	13	0	**109**	0	5	84	1	0	**90**	0	**208**
8:30AM	1	0	0	0	**1**	0	5	0	2	0	**7**	0	0	82	9	0	**91**	0	1	73	2	0	**76**	0	**175**
8:45AM	1	0	0	0	**1**	0	12	1	4	0	**17**	0	0	89	6	0	**95**	0	3	82	0	0	**85**	0	**198**
Hourly Total	3	0	1	0	**4**	0	32	1	13	0	**46**	0	1	366	35	0	**402**	0	11	320	5	0	**336**	0	**788**
3:00PM	1	0	1	0	**2**	0	5	0	4	0	**9**	0	0	143	12	0	**155**	0	7	143	0	0	**150**	0	**316**
3:15PM	0	0	1	0	**1**	0	24	0	7	0	**31**	0	1	140	23	0	**164**	0	5	144	0	0	**149**	0	**345**
3:30PM	0	1	0	0	**1**	0	28	0	2	0	**30**	0	0	160	16	0	**176**	0	11	162	0	0	**173**	0	**380**
3:45PM	0	0	0	0	**0**	0	11	0	7	0	**18**	0	0	208	53	0	**261**	0	7	182	1	0	**190**	0	**469**
Hourly Total	1	1	2	0	**4**	0	68	0	20	0	**88**	0	1	651	104	0	**756**	0	30	631	1	0	**662**	0	**1510**
4:00PM	0	0	0	0	**0**	0	16	0	9	0	**25**	0	0	152	19	0	**171**	0	4	133	0	0	**137**	0	**333**
4:15PM	5	0	1	0	**6**	0	18	0	2	0	**20**	0	0	119	18	0	**137**	0	9	155	4	0	**168**	0	**331**
4:30PM	5	2	0	0	**7**	0	24	0	2	0	**26**	0	1	167	31	0	**199**	0	6	164	0	0	**170**	0	**402**
4:45PM	1	0	0	0	**1**	0	29	0	4	0	**33**	0	0	180	21	0	**201**	0	7	153	0	0	**160**	0	**395**
Hourly Total	11	2	1	0	**14**	0	87	0	17	0	**104**	0	1	618	89	0	**708**	0	26	605	4	0	**635**	0	**1461**
5:00PM	2	0	1	0	**3**	0	22	0	2	0	**24**	0	0	150	11	0	**161**	0	1	141	0	0	**142**	0	**330**
5:15PM	0	0	0	0	**0**	0	22	0	3	0	**25**	0	1	112	20	0	**133**	0	10	133	0	0	**143**	0	**301**
5:30PM	0	0	0	0	**0**	0	17	1	4	0	**22**	0	0	133	16	0	**149**	0	4	120	1	0	**125**	0	**296**
5:45PM	0	0	0	0	**0**	0	13	1	1	0	**15**	0	0	93	13	0	**106**	0	0	109	0	1	**110**	0	**231**
Hourly Total	2	0	1	0	**3**	0	74	2	10	0	**86**	0	1	488	60	0	**549**	0	15	503	1	1	**520**	0	**1158**
Total	20	3	6	0	**29**	0	358	3	101	0	**462**	0	7	3186	407	1	**3601**	0	115	3071	21	3	**3210**	0	**7302**
% Approach	69.0%	10.3%	20.7%	0%	**-**	-	77.5%	0.6%	21.9%	0%	**-**	-	0.2%	88.5%	11.3%	0%	**-**	-	3.6%	95.7%	0.7%	0.1%	**-**	-	-
% Total	0.3%	0%	0.1%	0%	**0.4%**	-	4.9%	0%	1.4%	0%	**6.3%**	-	0.1%	43.6%	5.6%	0%	**49.3%**	-	1.6%	42.1%	0.3%	0%	**44.0%**	-	-
Lights	20	2	4	0	**26**	-	351	3	74	0	**428**	-	5	2908	404	1	**3318**	-	102	2774	19	3	**2898**	-	6670
% Lights	100%	66.7%	66.7%	0%	**89.7%**	-	98.0%	100%	73.3%	0%	**92.6%**	-	71.4%	91.3%	99.3%	100%	**92.1%**	-	88.7%	90.3%	90.5%	100%	**90.3%**	-	91.3%
Articulated Trucks	0	0	1	0	**1**	-	0	0	12	0	**12**	-	0	179	0	0	**179**	-	10	189	1	0	**200**	-	392
% Articulated Trucks	0%	0%	16.7%	0%	**3.4%**	-	0%	0%	11.9%	0%	**2.6%**	-	0%	5.6%	0%	0%	**5.0%**	-	8.7%	6.2%	4.8%	0%	**6.2%**	-	5.4%
Buses and Single-Unit Trucks	0	1	1	0	**2**	-	7	0	15	0	**22**	-	2	99	3	0	**104**	-	3	108	1	0	**112**	-	240
% Buses and Single-Unit Trucks	0%	33.3%	16.7%	0%	**6.9%**	-	2.0%	0%	14.9%	0%	**4.8%**	-	28.6%	3.1%	0.7%	0%	**2.9%**	-	2.6%	3.5%	4.8%	0%	**3.5%**	-	3.3%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

01_IL 53 & Schweitzer Road - TMC

Tue Dec 17, 2024
AM Peak (6 AM - 7 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258626, Location: 41.466312, -88.079616

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Schweitzer Rd						Schweitzer Rd						IL 53						IL 53						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-12-17 6:00AM	0	0	0	0	**0**	0	5	0	2	0	**7**	0	0	157	12	0	**169**	0	2	104	0	1	**107**	0	**283**
6:15AM	0	0	0	0	**0**	0	11	0	2	0	**13**	0	0	151	17	0	**168**	0	7	134	0	1	**142**	0	**323**
6:30AM	0	0	0	0	**0**	0	20	0	5	0	**25**	0	0	158	18	0	**176**	0	7	184	3	0	**194**	0	**395**
6:45AM	0	0	0	0	**0**	0	13	0	5	0	**18**	0	0	117	13	0	**130**	0	6	175	5	0	**186**	0	**334**
Total	0	0	0	0	**0**	0	49	0	14	0	**63**	0	0	583	60	0	**643**	0	22	597	8	2	**629**	0	**1335**
% Approach	0%	0%	0%	0%	**-**	-	77.8%	0%	22.2%	0%	**-**	-	0%	90.7%	9.3%	0%	**-**	-	3.5%	94.9%	1.3%	0.3%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	3.7%	0%	1.0%	0%	**4.7%**	-	0%	43.7%	4.5%	0%	**48.2%**	-	1.6%	44.7%	0.6%	0.1%	**47.1%**	-	-
PHF	-	-	-	-	**-**	-	0.613	-	0.700	-	**0.630**	-	-	0.922	0.833	-	**0.913**	-	0.786	0.811	0.400	0.500	**0.811**	-	0.845
Lights	0	0	0	0	**0**	-	48	0	4	0	**52**	-	0	558	60	0	**618**	-	20	557	8	2	**587**	-	1257
% Lights	0%	0%	0%	0%	**-**	-	98.0%	0%	28.6%	0%	**82.5%**	-	0%	95.7%	100%	0%	**96.1%**	-	90.9%	93.3%	100%	100%	**93.3%**	-	94.2%
Articulated Trucks	0	0	0	0	**0**	-	0	0	7	0	**7**	-	0	9	0	0	**9**	-	1	25	0	0	**26**	-	42
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	0%	50.0%	0%	**11.1%**	-	0%	1.5%	0%	0%	**1.4%**	-	4.5%	4.2%	0%	0%	**4.1%**	-	3.1%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	1	0	3	0	**4**	-	0	16	0	0	**16**	-	1	15	0	0	**16**	-	36
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**-**	-	2.0%	0%	21.4%	0%	**6.3%**	-	0%	2.7%	0%	0%	**2.5%**	-	4.5%	2.5%	0%	0%	**2.5%**	-	2.7%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

01_IL 53 & Schweitzer Road - TMC

Tue Dec 17, 2024
Forced Peak (3:15 PM - 4:15 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258626, Location: 41.466312, -88.079616

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Schweitzer Rd						Schweitzer Rd						IL 53						IL 53						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-12-17 3:15PM	0	0	1	0	**1**	0	24	0	7	0	**31**	0	1	140	23	0	**164**	0	5	144	0	0	**149**	0	**345**
3:30PM	0	1	0	0	**1**	0	28	0	2	0	**30**	0	0	160	16	0	**176**	0	11	162	0	0	**173**	0	**380**
3:45PM	0	0	0	0	**0**	0	11	0	7	0	**18**	0	0	208	53	0	**261**	0	7	182	1	0	**190**	0	**469**
4:00PM	0	0	0	0	**0**	0	16	0	9	0	**25**	0	0	152	19	0	**171**	0	4	133	0	0	**137**	0	**333**
Total	0	1	1	0	**2**	0	79	0	25	0	**104**	0	1	660	111	0	**772**	0	27	621	1	0	**649**	0	**1527**
% Approach	0%	50.0%	50.0%	0%	**-**	-	76.0%	0%	24.0%	0%	**-**	-	0.1%	85.5%	14.4%	0%	**-**	-	4.2%	95.7%	0.2%	0%	**-**	-	-
% Total	0%	0.1%	0.1%	0%	**0.1%**	-	5.2%	0%	1.6%	0%	**6.8%**	-	0.1%	43.2%	7.3%	0%	**50.6%**	-	1.8%	40.7%	0.1%	0%	**42.5%**	-	-
PHF	-	0.250	0.250	-	**0.500**	-	0.705	-	0.694	-	**0.839**	-	0.250	0.793	0.524	-	**0.739**	-	0.614	0.853	0.250	-	**0.854**	-	0.814
Lights	0	0	1	0	**1**	-	78	0	23	0	**101**	-	0	607	110	0	**717**	-	22	585	1	0	**608**	-	1427
% Lights	0%	0%	100%	0%	**50.0%**	-	98.7%	0%	92.0%	0%	**97.1%**	-	0%	92.0%	99.1%	0%	**92.9%**	-	81.5%	94.2%	100%	0%	**93.7%**	-	93.5%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	36	0	0	**36**	-	4	23	0	0	**27**	-	63
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	5.5%	0%	0%	**4.7%**	-	14.8%	3.7%	0%	0%	**4.2%**	-	4.1%
Buses and Single-Unit Trucks	0	1	0	0	**1**	-	1	0	2	0	**3**	-	1	17	1	0	**19**	-	1	13	0	0	**14**	-	37
% Buses and Single-Unit Trucks	0%	100%	0%	0%	**50.0%**	-	1.3%	0%	8.0%	0%	**2.9%**	-	100%	2.6%	0.9%	0%	**2.5%**	-	3.7%	2.1%	0%	0%	**2.2%**	-	2.4%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

02_IL 53 & Millsdale Road - TMC

Tue Dec 17, 2024
Full Length (6 AM-9 AM, 3 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258627, Location: 41.451608, -88.079173

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Millsdale Rd						Millsdale Rd						IL 53						IL 53						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2024-12-17 6:00AM	62	0	0	0	**62**	0	0	0	0	0	**0**	0	2	120	0	0	**122**	0	1	37	59	0	**97**	0	**281**
6:15AM	45	0	5	0	**50**	0	0	0	0	0	**0**	0	3	122	1	0	**126**	0	7	46	73	0	**126**	0	**302**
6:30AM	25	1	0	0	**26**	0	0	0	0	0	**0**	0	2	150	1	0	**153**	0	9	77	109	0	**195**	0	**374**
6:45AM	13	0	0	0	**13**	0	0	0	2	0	**2**	0	6	100	2	0	**108**	0	18	69	112	0	**199**	0	**322**
Hourly Total	145	1	5	0	**151**	0	0	0	2	0	**2**	0	13	492	4	0	**509**	0	35	229	353	0	**617**	0	**1279**
7:00AM	16	0	5	0	**21**	0	0	0	2	0	**2**	0	2	101	0	0	**103**	0	9	52	49	0	**110**	0	**236**
7:15AM	24	0	4	0	**28**	0	0	0	4	0	**4**	0	5	117	0	0	**122**	0	2	48	43	0	**93**	0	**247**
7:30AM	20	1	3	0	**24**	0	0	0	2	0	**2**	0	2	109	0	0	**111**	0	3	73	37	1	**114**	0	**251**
7:45AM	19	0	0	0	**19**	0	0	0	2	0	**2**	0	4	113	0	0	**117**	0	2	78	30	0	**110**	0	**248**
Hourly Total	79	1	12	0	**92**	0	0	0	10	0	**10**	0	13	440	0	0	**453**	0	16	251	159	1	**427**	0	**982**
8:00AM	5	0	4	0	**9**	0	0	1	4	0	**5**	0	5	100	0	0	**105**	0	5	56	32	0	**93**	0	**212**
8:15AM	12	0	2	0	**14**	0	0	0	0	0	**0**	0	4	88	0	1	**93**	0	3	55	25	0	**83**	0	**190**
8:30AM	4	0	1	0	**5**	0	0	0	4	0	**4**	0	2	82	0	0	**84**	0	2	58	25	0	**85**	0	**178**
8:45AM	10	0	3	0	**13**	0	0	1	1	0	**2**	0	2	80	0	0	**82**	0	3	54	25	0	**82**	0	**179**
Hourly Total	31	0	10	0	**41**	0	0	2	9	0	**11**	0	13	350	0	1	**364**	0	13	223	107	0	**343**	0	**759**
3:00PM	16	0	9	0	**25**	0	1	0	3	0	**4**	0	6	121	1	0	**128**	0	0	101	28	0	**129**	0	**286**
3:15PM	15	0	35	0	**50**	0	0	0	2	0	**2**	0	11	126	0	0	**137**	0	5	127	56	0	**188**	0	**377**
3:30PM	15	0	12	0	**27**	0	3	1	22	0	**26**	0	10	119	3	0	**132**	0	8	124	49	0	**181**	0	**366**
3:45PM	82	0	12	0	**94**	0	0	0	7	0	**7**	0	6	133	3	0	**142**	0	13	137	42	0	**192**	0	**435**
Hourly Total	128	0	68	0	**196**	0	4	1	34	0	**39**	0	33	499	7	0	**539**	0	26	489	175	0	**690**	0	**1464**
4:00PM	76	0	4	0	**80**	0	0	0	2	0	**2**	0	3	83	0	0	**86**	0	6	119	34	0	**159**	0	**327**
4:15PM	45	0	2	0	**47**	0	0	1	1	0	**2**	0	4	79	0	0	**83**	0	3	110	49	1	**163**	0	**295**
4:30PM	83	0	8	0	**91**	0	0	0	2	0	**2**	0	9	102	0	0	**111**	0	1	114	84	0	**199**	0	**403**
4:45PM	78	0	5	0	**83**	0	0	0	0	0	**0**	0	5	106	0	0	**111**	0	0	90	89	0	**179**	0	**373**
Hourly Total	282	0	19	0	**301**	0	0	1	5	0	**6**	0	21	370	0	0	**391**	0	10	433	256	1	**700**	0	**1398**
5:00PM	66	0	4	0	**70**	0	0	0	3	0	**3**	0	2	80	1	0	**83**	0	0	109	43	0	**152**	0	**308**
5:15PM	57	0	3	0	**60**	0	1	1	6	0	**8**	0	4	63	0	0	**67**	0	0	101	50	0	**151**	0	**286**
5:30PM	67	0	3	0	**70**	0	1	0	3	0	**4**	0	3	74	0	0	**77**	0	0	116	28	0	**144**	0	**295**
5:45PM	30	0	2	0	**32**	0	0	0	1	0	**1**	0	2	62	0	0	**64**	0	1	83	28	0	**112**	0	**209**
Hourly Total	220	0	12	0	**232**	0	2	1	13	0	**16**	0	11	279	1	0	**291**	0	1	409	149	0	**559**	0	**1098**
Total	885	2	126	0	**1013**	0	6	5	73	0	**84**	0	104	2430	12	1	**2547**	0	101	2034	1199	2	**3336**	0	**6980**
% Approach	87.4%	0.2%	12.4%	0%	**-**	-	7.1%	6.0%	86.9%	0%	**-**	-	4.1%	95.4%	0.5%	0%	**-**	-	3.0%	61.0%	35.9%	0.1%	**-**	-	-
% Total	12.7%	0%	1.8%	0%	**14.5%**	-	0.1%	0.1%	1.0%	0%	**1.2%**	-	1.5%	34.8%	0.2%	0%	**36.5%**	-	1.4%	29.1%	17.2%	0%	**47.8%**	-	-
Lights	864	2	118	0	**984**	-	5	2	49	0	**56**	-	89	2234	11	1	**2335**	-	73	1829	1163	1	**3066**	-	6441
% Lights	97.6%	100%	93.7%	0%	**97.1%**	-	83.3%	40.0%	67.1%	0%	**66.7%**	-	85.6%	91.9%	91.7%	100%	**91.7%**	-	72.3%	89.9%	97.0%	50.0%	**91.9%**	-	92.3%
Articulated Trucks	3	0	0	0	**3**	-	1	0	18	0	**19**	-	5	118	0	0	**123**	-	25	141	5	1	**172**	-	317
% Articulated Trucks	0.3%	0%	0%	0%	**0.3%**	-	16.7%	0%	24.7%	0%	**22.6%**	-	4.8%	4.9%	0%	0%	**4.8%**	-	24.8%	6.9%	0.4%	50.0%	**5.2%**	-	4.5%
Buses and Single-Unit Trucks	18	0	8	0	**26**	-	0	3	6	0	**9**	-	10	78	1	0	**89**	-	3	63	31	0	**97**	-	221
% Buses and Single-Unit Trucks	2.0%	0%	6.3%	0%	**2.6%**	-	0%	60.0%	8.2%	0%	**10.7%**	-	9.6%	3.2%	8.3%	0%	**3.5%**	-	3.0%	3.1%	2.6%	0%	**2.9%**	-	3.2%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

02_IL 53 & Millsdale Road - TMC

Tue Dec 17, 2024
AM Peak (6 AM - 7 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258627, Location: 41.451608, -88.079173

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Millsdale Rd						Millsdale Rd						IL 53						IL 53						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-12-17 6:00AM	62	0	0	0	**62**	0	0	0	0	0	**0**	0	2	120	0	0	**122**	0	1	37	59	0	**97**	0	**281**
6:15AM	45	0	5	0	**50**	0	0	0	0	0	**0**	0	3	122	1	0	**126**	0	7	46	73	0	**126**	0	**302**
6:30AM	25	1	0	0	**26**	0	0	0	0	0	**0**	0	2	150	1	0	**153**	0	9	77	109	0	**195**	0	**374**
6:45AM	13	0	0	0	**13**	0	0	0	2	0	**2**	0	6	100	2	0	**108**	0	18	69	112	0	**199**	0	**322**
Total	145	1	5	0	**151**	0	0	0	2	0	**2**	0	13	492	4	0	**509**	0	35	229	353	0	**617**	0	**1279**
% Approach	96.0%	0.7%	3.3%	0%	**-**	-	0%	0%	100%	0%	**-**	-	2.6%	96.7%	0.8%	0%	**-**	-	5.7%	37.1%	57.2%	0%	**-**	-	-
% Total	11.3%	0.1%	0.4%	0%	**11.8%**	-	0%	0%	0.2%	0%	**0.2%**	-	1.0%	38.5%	0.3%	0%	**39.8%**	-	2.7%	17.9%	27.6%	0%	**48.2%**	-	-
PHF	0.585	0.250	0.250	-	**0.609**	-	-	-	0.250	-	**0.250**	-	0.542	0.820	0.500	-	**0.832**	-	0.486	0.744	0.788	-	**0.775**	-	0.855
Lights	143	1	5	0	**149**	-	0	0	2	0	**2**	-	11	466	4	0	**481**	-	33	203	348	0	**584**	-	1216
% Lights	98.6%	100%	100%	0%	**98.7%**	-	0%	0%	100%	0%	**100%**	-	84.6%	94.7%	100%	0%	**94.5%**	-	94.3%	88.6%	98.6%	0%	**94.7%**	-	95.1%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	10	0	0	**11**	-	2	23	0	0	**25**	-	36
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	7.7%	2.0%	0%	0%	**2.2%**	-	5.7%	10.0%	0%	0%	**4.1%**	-	2.8%
Buses and Single-Unit Trucks	2	0	0	0	**2**	-	0	0	0	0	**0**	-	1	16	0	0	**17**	-	0	3	5	0	**8**	-	27
% Buses and Single-Unit Trucks	1.4%	0%	0%	0%	**1.3%**	-	0%	0%	0%	0%	**0%**	-	7.7%	3.3%	0%	0%	**3.3%**	-	0%	1.3%	1.4%	0%	**1.3%**	-	2.1%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

02_IL 53 & Millsdale Road - TMC

Tue Dec 17, 2024
PM Peak (3:15 PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258627, Location: 41.451608, -88.079173

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Millsdale Rd						Millsdale Rd						IL 53						IL 53						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2024-12-17 3:15PM	15	0	35	0	**50**	0	0	0	2	0	**2**	0	11	126	0	0	**137**	0	5	127	56	0	**188**	0	**377**
3:30PM	15	0	12	0	**27**	0	3	1	22	0	**26**	0	10	119	3	0	**132**	0	8	124	49	0	**181**	0	**366**
3:45PM	82	0	12	0	**94**	0	0	0	7	0	**7**	0	6	133	3	0	**142**	0	13	137	42	0	**192**	0	**435**
4:00PM	76	0	4	0	**80**	0	0	0	2	0	**2**	0	3	83	0	0	**86**	0	6	119	34	0	**159**	0	**327**
Total	188	0	63	0	**251**	0	3	1	33	0	**37**	0	30	461	6	0	**497**	0	32	507	181	0	**720**	0	**1505**
% Approach	74.9%	0%	25.1%	0%	**-**	-	8.1%	2.7%	89.2%	0%	**-**	-	6.0%	92.8%	1.2%	0%	**-**	-	4.4%	70.4%	25.1%	0%	**-**	-	-
% Total	12.5%	0%	4.2%	0%	**16.7%**	-	0.2%	0.1%	2.2%	0%	**2.5%**	-	2.0%	30.6%	0.4%	0%	**33.0%**	-	2.1%	33.7%	12.0%	0%	**47.8%**	-	-
PHF	0.573	-	0.450	-	**0.668**	-	0.250	0.250	0.375	-	**0.356**	-	0.682	0.867	0.500	-	**0.875**	-	0.615	0.925	0.808	-	**0.938**	-	0.865
Lights	183	0	60	0	**243**	-	3	0	30	0	**33**	-	26	420	6	0	**452**	-	27	472	173	0	**672**	-	1400
% Lights	97.3%	0%	95.2%	0%	**96.8%**	-	100%	0%	90.9%	0%	**89.2%**	-	86.7%	91.1%	100%	0%	**90.9%**	-	84.4%	93.1%	95.6%	0%	**93.3%**	-	93.0%
Articulated Trucks	2	0	0	0	**2**	-	0	0	2	0	**2**	-	0	24	0	0	**24**	-	4	25	2	0	**31**	-	59
% Articulated Trucks	1.1%	0%	0%	0%	**0.8%**	-	0%	0%	6.1%	0%	**5.4%**	-	0%	5.2%	0%	0%	**4.8%**	-	12.5%	4.9%	1.1%	0%	**4.3%**	-	3.9%
Buses and Single-Unit Trucks	3	0	3	0	**6**	-	0	1	1	0	**2**	-	4	17	0	0	**21**	-	1	10	6	0	**17**	-	46
% Buses and Single-Unit Trucks	1.6%	0%	4.8%	0%	**2.4%**	-	0%	100%	3.0%	0%	**5.4%**	-	13.3%	3.7%	0%	0%	**4.2%**	-	3.1%	2.0%	3.3%	0%	**2.4%**	-	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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

03_Rowell Avenue & Schweitzer Road - TMC

Tue Dec 17, 2024
Full Length (6 AM-9 AM, 3 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258628, Location: 41.466806, -88.060329

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg / Direction	Schweitzer Road Eastbound						Schweitzer Road Westbound						Rowell Ave Northbound						Rowell Ave Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-12-17 6:00AM	0	12	0	0	**12**	0	0	11	0	1	**12**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**24**
6:15AM	0	24	0	0	**24**	0	1	12	0	0	**13**	0	0	0	1	0	**1**	0	0	0	0	0	**0**	0	**38**
6:30AM	0	23	0	0	**23**	0	0	25	0	0	**25**	0	1	0	0	0	**1**	0	0	0	0	0	**0**	0	**49**
6:45AM	0	19	1	0	**20**	0	3	19	0	0	**22**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**42**
Hourly Total	0	78	1	0	**79**	0	4	67	0	1	**72**	0	1	0	1	0	**2**	0	0	0	0	0	**0**	0	**153**
7:00AM	0	17	0	0	**17**	0	1	24	0	0	**25**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**42**
7:15AM	0	21	0	0	**21**	0	1	22	0	0	**23**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**44**
7:30AM	0	13	0	1	**14**	0	0	11	0	0	**11**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**25**
7:45AM	0	12	0	0	**12**	0	0	11	0	0	**11**	0	3	0	2	0	**5**	0	0	0	0	0	**0**	0	**28**
Hourly Total	0	63	0	1	**64**	0	2	68	0	0	**70**	0	3	0	2	0	**5**	0	0	0	0	0	**0**	0	**139**
8:00AM	0	9	0	0	**9**	0	0	15	0	0	**15**	0	1	0	0	0	**1**	0	0	0	0	0	**0**	0	**25**
8:15AM	0	15	0	0	**15**	0	1	6	0	0	**7**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**22**
8:30AM	0	13	0	0	**13**	0	0	8	0	0	**8**	0	0	0	1	0	**1**	0	0	0	0	0	**0**	0	**22**
8:45AM	0	8	0	0	**8**	0	0	18	0	0	**18**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**26**
Hourly Total	0	45	0	0	**45**	0	1	47	0	0	**48**	0	1	0	1	0	**2**	0	0	0	0	0	**0**	0	**95**
3:00PM	0	18	1	0	**19**	0	6	13	0	0	**19**	0	0	0	1	0	**1**	0	0	0	0	0	**0**	0	**39**
3:15PM	0	26	2	0	**28**	0	0	29	0	0	**29**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**57**
3:30PM	0	28	1	0	**29**	0	2	27	0	0	**29**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**58**
3:45PM	0	57	1	0	**58**	0	3	12	0	0	**15**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**73**
Hourly Total	0	129	5	0	**134**	0	11	81	0	0	**92**	0	0	0	1	0	**1**	0	0	0	0	0	**0**	0	**227**
4:00PM	0	28	0	0	**28**	0	1	25	0	0	**26**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**54**
4:15PM	0	29	0	0	**29**	0	3	20	0	0	**23**	0	1	0	1	0	**2**	0	0	0	0	0	**0**	0	**54**
4:30PM	0	31	3	0	**34**	0	3	28	0	0	**31**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**65**
4:45PM	0	33	1	0	**34**	0	1	32	0	0	**33**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**67**
Hourly Total	0	121	4	0	**125**	0	8	105	0	0	**113**	0	1	0	1	0	**2**	0	0	0	0	0	**0**	0	**240**
5:00PM	0	14	0	0	**14**	0	1	27	0	0	**28**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**42**
5:15PM	0	31	0	0	**31**	0	3	22	0	0	**25**	0	0	0	1	0	**1**	0	0	0	0	0	**0**	0	**57**
5:30PM	0	18	1	0	**19**	0	1	22	0	0	**23**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**42**
5:45PM	0	12	0	0	**12**	0	1	17	0	0	**18**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**30**
Hourly Total	0	75	1	0	**76**	0	6	88	0	0	**94**	0	0	0	1	0	**1**	0	0	0	0	0	**0**	0	**171**
Total	0	511	11	1	**523**	0	32	456	0	1	**489**	0	6	0	7	0	**13**	0	0	0	0	0	**0**	0	**1025**
% Approach	0%	97.7%	2.1%	0.2%	**-**	-	6.5%	93.3%	0%	0.2%	**-**	-	46.2%	0%	53.8%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	49.9%	1.1%	0.1%	**51.0%**	-	3.1%	44.5%	0%	0.1%	**47.7%**	-	0.6%	0%	0.7%	0%	**1.3%**	-	0%	0%	0%	0%	**0%**	-	-
Lights	0	497	8	1	**506**	-	32	427	0	1	**460**	-	3	0	6	0	**9**	-	0	0	0	0	**0**	-	975
% Lights	0%	97.3%	72.7%	100%	**96.7%**	-	100%	93.6%	0%	100%	**94.1%**	-	50.0%	0%	85.7%	0%	**69.2%**	-	0%	0%	0%	0%	**-**	-	95.1%
Articulated Trucks	0	6	0	0	**6**	-	0	13	0	0	**13**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	19
% Articulated Trucks	0%	1.2%	0%	0%	**1.1%**	-	0%	2.9%	0%	0%	**2.7%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	1.9%
Buses and Single-Unit Trucks	0	8	3	0	**11**	-	0	16	0	0	**16**	-	3	0	1	0	**4**	-	0	0	0	0	**0**	-	31
% Buses and Single-Unit Trucks	0%	1.6%	27.3%	0%	**2.1%**	-	0%	3.5%	0%	0%	**3.3%**	-	50.0%	0%	14.3%	0%	**30.8%**	-	0%	0%	0%	0%	**-**	-	3.0%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

03_Rowell Avenue & Schweitzer Road - TMC

Tue Dec 17, 2024
Forced Peak (6 AM - 7 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258628, Location: 41.466806, -88.060329

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg / Direction	Schweitzer Road Eastbound						Schweitzer Road Westbound						Rowell Ave Northbound						Rowell Ave Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-12-17 6:00AM	0	12	0	0	**12**	0	0	11	0	1	**12**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**24**
6:15AM	0	24	0	0	**24**	0	1	12	0	0	**13**	0	0	0	1	0	**1**	0	0	0	0	0	**0**	0	**38**
6:30AM	0	23	0	0	**23**	0	0	25	0	0	**25**	0	1	0	0	0	**1**	0	0	0	0	0	**0**	0	**49**
6:45AM	0	19	1	0	**20**	0	3	19	0	0	**22**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**42**
Total	0	78	1	0	**79**	0	4	67	0	1	**72**	0	1	0	1	0	**2**	0	0	0	0	0	**0**	0	**153**
% Approach	0%	98.7%	1.3%	0%	**-**	-	5.6%	93.1%	0%	1.4%	**-**	-	50.0%	0%	50.0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	51.0%	0.7%	0%	**51.6%**	-	2.6%	43.8%	0%	0.7%	**47.1%**	-	0.7%	0%	0.7%	0%	**1.3%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	0.813	0.250	-	**0.823**	-	0.333	0.670	-	0.250	**0.720**	-	0.250	-	0.250	-	**0.500**	-	-	-	-	-	**-**	-	0.781
Lights	0	76	0	0	**76**	-	4	58	0	1	**63**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	140
% Lights	0%	97.4%	0%	0%	**96.2%**	-	100%	86.6%	0%	100%	**87.5%**	-	0%	0%	100%	0%	**50.0%**	-	0%	0%	0%	0%	**-**	-	91.5%
Articulated Trucks	0	1	0	0	**1**	-	0	6	0	0	**6**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	7
% Articulated Trucks	0%	1.3%	0%	0%	**1.3%**	-	0%	9.0%	0%	0%	**8.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	4.6%
Buses and Single-Unit Trucks	0	1	1	0	**2**	-	0	3	0	0	**3**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	6
% Buses and Single-Unit Trucks	0%	1.3%	100%	0%	**2.5%**	-	0%	4.5%	0%	0%	**4.2%**	-	100%	0%	0%	0%	**50.0%**	-	0%	0%	0%	0%	**-**	-	3.9%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

03_Rowell Avenue & Schweitzer Road - TMC

Tue Dec 17, 2024
Forced Peak (3:15 PM - 4:15 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258628, Location: 41.466806, -88.060329

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Schweitzer Road						Schweitzer Road						Rowell Ave						Rowell Ave						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-12-17 3:15PM	0	26	2	0	**28**	0	0	29	0	0	**29**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**57**
3:30PM	0	28	1	0	**29**	0	2	27	0	0	**29**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**58**
3:45PM	0	57	1	0	**58**	0	3	12	0	0	**15**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**73**
4:00PM	0	28	0	0	**28**	0	1	25	0	0	**26**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**54**
Total	0	139	4	0	**143**	0	6	93	0	0	**99**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**242**
% Approach	0%	97.2%	2.8%	0%	**-**	-	6.1%	93.9%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	57.4%	1.7%	0%	**59.1%**	-	2.5%	38.4%	0%	0%	**40.9%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	0.610	0.500	-	**0.616**	-	0.500	0.802	-	-	**0.853**	-	-	-	-	-	**-**	-	-	-	-	-	**-**	-	0.829
Lights	0	133	2	0	**135**	-	6	91	0	0	**97**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	232
% Lights	0%	95.7%	50.0%	0%	**94.4%**	-	100%	97.8%	0%	0%	**98.0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	95.9%
Articulated Trucks	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	1.4%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0.8%
Buses and Single-Unit Trucks	0	4	2	0	**6**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	8
% Buses and Single-Unit Trucks	0%	2.9%	50.0%	0%	**4.2%**	-	0%	2.2%	0%	0%	**2.0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	3.3%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

04_Ridge Road & Schweitzer Road - TMC

Tue Dec 17, 2024
Full Length (6 AM-9 AM, 3 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258629, Location: 41.467242, -88.04112

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Schweitzer Rd Eastbound					Schweitzer Rd Westbound					Ridge Rd Northbound					
Time	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2024-12-17 6:00AM	14	2	0	**16**	0	6	8	0	**14**	0	4	15	0	**19**	0	**49**
6:15AM	24	2	0	**26**	0	3	11	0	**14**	0	2	6	0	**8**	0	**48**
6:30AM	21	2	0	**23**	0	7	22	0	**29**	0	3	8	0	**11**	0	**63**
6:45AM	18	2	0	**20**	0	9	17	0	**26**	0	4	7	0	**11**	0	**57**
Hourly Total	77	8	0	**85**	0	25	58	0	**83**	0	13	36	0	**49**	0	**217**
7:00AM	13	4	0	**17**	0	6	19	0	**25**	0	6	7	0	**13**	0	**55**
7:15AM	19	0	0	**19**	0	8	14	0	**22**	0	7	7	0	**14**	0	**55**
7:30AM	15	0	0	**15**	0	1	8	0	**9**	0	3	8	0	**11**	0	**35**
7:45AM	12	1	0	**13**	0	1	12	0	**13**	0	0	6	0	**6**	0	**32**
Hourly Total	59	5	0	**64**	0	16	53	0	**69**	0	16	28	0	**44**	0	**177**
8:00AM	7	0	0	**7**	0	2	17	0	**19**	0	2	7	0	**9**	0	**35**
8:15AM	13	3	0	**16**	0	4	7	0	**11**	0	1	7	0	**8**	0	**35**
8:30AM	13	0	0	**13**	0	6	7	0	**13**	0	0	8	0	**8**	0	**34**
8:45AM	7	3	0	**10**	0	5	15	0	**20**	0	3	6	0	**9**	0	**39**
Hourly Total	40	6	0	**46**	0	17	46	0	**63**	0	6	28	0	**34**	0	**143**
3:00PM	19	4	0	**23**	0	10	17	0	**27**	0	5	8	0	**13**	0	**63**
3:15PM	23	2	0	**25**	0	11	26	0	**37**	0	3	4	0	**7**	0	**69**
3:30PM	25	5	0	**30**	0	13	31	0	**44**	0	1	8	0	**9**	0	**83**
3:45PM	48	2	0	**50**	0	8	11	0	**19**	0	2	7	0	**9**	0	**78**
Hourly Total	115	13	0	**128**	0	42	85	0	**127**	0	11	27	0	**38**	0	**293**
4:00PM	30	1	0	**31**	0	12	20	0	**32**	0	6	10	0	**16**	0	**79**
4:15PM	24	2	0	**26**	0	9	24	0	**33**	0	0	6	0	**6**	0	**65**
4:30PM	32	3	0	**35**	0	8	26	0	**34**	0	3	6	0	**9**	0	**78**
4:45PM	32	2	0	**34**	0	13	33	0	**46**	0	1	2	0	**3**	0	**83**
Hourly Total	118	8	0	**126**	0	42	103	0	**145**	0	10	24	0	**34**	0	**305**
5:00PM	13	0	0	**13**	0	8	25	0	**33**	0	0	6	0	**6**	0	**52**
5:15PM	28	1	0	**29**	0	9	26	0	**35**	0	2	4	0	**6**	0	**70**
5:30PM	16	2	0	**18**	0	12	19	0	**31**	0	1	7	0	**8**	0	**57**
5:45PM	13	0	0	**13**	0	3	16	0	**19**	0	0	2	0	**2**	0	**34**
Hourly Total	70	3	0	**73**	0	32	86	0	**118**	0	3	19	0	**22**	0	**213**
Total	479	43	0	**522**	0	174	431	0	**605**	0	59	162	0	**221**	0	**1348**
% Approach	91.8%	8.2%	0%	**-**	-	28.8%	71.2%	0%	**-**	-	26.7%	73.3%	0%	**-**	-	-
% Total	35.5%	3.2%	0%	**38.7%**	-	12.9%	32.0%	0%	**44.9%**	-	4.4%	12.0%	0%	**16.4%**	-	-
Lights	475	32	0	**507**	-	158	421	0	**579**	-	37	151	0	**188**	-	1274
% Lights	99.2%	74.4%	0%	**97.1%**	-	90.8%	97.7%	0%	**95.7%**	-	62.7%	93.2%	0%	**85.1%**	-	94.5%
Articulated Trucks	1	4	0	**5**	-	7	1	0	**8**	-	13	4	0	**17**	-	30
% Articulated Trucks	0.2%	9.3%	0%	**1.0%**	-	4.0%	0.2%	0%	**1.3%**	-	22.0%	2.5%	0%	**7.7%**	-	2.2%
Buses and Single-Unit Trucks	3	7	0	**10**	-	9	9	0	**18**	-	9	7	0	**16**	-	44
% Buses and Single-Unit Trucks	0.6%	16.3%	0%	**1.9%**	-	5.2%	2.1%	0%	**3.0%**	-	15.3%	4.3%	0%	**7.2%**	-	3.3%
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%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

04_Ridge Road & Schweitzer Road - TMC

Tue Dec 17, 2024
Forced Peak (6 AM - 7 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258629, Location: 41.467242, -88.04112

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Schweitzer Rd Eastbound					Schweitzer Rd Westbound					Ridge Rd Northbound					
Time	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2024-12-17 6:00AM	14	2	0	**16**	0	6	8	0	**14**	0	4	15	0	**19**	0	**49**
6:15AM	24	2	0	**26**	0	3	11	0	**14**	0	2	6	0	**8**	0	**48**
6:30AM	21	2	0	**23**	0	7	22	0	**29**	0	3	8	0	**11**	0	**63**
6:45AM	18	2	0	**20**	0	9	17	0	**26**	0	4	7	0	**11**	0	**57**
Total	77	8	0	**85**	0	25	58	0	**83**	0	13	36	0	**49**	0	**217**
% Approach	90.6%	9.4%	0%	**-**	-	30.1%	69.9%	0%	**-**	-	26.5%	73.5%	0%	**-**	-	-
% Total	35.5%	3.7%	0%	**39.2%**	-	11.5%	26.7%	0%	**38.2%**	-	6.0%	16.6%	0%	**22.6%**	-	-
PHF	0.802	1.000	-	**0.817**	-	0.694	0.659	-	**0.716**	-	0.813	0.600	-	**0.645**	-	0.861
Lights	76	8	0	**84**	-	22	57	0	**79**	-	3	35	0	**38**	-	201
% Lights	98.7%	100%	0%	**98.8%**	-	88.0%	98.3%	0%	**95.2%**	-	23.1%	97.2%	0%	**77.6%**	-	92.6%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	6	1	0	**7**	-	7
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	46.2%	2.8%	0%	**14.3%**	-	3.2%
Buses and Single-Unit Trucks	1	0	0	**1**	-	3	1	0	**4**	-	4	0	0	**4**	-	9
% Buses and Single-Unit Trucks	1.3%	0%	0%	**1.2%**	-	12.0%	1.7%	0%	**4.8%**	-	30.8%	0%	0%	**8.2%**	-	4.1%
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%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

04_Ridge Road & Schweitzer Road - TMC

Tue Dec 17, 2024
PM Peak (3:15 PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258629, Location: 41.467242, -88.04112

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Schweitzer Rd Eastbound					Schweitzer Rd Westbound					Ridge Rd Northbound					
Time	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2024-12-17 3:15PM	23	2	0	**25**	0	11	26	0	**37**	0	3	4	0	**7**	0	**69**
3:30PM	25	5	0	**30**	0	13	31	0	**44**	0	1	8	0	**9**	0	**83**
3:45PM	48	2	0	**50**	0	8	11	0	**19**	0	2	7	0	**9**	0	**78**
4:00PM	30	1	0	**31**	0	12	20	0	**32**	0	6	10	0	**16**	0	**79**
Total	126	10	0	**136**	0	44	88	0	**132**	0	12	29	0	**41**	0	**309**
% Approach	92.6%	7.4%	0%	**-**	-	33.3%	66.7%	0%	**-**	-	29.3%	70.7%	0%	**-**	-	**-**
% Total	40.8%	3.2%	0%	**44.0%**	-	14.2%	28.5%	0%	**42.7%**	-	3.9%	9.4%	0%	**13.3%**	-	**-**
PHF	0.656	0.500	-	**0.680**	-	0.846	0.710	-	**0.750**	-	0.500	0.725	-	**0.641**	-	0.931
Lights	124	7	0	**131**	-	43	87	0	**130**	-	10	27	0	**37**	-	298
% Lights	98.4%	70.0%	0%	**96.3%**	-	97.7%	98.9%	0%	**98.5%**	-	83.3%	93.1%	0%	**90.2%**	-	96.4%
Articulated Trucks	1	2	0	**3**	-	0	0	0	**0**	-	0	0	0	**0**	-	3
% Articulated Trucks	0.8%	20.0%	0%	**2.2%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	1.0%
Buses and Single-Unit Trucks	1	1	0	**2**	-	1	1	0	**2**	-	2	2	0	**4**	-	8
% Buses and Single-Unit Trucks	0.8%	10.0%	0%	**1.5%**	-	2.3%	1.1%	0%	**1.5%**	-	16.7%	6.9%	0%	**9.8%**	-	2.6%
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%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

05_Ridge Road & Bernhard Road - TMC

Tue Dec 17, 2024
Full Length (6 AM-9 AM, 3 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258630, Location: 41.459487, -88.040878

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg / Direction	Bernhard Rd Eastbound						Bernhard Rd Westbound						Ridge Rd Northbound						Ridge Rd Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-12-17 6:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	11	0	0	**11**	0	0	2	0	0	**2**	0	**13**
6:15AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	6	0	0	**6**	0	0	1	0	0	**1**	0	**7**
6:30AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	1	11	0	0	**12**	0	0	2	0	0	**2**	0	**14**
6:45AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	11	0	0	**11**	0	0	5	0	0	**5**	0	**16**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	1	39	0	0	**40**	0	0	10	0	0	**10**	0	**50**
7:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	7	0	0	**7**	0	0	5	0	0	**5**	0	**12**
7:15AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	6	1	0	**7**	0	0	5	0	0	**5**	0	**12**
7:30AM	0	0	0	0	**0**	0	0	2	0	0	**2**	0	1	7	0	0	**8**	0	0	1	0	0	**1**	0	**11**
7:45AM	0	0	1	0	**1**	0	0	0	0	0	**0**	0	0	4	0	0	**4**	0	0	1	1	0	**2**	0	**7**
Hourly Total	0	0	1	0	**1**	0	0	2	0	0	**2**	0	1	24	1	0	**26**	0	0	12	1	0	**13**	0	**42**
8:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	3	0	0	**3**	0	0	1	0	0	**1**	0	**4**
8:15AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	7	0	0	**7**	0	0	4	0	0	**4**	0	**11**
8:30AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	5	0	0	**5**	0	0	4	0	0	**4**	0	**9**
8:45AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	6	0	0	**6**	0	0	0	0	0	**0**	0	**6**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	21	0	0	**21**	0	0	9	0	0	**9**	0	**30**
3:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	8	0	0	**8**	0	0	8	0	0	**8**	0	**16**
3:15PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	7	0	0	**7**	0	0	11	0	0	**11**	0	**18**
3:30PM	0	0	1	0	**1**	0	0	0	0	0	**0**	0	0	6	0	0	**6**	0	0	16	1	0	**17**	0	**24**
3:45PM	0	0	0	0	**0**	0	0	1	0	0	**1**	0	0	5	0	0	**5**	0	0	12	0	0	**12**	0	**18**
Hourly Total	0	0	1	0	**1**	0	0	1	0	0	**1**	0	0	26	0	0	**26**	0	0	47	1	0	**48**	0	**76**
4:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	6	0	0	**6**	0	0	18	0	0	**18**	0	**24**
4:15PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	4	0	0	**4**	0	0	9	0	0	**9**	0	**13**
4:30PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	8	0	0	**8**	0	0	10	0	0	**10**	0	**18**
4:45PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	2	0	0	**2**	0	0	15	0	0	**15**	0	**17**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	20	0	0	**20**	0	0	52	0	0	**52**	0	**72**
5:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	6	0	0	**6**	0	0	7	0	0	**7**	0	**13**
5:15PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	8	0	0	**8**	0	0	9	2	0	**11**	0	**19**
5:30PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	7	0	0	**7**	0	0	14	0	0	**14**	0	**21**
5:45PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	3	0	0	**3**	0	0	4	0	0	**4**	0	**7**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	24	0	0	**24**	0	0	34	2	0	**36**	0	**60**
Total	0	0	2	0	**2**	0	0	3	0	0	**3**	0	2	154	1	0	**157**	0	0	164	4	0	**168**	0	**330**
% Approach	0%	0%	100%	0%	**-**	-	0%	100%	0%	0%	**-**	-	1.3%	98.1%	0.6%	0%	**-**	-	0%	97.6%	2.4%	0%	**-**	-	-
% Total	0%	0%	0.6%	0%	**0.6%**	-	0%	0.9%	0%	0%	**0.9%**	-	0.6%	46.7%	0.3%	0%	**47.6%**	-	0%	49.7%	1.2%	0%	**50.9%**	-	-
Lights	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	146	0	0	**146**	-	0	161	2	0	**163**	-	311
% Lights	0%	0%	0%	0%	**0%**	-	0%	66.7%	0%	0%	**66.7%**	-	0%	94.8%	0%	0%	**93.0%**	-	0%	98.2%	50.0%	0%	**97.0%**	-	94.2%
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%
Buses and Single-Unit Trucks	0	0	2	0	**2**	-	0	1	0	0	**1**	-	2	8	1	0	**11**	-	0	3	2	0	**5**	-	19
% Buses and Single-Unit Trucks	0%	0%	100%	0%	**100%**	-	0%	33.3%	0%	0%	**33.3%**	-	100%	5.2%	100%	0%	**7.0%**	-	0%	1.8%	50.0%	0%	**3.0%**	-	5.8%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

05_Ridge Road & Bernhard Road - TMC

Tue Dec 17, 2024
Forced Peak (6 AM - 7 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258630, Location: 41.459487, -88.040878

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Bernhard Rd						Bernhard Rd						Ridge Rd						Ridge Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-12-17 6:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	11	0	0	**11**	0	0	2	0	0	**2**	0	**13**
6:15AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	6	0	0	**6**	0	0	1	0	0	**1**	0	**7**
6:30AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	1	11	0	0	**12**	0	0	2	0	0	**2**	0	**14**
6:45AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	11	0	0	**11**	0	0	5	0	0	**5**	0	**16**
Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	1	39	0	0	**40**	0	0	10	0	0	**10**	0	**50**
% Approach	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	2.5%	97.5%	0%	0%	**-**	-	0%	100%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	2.0%	78.0%	0%	0%	**80.0%**	-	0%	20.0%	0%	0%	**20.0%**	-	-
PHF	-	-	-	-	**-**	-	-	-	-	-	**-**	-	0.250	0.886	-	-	**0.833**	-	-	0.500	-	-	**0.500**	-	0.781
Lights	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	39	0	0	**39**	-	0	8	0	0	**8**	-	47
% Lights	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	100%	0%	0%	**97.5%**	-	0%	80.0%	0%	0%	**80.0%**	-	94.0%
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%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	2	0	0	**2**	-	3
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	100%	0%	0%	0%	**2.5%**	-	0%	20.0%	0%	0%	**20.0%**	-	6.0%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

05_Ridge Road & Bernhard Road - TMC

Tue Dec 17, 2024
PM Peak (3:15 PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1258630, Location: 41.459487, -88.040878

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Bernhard Rd						Bernhard Rd						Ridge Rd						Ridge Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-12-17 3:15PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	7	0	0	**7**	0	0	11	0	0	**11**	0	**18**
3:30PM	0	0	1	0	**1**	0	0	0	0	0	**0**	0	0	6	0	0	**6**	0	0	16	1	0	**17**	0	**24**
3:45PM	0	0	0	0	**0**	0	0	1	0	0	**1**	0	0	5	0	0	**5**	0	0	12	0	0	**12**	0	**18**
4:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	6	0	0	**6**	0	0	18	0	0	**18**	0	**24**
Total	0	0	1	0	**1**	0	0	1	0	0	**1**	0	0	24	0	0	**24**	0	0	57	1	0	**58**	0	**84**
% Approach	0%	0%	100%	0%	**-**	-	0%	100%	0%	0%	**-**	-	0%	100%	0%	0%	**-**	-	0%	98.3%	1.7%	0%	**-**	-	**-**
% Total	0%	0%	1.2%	0%	**1.2%**	-	0%	1.2%	0%	0%	**1.2%**	-	0%	28.6%	0%	0%	**28.6%**	-	0%	67.9%	1.2%	0%	**69.0%**	-	**-**
PHF	-	-	0.250	-	**0.250**	-	-	0.250	-	-	**0.250**	-	-	0.857	-	-	**0.857**	-	-	0.792	0.250	-	**0.806**	-	0.875
Lights	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	20	0	0	**20**	-	0	56	0	0	**56**	-	77
% Lights	0%	0%	0%	0%	**0%**	-	0%	100%	0%	0%	**100%**	-	0%	83.3%	0%	0%	**83.3%**	-	0%	98.2%	0%	0%	**96.6%**	-	91.7%
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%
Buses and Single-Unit Trucks	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	0	1	1	0	**2**	-	7
% Buses and Single-Unit Trucks	0%	0%	100%	0%	**100%**	-	0%	0%	0%	0%	**0%**	-	0%	16.7%	0%	0%	**16.7%**	-	0%	1.8%	100%	0%	**3.4%**	-	8.3%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

EXISTING (2024) CAPACITY REPORTS

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	50	1	15	1	585	65	20	600	10
Future Vol, veh/h	1	1	1	50	1	15	1	585	65	20	600	10
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	-	-	-	-	-	-	-	-	-	345	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	71	2	4	2	9	7	2
Mvmt Flow	1	1	1	53	1	16	1	616	68	21	632	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	989	1365	321	1011	1336	342	642	0	0	684	0	0
Stage 1	679	679	-	652	652	-	-	-	-	-	-	-
Stage 2	311	686	-	358	684	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	8.32	4.14	-	-	4.28	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	4.01	2.22	-	-	2.29	-	-
Pot Cap-1 Maneuver	201	146	675	194	152	490	938	-	-	860	-	-
Stage 1	408	449	-	423	462	-	-	-	-	-	-	-
Stage 2	675	446	-	632	447	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	188	142	675	187	148	490	938	-	-	860	-	-
Mov Cap-2 Maneuver	188	142	-	187	148	-	-	-	-	-	-	-
Stage 1	398	438	-	422	462	-	-	-	-	-	-	-
Stage 2	650	445	-	614	436	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	21.83	27.56	0.02	0.3
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	5	-	-	217	186	490	860	-	-
HCM Lane V/C Ratio	0.001	-	-	0.015	0.288	0.032	0.024	-	-
HCM Control Delay (s/veh)	8.8	0	-	21.8	32	12.6	9.3	-	-
HCM Lane LOS	A	A	-	C	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	1.1	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	145	1	5	1	1	1	15	495	5	35	230	355
Future Vol, veh/h	145	1	5	1	1	1	15	495	5	35	230	355
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	-	-	-	-	-	80	215	-	175	270	-	290
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	15	5	2	6	11	2
Mvmt Flow	153	1	5	1	1	1	16	521	5	37	242	374

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	608	874	121	748	1242	261	616	0	0	526	0	0
Stage 1	316	316	-	553	553	-	-	-	-	-	-	-
Stage 2	293	558	-	195	689	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.4	-	-	4.22	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.35	-	-	2.26	-	-
Pot Cap-1 Maneuver	379	287	907	301	173	738	876	-	-	1009	-	-
Stage 1	670	654	-	485	513	-	-	-	-	-	-	-
Stage 2	691	510	-	788	444	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	356	271	907	282	164	738	876	-	-	1009	-	-
Mov Cap-2 Maneuver	356	271	-	282	164	-	-	-	-	-	-	-
Stage 1	645	630	-	476	503	-	-	-	-	-	-	-
Stage 2	676	501	-	754	428	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	22.43	18.28	0.27	0.49
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	876	-	-	363	282	268	1009	-	-
HCM Lane V/C Ratio	0.018	-	-	0.438	0.004	0.008	0.037	-	-
HCM Control Delay (s/veh)	9.2	-	-	22.4	17.8	18.5	8.7	-	-
HCM Lane LOS	A	-	-	C	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.2	0	0	0.1	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	85	1	5	70	1	1	1	1	1	1	1
Future Vol, veh/h	1	85	1	5	70	1	1	1	1	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	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	-	-	-	-	-	40	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	3	2	2	13	2	2	2	2	2	2	2
Mvmt Flow	1	89	1	5	74	1	1	1	1	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	75	0	0	91	0	0	176	177	89	176	177	74
Stage 1	-	-	-	-	-	-	92	92	-	84	84	-
Stage 2	-	-	-	-	-	-	85	85	-	92	93	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1525	-	-	1505	-	-	786	717	968	786	717	988
Stage 1	-	-	-	-	-	-	916	819	-	924	825	-
Stage 2	-	-	-	-	-	-	923	824	-	915	818	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1525	-	-	1505	-	-	781	714	968	781	714	988
Mov Cap-2 Maneuver	-	-	-	-	-	-	781	714	-	781	714	-
Stage 1	-	-	-	-	-	-	915	818	-	920	822	-
Stage 2	-	-	-	-	-	-	918	821	-	912	818	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	0.49	9.48	9.45
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	808	21	-	-	120	-	-	812
HCM Lane V/C Ratio	0.004	0.001	-	-	0.003	-	-	0.004
HCM Control Delay (s/veh)	9.5	7.4	0	-	7.4	0	-	9.5
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	75	10	25	60	15	35
Future Vol, veh/h	75	10	25	60	15	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	12	2	77	3
Mvmt Flow	79	11	26	63	16	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	89	0	200	84
Stage 1	-	-	-	-	84	-
Stage 2	-	-	-	-	116	-
Critical Hdwy	-	-	4.22	-	7.17	6.23
Critical Hdwy Stg 1	-	-	-	-	6.17	-
Critical Hdwy Stg 2	-	-	-	-	6.17	-
Follow-up Hdwy	-	-	2.308	-	4.193	3.327
Pot Cap-1 Maneuver	-	-	1445	-	646	972
Stage 1	-	-	-	-	780	-
Stage 2	-	-	-	-	753	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1445	-	634	972
Mov Cap-2 Maneuver	-	-	-	-	634	-
Stage 1	-	-	-	-	780	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.22	9.58
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	838	-	-	529	-
HCM Lane V/C Ratio	0.063	-	-	0.018	-
HCM Control Delay (s/veh)	9.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

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	1	1	1	1	1	1	1	40	1	1	10	1
Future Vol, veh/h	1	1	1	1	1	1	1	40	1	1	10	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	20	2
Mvmt Flow	1	1	1	1	1	1	1	42	1	1	11	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	58	58	11	58	58	43	12	0	0	43	0	0
Stage 1	13	13	-	45	45	-	-	-	-	-	-	-
Stage 2	45	45	-	13	14	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	939	833	1070	939	833	1028	1607	-	-	1565	-	-
Stage 1	1007	885	-	969	858	-	-	-	-	-	-	-
Stage 2	969	857	-	1007	884	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	935	831	1070	935	831	1028	1607	-	-	1565	-	-
Mov Cap-2 Maneuver	935	831	-	935	831	-	-	-	-	-	-	-
Stage 1	1006	884	-	969	857	-	-	-	-	-	-	-
Stage 2	966	857	-	1004	883	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.86	8.91	0.17	0.61
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	43	-	-	936	925	147	-	-
HCM Lane V/C Ratio	0.001	-	-	0.003	0.003	0.001	-	-
HCM Control Delay (s/veh)	7.2	0	-	8.9	8.9	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	80	1	25	1	665	120	25	620	1
Future Vol, veh/h	1	1	1	80	1	25	1	665	120	25	620	1
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	-	-	-	-	-	-	-	-	-	345	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	8	2	8	2	19	6	2
Mvmt Flow	1	1	1	84	1	26	1	700	126	26	653	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1058	1534	327	1145	1472	413	654	0	0	826	0	0
Stage 1	706	706	-	765	765	-	-	-	-	-	-	-
Stage 2	353	828	-	379	706	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	7.06	4.14	-	-	4.48	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.38	2.22	-	-	2.39	-	-
Pot Cap-1 Maneuver	179	115	669	155	126	571	929	-	-	700	-	-
Stage 1	393	437	-	362	410	-	-	-	-	-	-	-
Stage 2	637	384	-	614	437	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	163	111	669	147	121	571	929	-	-	700	-	-
Mov Cap-2 Maneuver	163	111	-	147	121	-	-	-	-	-	-	-
Stage 1	378	420	-	361	410	-	-	-	-	-	-	-
Stage 2	605	383	-	589	420	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	25.36	47.9	0.02	0.4
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	4	-	-	180	147	571	700	-	-
HCM Lane V/C Ratio	0.001	-	-	0.018	0.582	0.046	0.038	-	-
HCM Control Delay (s/veh)	8.9	0	-	25.4	59.1	11.6	10.3	-	-
HCM Lane LOS	A	A	-	D	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	3	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	22.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	190	1	65	5	1	35	30	460	5	30	510	180
Future Vol, veh/h	190	1	65	5	1	35	30	460	5	30	510	180
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	-	-	-	-	-	80	215	-	175	270	-	290
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	2	5	2	2	9	13	9	2	16	7	4
Mvmt Flow	200	1	68	5	1	37	32	484	5	32	537	189

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	906	1153	268	879	1337	242	726	0	0	489	0	0
Stage 1	600	600	-	547	547	-	-	-	-	-	-	-
Stage 2	306	553	-	332	789	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.54	7	7.54	6.54	7.08	4.36	-	-	4.42	-	-
Critical Hdwy Stg 1	6.56	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.02	3.35	3.52	4.02	3.39	2.33	-	-	2.36	-	-
Pot Cap-1 Maneuver	230	196	721	242	152	738	804	-	-	978	-	-
Stage 1	452	488	-	489	516	-	-	-	-	-	-	-
Stage 2	676	513	-	655	400	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	201	182	721	202	141	738	804	-	-	978	-	-
Mov Cap-2 Maneuver	201	182	-	202	141	-	-	-	-	-	-	-
Stage 1	437	472	-	469	495	-	-	-	-	-	-	-
Stage 2	616	493	-	573	387	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	128	12.31	0.59	0.37
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	804	-	-	246	202	660	978	-	-
HCM Lane V/C Ratio	0.039	-	-	1.094	0.026	0.057	0.032	-	-
HCM Control Delay (s/veh)	9.7	-	-	128	23.3	10.8	8.8	-	-
HCM Lane LOS	A	-	-	F	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	11.6	0.1	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	140	5	5	105	1	1	1	1	1	1	1
Future Vol, veh/h	1	140	5	5	105	1	1	1	1	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	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	-	-	-	-	-	40	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	4	50	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	147	5	5	111	1	1	1	1	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	112	0	0	153	0	0	271	272	147	271	276	111
Stage 1	-	-	-	-	-	-	149	149	-	121	121	-
Stage 2	-	-	-	-	-	-	122	122	-	150	155	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1478	-	-	1428	-	-	681	635	900	681	632	943
Stage 1	-	-	-	-	-	-	853	774	-	883	796	-
Stage 2	-	-	-	-	-	-	883	795	-	853	770	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1478	-	-	1428	-	-	676	632	900	676	629	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	676	632	-	676	629	-
Stage 1	-	-	-	-	-	-	852	773	-	880	792	-
Stage 2	-	-	-	-	-	-	877	792	-	850	769	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.05	0.34	10.03	9.98
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	719	13	-	-	82	-	-	726
HCM Lane V/C Ratio	0.004	0.001	-	-	0.004	-	-	0.004
HCM Control Delay (s/veh)	10	7.4	0	-	7.5	0	-	10
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	130	10	45	100	10	30
Future Vol, veh/h	130	10	45	100	10	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	30	2	2	17	7
Mvmt Flow	137	11	47	105	11	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	147	0	342	142
Stage 1	-	-	-	-	142	-
Stage 2	-	-	-	-	200	-
Critical Hdwy	-	-	4.12	-	6.57	6.27
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	-	-	2.218	-	3.653	3.363
Pot Cap-1 Maneuver	-	-	1434	-	625	892
Stage 1	-	-	-	-	849	-
Stage 2	-	-	-	-	799	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1434	-	603	892
Mov Cap-2 Maneuver	-	-	-	-	603	-
Stage 1	-	-	-	-	849	-
Stage 2	-	-	-	-	771	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.36	9.77
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	797	-	-	559	-
HCM Lane V/C Ratio	0.053	-	-	0.033	-
HCM Control Delay (s/veh)	9.8	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

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	1	1	1	1	1	1	1	25	1	1	55	1
Future Vol, veh/h	1	1	1	1	1	1	1	25	1	1	55	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	17	2	2	2	2
Mvmt Flow	1	1	1	1	1	1	1	26	1	1	58	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	89	90	58	89	90	27	59	0	0	27	0	0
Stage 1	61	61	-	29	29	-	-	-	-	-	-	-
Stage 2	29	29	-	61	61	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	895	800	1007	895	800	1049	1545	-	-	1586	-	-
Stage 1	951	844	-	988	871	-	-	-	-	-	-	-
Stage 2	988	871	-	951	844	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	892	799	1007	892	799	1049	1545	-	-	1586	-	-
Mov Cap-2 Maneuver	892	799	-	892	799	-	-	-	-	-	-	-
Stage 1	950	844	-	987	870	-	-	-	-	-	-	-
Stage 2	985	870	-	948	843	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.05	9.01	0.27	0.13
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	66	-	-	891	902	31	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.004	0.001	-	-
HCM Control Delay (s/veh)	7.3	0	-	9.1	9	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

DATA FROM ITE TRIP GENERATION MANUAL, 11TH EDITION

Land Use: 160
Data Center

Description

A data center is a free-standing warehouse type of facility that is primarily used for off-site storage of computer systems and associated components including applications and secure data. Some data centers may include maintenance areas and a small office. Data centers may be occupied by single or multiple tenants. Data centers typically have a small number of employees and visitors.

Additional Data

For the two data sites with time-of-day data, the AM and PM peak hours for the sites were between 6:30 and 7:30 a.m. and 3:00 and 4:00 p.m., respectively.

The sites were surveyed in the 2010s in Illinois and Virginia.

Caution should be used when applying trip generation rates for data centers, as the database contains a small number of sites with limited data on the number of tenants and employees. To assist in the future analysis of this land use, it is important that this information be reported.

Source Numbers

660, 958

Data Center
(160)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

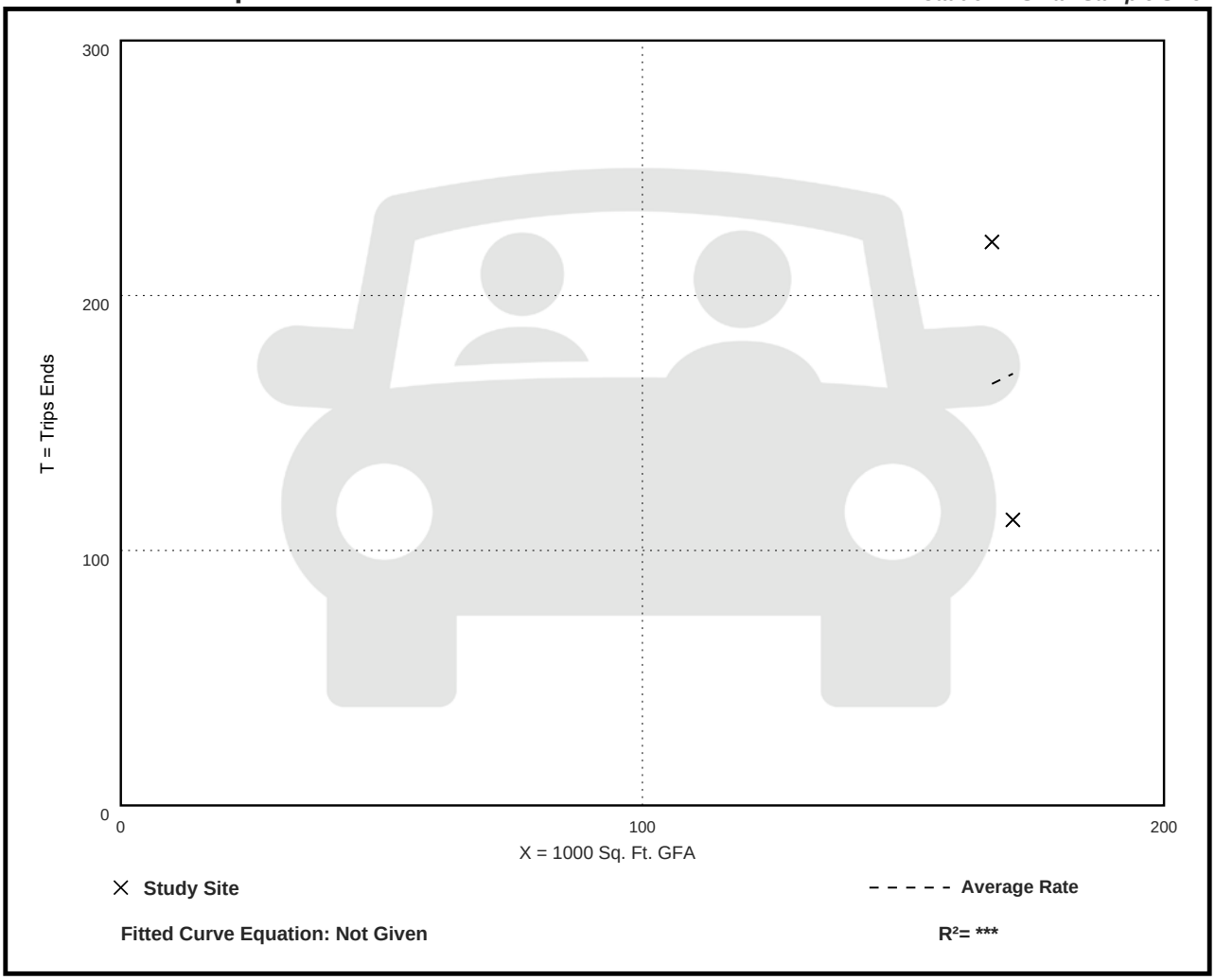
Setting/Location: General Urban/Suburban
Number of Studies: 2
Avg. 1000 Sq. Ft. GFA: 169
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.99	0.65 - 1.32	***

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= *

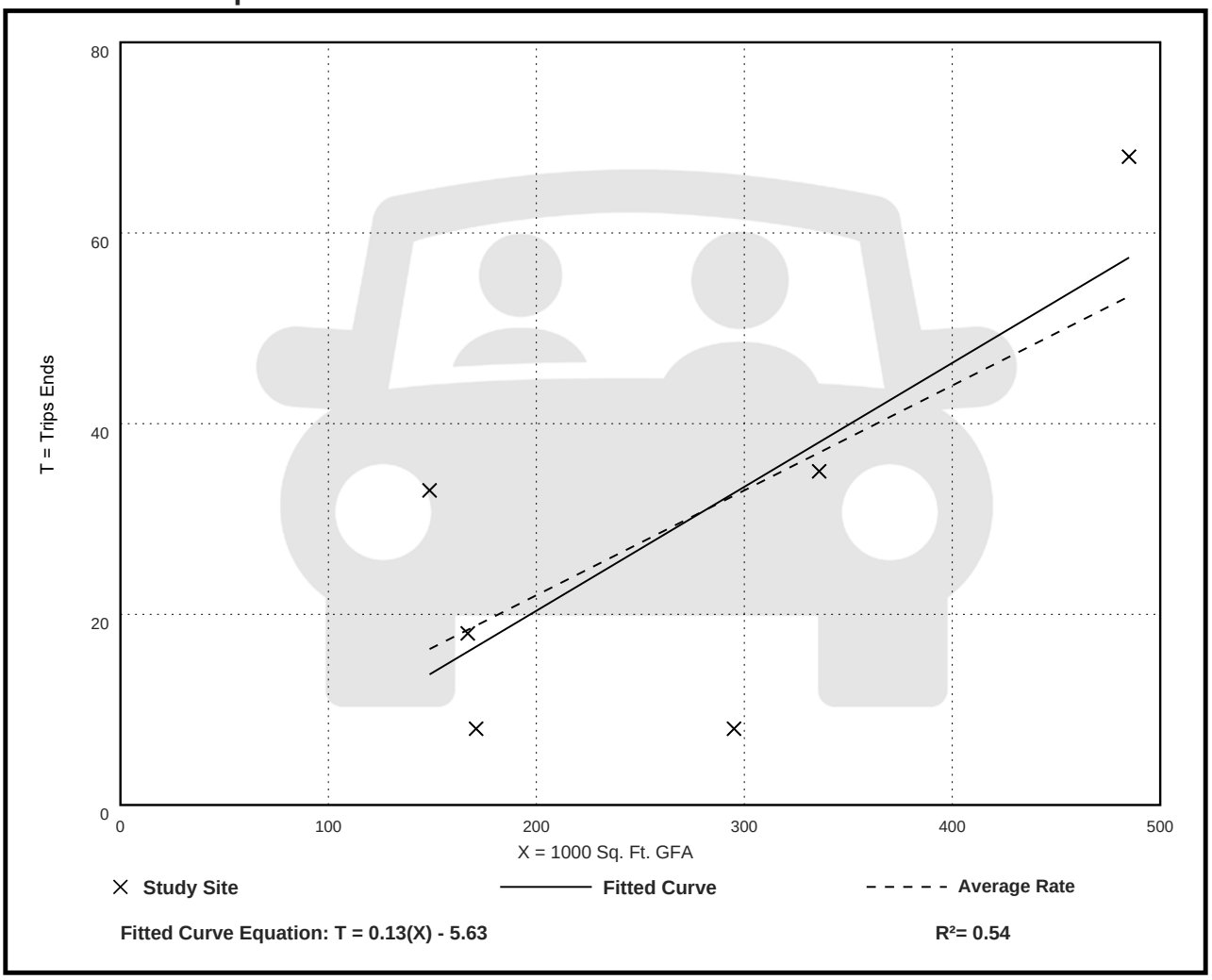
Data Center
(160)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 6
Avg. 1000 Sq. Ft. GFA: 267
Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.11	0.03 - 0.22	0.06

Data Plot and Equation



Fitted Curve Equation: T = 0.13(X) - 5.63

R^2= 0.54

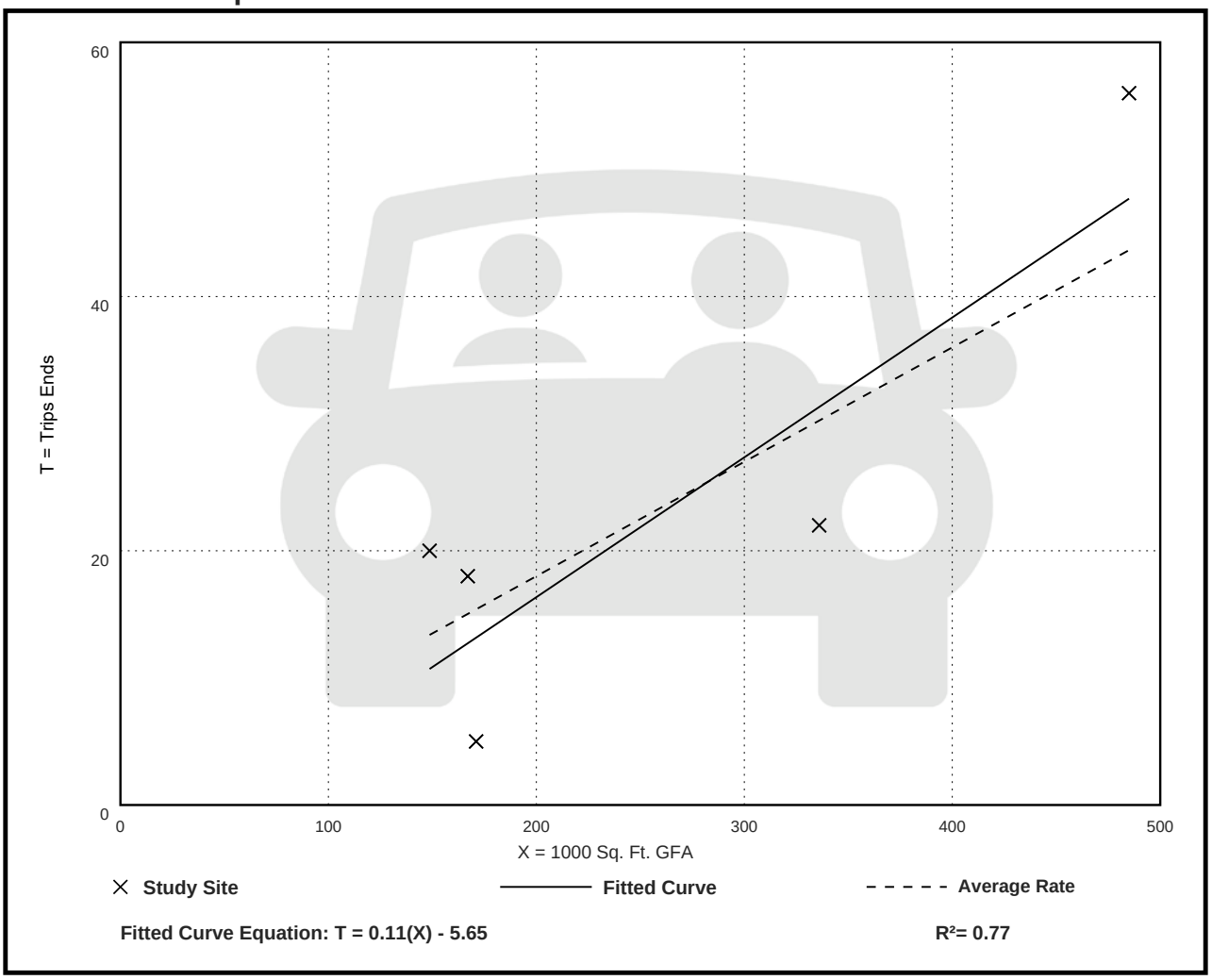
Data Center
(160)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 5
Avg. 1000 Sq. Ft. GFA: 262
Directional Distribution: 30% entering, 70% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.09	0.03 - 0.13	0.04

Data Plot and Equation



Fitted Curve Equation: T = 0.11(X) - 5.65

R^2= 0.77

CMAP YEAR 2050 TRAFFIC PROJECTIONS

Chicago Metropolitan Agency for Planning

433 West Van Buren Street, Suite 450
Chicago, IL 60607
cmap.illinois.gov | 312-454-0400

December 18, 2024

Galena Fessler
Planning Analyst
Kimley-Horn
4201 Winfield Road
Suite 600
Warrenville, IL 60018

Subject: IL 53 & Laraway Road
IDOT

Dear Ms. Fessler:

In response to a request made on your behalf and dated December 17, 2024, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT (2023)	Year 2050 ADT
IL 53, north of Laraway Road	21,600	26,400
IL 53, south of Laraway Road	15,800	21,900
Laraway Road, east of IL 53	7,300	8,400
Laraway Road, west of IL 53	7,450	9,850
Millsdale Road, west of IL 53	5,000	6,600
Schweizer Road, west of IL 53	200	265
Bernhard Rd, east of Rowell Rd	20 (2016)	30

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2024 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 or email me at jrodriguez@cmap.illinois.gov

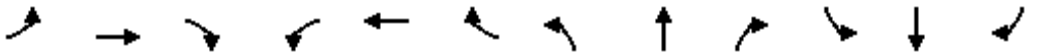
Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Rios (IDOT)
s\2024_TrafficForecasts\Elwood\wi-53-24\wi-53-24.docx

TRAFFIC FORECAST RECORD

Record Number: wi-53-24
Type of Report: Projection
Year Sought: 2050
Analyst: JAR
Organization Requestion Forecast: Kimley-Horn
Contact: Galena Fessler
Email or Phone: Galena.Fessler@kimley-horn.com
Sponsor: IDOT
Date request was received: 12/17/2024
Date that response was emailed: 12/18/2024
Facility Location: IL 53 & Laraway Road
Municipality: Elwood

SIGNAL TIMINGS – *BRANDON ROAD BUSINESS PARK TRAFFIC IMPACT ANALYSIS*

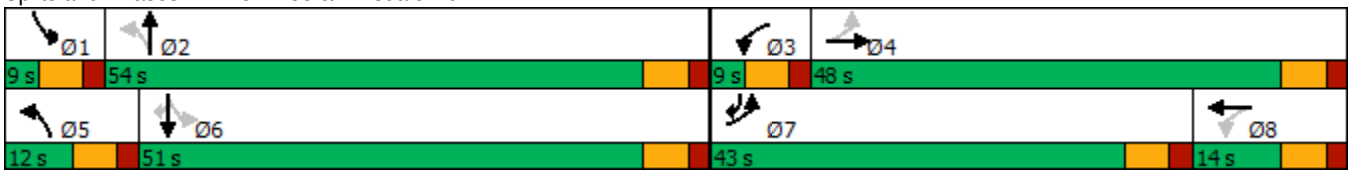


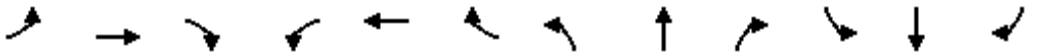
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	0	34	1	0	1	143	514	0	0	324	350
Future Volume (vph)	79	0	34	1	0	1	143	514	0	0	324	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Storage Length (ft)	150		100	0		0	250		0	285		220
Storage Lanes	1		0	0		0	1		0	1		1
Taper Length (ft)	25			25			220			220		
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	1.00
Frt		0.850			0.932							0.850
Flt Protected	0.950				0.976		0.950					
Satd. Flow (prot)	1752	1524	0	0	1114	0	1728	3292	0	1837	3172	1561
Flt Permitted	0.593						0.347					
Satd. Flow (perm)	1094	1524	0	0	1141	0	631	3292	0	1837	3172	1561
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		424			136							368
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1364			582			641			5367	
Travel Time (s)		23.3			9.9			7.9			66.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	0%	6%	0%	0%	100%	1%	6%	0%	0%	10%	0%
Adj. Flow (vph)	83	0	36	1	0	1	151	541	0	0	341	368
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	36	0	0	2	0	151	541	0	0	341	368
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			50			50	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		3	8		5	2		1	6	7
Switch Phase												
Minimum Initial (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	3.0
Minimum Split (s)	9.0	14.0		9.0	14.0		9.0	14.0		9.0	14.0	9.0
Total Split (s)	43.0	48.0		9.0	14.0		12.0	54.0		9.0	51.0	43.0
Total Split (%)	35.8%	40.0%		7.5%	11.7%		10.0%	45.0%		7.5%	42.5%	35.8%
Maximum Green (s)	37.0	42.0		3.0	8.0		6.0	48.0		3.0	45.0	37.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None		None	None		None	Min		None	Min	None
Act Effct Green (s)	9.6	9.6			5.9		19.4	19.4			10.3	26.7
Actuated g/C Ratio	0.23	0.23			0.14		0.46	0.46			0.25	0.64
v/c Ratio	0.22	0.05			0.01		0.33	0.35			0.43	0.33
Control Delay	15.3	0.1			0.0		9.5	8.4			17.3	1.9
Queue Delay	0.0	0.0			0.0		0.0	0.0			0.0	0.0
Total Delay	15.3	0.1			0.0		9.5	8.4			17.3	1.9
LOS	B	A			A		A	A			B	A
Approach Delay		10.7						8.7			9.3	
Approach LOS		B						A			A	
Stops (vph)	58	0			0		70	276			250	28
Fuel Used(gal)	2	0			0		2	8			17	13
CO Emissions (g/hr)	108	22			1		151	566			1175	878
NOx Emissions (g/hr)	21	4			0		29	110			229	171
VOC Emissions (g/hr)	25	5			0		35	131			272	203
Dilemma Vehicles (#)	0	3			0		0	52			32	0
Queue Length 50th (ft)	17	0			0		16	32			35	0
Queue Length 95th (ft)	44	0			0		65	100			91	34
Internal Link Dist (ft)		1284			502			561			5287	
Turn Bay Length (ft)	150						250					220
Base Capacity (vph)	1514	1454			342		460	3161			3014	1477
Starvation Cap Reductn	0	0			0		0	0			0	0
Spillback Cap Reductn	0	0			0		0	0			0	0
Storage Cap Reductn	0	0			0		0	0			0	0
Reduced v/c Ratio	0.05	0.02			0.01		0.33	0.17			0.11	0.25

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 41.8			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 9.1		Intersection LOS: A	
Intersection Capacity Utilization 48.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 115: IL 53 & Millsdale Rd



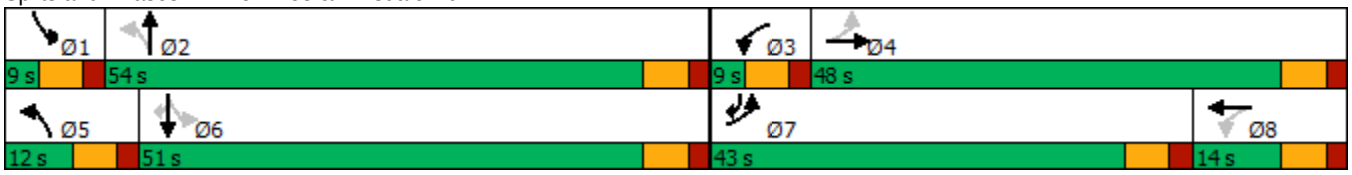


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	474	0	157	1	0	0	76	871	1	0	652	177
Future Volume (vph)	474	0	157	1	0	0	76	871	1	0	652	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	11	11	11	11	11
Storage Length (ft)	150		100	0		0	250		0	285		220
Storage Lanes	1		0	0		0	1		0	1		1
Taper Length (ft)	25			25			220			220		
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	1.00
Frt		0.850										0.850
Flt Protected	0.950				0.950		0.950					
Satd. Flow (prot)	1787	1615	0	0	1745	0	1728	3173	0	1837	3292	1561
Flt Permitted	0.971						0.196					
Satd. Flow (perm)	1827	1615	0	0	1837	0	356	3173	0	1837	3292	1561
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		212										186
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1364			582			641			5367	
Travel Time (s)		23.3			9.9			7.9			66.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	1%	10%	0%	0%	6%	0%
Adj. Flow (vph)	499	0	165	1	0	0	80	917	1	0	686	186
Shared Lane Traffic (%)												
Lane Group Flow (vph)	499	165	0	0	1	0	80	918	0	0	686	186
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			50			50	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		3	8		5	2		1	6	7
Switch Phase												
Minimum Initial (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	3.0
Minimum Split (s)	9.0	14.0		9.0	14.0		9.0	14.0		9.0	14.0	9.0
Total Split (s)	43.0	48.0		9.0	14.0		12.0	54.0		9.0	51.0	43.0
Total Split (%)	35.8%	40.0%		7.5%	11.7%		10.0%	45.0%		7.5%	42.5%	35.8%
Maximum Green (s)	37.0	42.0		3.0	8.0		6.0	48.0		3.0	45.0	37.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None		None	None		None	Min		None	Min	None
Act Effct Green (s)	28.3	28.3			6.2		31.3	31.3			22.2	57.6
Actuated g/C Ratio	0.39	0.39			0.09		0.43	0.43			0.30	0.79
v/c Ratio	0.70	0.22			0.01		0.29	0.67			0.68	0.15
Control Delay	25.7	1.7			42.0		17.1	20.4			28.4	0.9
Queue Delay	0.0	0.0			0.0		0.0	0.0			0.0	0.0
Total Delay	25.7	1.7			42.0		17.1	20.4			28.4	0.9
LOS	C	A			D		B	C			C	A
Approach Delay		19.7			42.0			20.2			22.5	
Approach LOS		B			D			C			C	
Stops (vph)	360	5			2		40	632			528	8
Fuel Used(gal)	10	2			0		1	19			36	6
CO Emissions (g/hr)	727	109			2		92	1322			2498	433
NOx Emissions (g/hr)	141	21			0		18	257			486	84
VOC Emissions (g/hr)	168	25			1		21	306			579	100
Dilemma Vehicles (#)	0	7			0		0	52			39	0
Queue Length 50th (ft)	182	0			0		19	151			139	0
Queue Length 95th (ft)	359	17			7		62	333			277	18
Internal Link Dist (ft)		1284			502			561			5287	
Turn Bay Length (ft)	150						250					220
Base Capacity (vph)	1054	1120			221		277	2211			2192	1363
Starvation Cap Reductn	0	0			0		0	0			0	0
Spillback Cap Reductn	0	0			0		0	0			0	0
Storage Cap Reductn	0	0			0		0	0			0	0
Reduced v/c Ratio	0.47	0.15			0.00		0.29	0.42			0.31	0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 72.8			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 20.9		Intersection LOS: C	
Intersection Capacity Utilization 67.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 115: IL 53 & Millsdale Rd



FUTURE (2032) NO-BUILD CAPACITY REPORTS

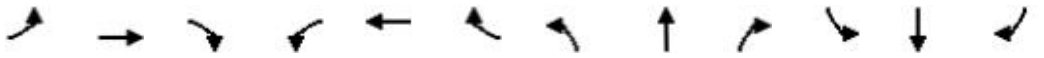
Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	60	1	15	1	725	70	20	940	10
Future Vol, veh/h	1	1	1	60	1	15	1	725	70	20	940	10
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	-	-	-	-	-	-	-	-	-	345	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	71	2	4	2	9	7	2
Mvmt Flow	1	1	1	63	1	16	1	763	74	21	989	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1421	1876	500	1339	1844	418	1000	0	0	837	0	0
Stage 1	1037	1037	-	802	802	-	-	-	-	-	-	-
Stage 2	384	839	-	537	1042	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	8.32	4.14	-	-	4.28	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	4.01	2.22	-	-	2.29	-	-
Pot Cap-1 Maneuver	96	71	516	111	74	427	688	-	-	750	-	-
Stage 1	247	307	-	344	395	-	-	-	-	-	-	-
Stage 2	610	379	-	495	305	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	89	69	516	106	72	427	688	-	-	750	-	-
Mov Cap-2 Maneuver	89	69	-	106	72	-	-	-	-	-	-	-
Stage 1	240	298	-	343	394	-	-	-	-	-	-	-
Stage 2	585	379	-	479	296	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	39.29	68.97	0.03	0.2
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	4	-	-	108	105	427	750	-	-
HCM Lane V/C Ratio	0.002	-	-	0.029	0.612	0.037	0.028	-	-
HCM Control Delay (s/veh)	10.2	0	-	39.3	82.6	13.8	9.9	-	-
HCM Lane LOS	B	A	-	E	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	3	0.1	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1	5	1	1	1	15	630	5	40	535	385
Future Volume (veh/h)	155	1	5	1	1	1	15	630	5	40	535	385
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1678	1826	1870	1811	1737	1870
Adj Flow Rate, veh/h	163	1	5	1	1	1	16	663	5	42	563	405
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	15	5	2	6	11	2
Cap, veh/h	383	35	177	175	10	10	281	1128	515	325	1122	729
Arrive On Green	0.12	0.13	0.13	0.00	0.01	0.01	0.01	0.33	0.33	0.03	0.34	0.34
Sat Flow, veh/h	1781	271	1355	1781	858	858	1598	3469	1585	1725	3300	1585
Grp Volume(v), veh/h	163	0	6	1	0	2	16	663	5	42	563	405
Grp Sat Flow(s),veh/h/ln	1781	0	1626	1781	0	1716	1598	1735	1585	1725	1650	1585
Q Serve(g_s), s	3.9	0.0	0.1	0.0	0.0	0.1	0.3	7.4	0.1	0.8	6.3	8.6
Cycle Q Clear(g_c), s	3.9	0.0	0.1	0.0	0.0	0.1	0.3	7.4	0.1	0.8	6.3	8.6
Prop In Lane	1.00		0.83	1.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	383	0	213	175	0	20	281	1128	515	325	1122	729
V/C Ratio(X)	0.43	0.00	0.03	0.01	0.00	0.10	0.06	0.59	0.01	0.13	0.50	0.56
Avail Cap(c_a), veh/h	1358	0	1260	286	0	295	364	4030	1841	390	3834	2031
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	0.0	17.6	22.6	0.0	22.7	10.7	13.1	10.6	10.6	12.2	9.1
Incr Delay (d2), s/veh	0.7	0.0	0.1	0.0	0.0	2.1	0.1	0.5	0.0	0.2	0.3	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.6	0.0	0.1	0.0	0.0	0.1	0.1	3.6	0.1	0.4	2.8	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.6	0.0	17.7	22.7	0.0	24.8	10.7	13.6	10.6	10.8	12.6	9.8
LnGrp LOS	B		B	C		C	B	B	B	B	B	A
Approach Vol, veh/h		169			3			684			1010	
Approach Delay, s/veh		18.6			24.1			13.5			11.4	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	21.1	6.0	12.1	6.6	21.8	11.6	6.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	3.0	54.0	3.0	36.0	3.0	54.0	31.0	8.0
Max Q Clear Time (g_c+I1), s	2.8	9.4	2.0	2.1	2.3	10.6	5.9	2.1
Green Ext Time (p_c), s	0.0	4.3	0.0	0.0	0.0	5.2	0.4	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.8
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1	5	1	1	1	15	630	5	40	535	385
Future Volume (veh/h)	155	1	5	1	1	1	15	630	5	40	535	385
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1678	1826	1870	1811	1737	1870
Adj Flow Rate, veh/h	163	1	5	1	1	1	16	663	5	42	563	405
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	15	5	2	6	11	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	383	35	177	175	10	10	281	1128	515	325	1122	729
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.13	0.13	0.00	0.01	0.01	0.01	0.33	0.33	0.03	0.34	0.34
Unsig. Movement Delay												
Ln Grp Delay, s/veh	18.6	0.0	17.7	22.7	0.0	24.8	10.7	13.6	10.6	10.8	12.6	9.8
Ln Grp LOS	B		B	C		C	B	B	B	B	B	A
Approach Vol, veh/h		169			3			684			1010	
Approach Delay, s/veh		18.6			24.1			13.5			11.4	
Approach LOS		B			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	7.3	21.1	6.0	12.1	6.6	21.8	11.6	6.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	3.0	54.0	3.0	36.0	3.0	54.0	31.0	8.0
Max Allow Headway (MAH), s	3.7	4.7	3.8	5.4	3.7	4.4	3.8	5.3
Max Q Clear (g_c+I1), s	2.8	9.4	2.0	2.1	2.3	10.6	5.9	2.1
Green Ext Time (g_e), s	0.0	4.3	0.0	0.0	0.0	5.2	0.4	0.0
Prob of Phs Call (p_c)	0.42	1.00	0.01	0.89	0.19	1.00	0.88	0.11
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.28

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1725		1781		1598		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3469		271		3300		858

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1355		1585		858

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	42	0	1	0	16	0	163	0
Grp Sat Flow (s), veh/h/ln	1725	0	1781	0	1598	0	1781	0
Q Serve Time (g_s), s	0.8	0.0	0.0	0.0	0.3	0.0	3.9	0.0
Cycle Q Clear Time (g_c), s	0.8	0.0	0.0	0.0	0.3	0.0	3.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	744	0	1410	0	521	0	1415	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	15.1	0.0	0.5	0.0	15.1	0.0	2.1	0.0
Perm LT Serve Time (g_u), s	7.7	0.0	0.5	0.0	9.5	0.0	0.5	0.0
Perm LT Q Serve Time (g_ps), s	0.4	0.0	0.0	0.0	0.2	0.0	0.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	325	0	175	0	281	0	383	0
V/C Ratio (X)	0.13	0.00	0.01	0.00	0.06	0.00	0.43	0.00
Avail Cap (c_a), veh/h	390	0	286	0	364	0	1358	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	10.6	0.0	22.6	0.0	10.7	0.0	17.9	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.1	0.0	0.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	10.8	0.0	22.7	0.0	10.7	0.0	18.6	0.0
1st-Term Q (Q1), veh/ln	0.2	0.0	0.0	0.0	0.1	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.4	0.0	0.0	0.0	0.1	0.0	2.6	0.0
%ile Storage Ratio (RQ%)	0.04	0.00	0.00	0.00	0.02	0.00	0.18	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	663	0	0	0	563	0	0
Grp Sat Flow (s), veh/h/ln	0	1735	0	0	0	1650	0	0
Q Serve Time (g_s), s	0.0	7.4	0.0	0.0	0.0	6.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.4	0.0	0.0	0.0	6.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1128	0	0	0	1122	0	0
V/C Ratio (X)	0.00	0.59	0.00	0.00	0.00	0.50	0.00	0.00
Avail Cap (c_a), veh/h	0	4030	0	0	0	3834	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.1	0.0	0.0	0.0	12.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.6	0.0	0.0	0.0	12.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	0.0	0.0	1.5	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	3.6	0.0	0.0	0.0	2.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.00	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	5	0	6	0	405	0	2
Grp Sat Flow (s), veh/h/ln	0	1585	0	1626	0	1585	0	1716
Q Serve Time (g_s), s	0.0	0.1	0.0	0.1	0.0	8.6	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.1	0.0	8.6	0.0	0.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.83	0.00	1.00	0.00	0.50
Lane Grp Cap (c), veh/h	0	515	0	213	0	729	0	20
V/C Ratio (X)	0.00	0.01	0.00	0.03	0.00	0.56	0.00	0.10
Avail Cap (c_a), veh/h	0	1841	0	1260	0	2031	0	295
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.6	0.0	17.6	0.0	9.1	0.0	22.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.7	0.0	2.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.6	0.0	17.7	0.0	9.8	0.0	24.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.1	0.0	4.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.35	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.8
HCM 7th LOS	B

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	1	90	1	20	75	1	1	1	1	1	1	1
Future Vol, veh/h	1	90	1	20	75	1	1	1	1	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	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	-	-	-	-	-	40	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	3	2	2	13	2	2	2	2	2	2	2
Mvmt Flow	1	95	1	21	79	1	1	1	1	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	80	0	0	96	0	0	218	219	95	218	219	79
Stage 1	-	-	-	-	-	-	97	97	-	121	121	-
Stage 2	-	-	-	-	-	-	122	122	-	97	98	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1518	-	-	1498	-	-	738	679	962	738	679	982
Stage 1	-	-	-	-	-	-	910	815	-	883	796	-
Stage 2	-	-	-	-	-	-	883	795	-	909	814	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1518	-	-	1498	-	-	724	669	962	724	669	982
Mov Cap-2 Maneuver	-	-	-	-	-	-	724	669	-	724	669	-
Stage 1	-	-	-	-	-	-	909	814	-	870	784	-
Stage 2	-	-	-	-	-	-	868	783	-	906	813	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	1.55	9.72	9.69
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	766	20	-	-	379	-	-	770
HCM Lane V/C Ratio	0.004	0.001	-	-	0.014	-	-	0.004
HCM Control Delay (s/veh)	9.7	7.4	0	-	7.4	0	-	9.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	80	10	25	80	15	40
Future Vol, veh/h	80	10	25	80	15	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	12	2	77	3
Mvmt Flow	84	11	26	84	16	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	95	0	226	89
Stage 1	-	-	-	-	89	-
Stage 2	-	-	-	-	137	-
Critical Hdwy	-	-	4.22	-	7.17	6.23
Critical Hdwy Stg 1	-	-	-	-	6.17	-
Critical Hdwy Stg 2	-	-	-	-	6.17	-
Follow-up Hdwy	-	-	2.308	-	4.193	3.327
Pot Cap-1 Maneuver	-	-	1439	-	622	966
Stage 1	-	-	-	-	776	-
Stage 2	-	-	-	-	735	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1439	-	610	966
Mov Cap-2 Maneuver	-	-	-	-	610	-
Stage 1	-	-	-	-	776	-
Stage 2	-	-	-	-	721	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.8	9.64
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	833	-	-	429	-
HCM Lane V/C Ratio	0.069	-	-	0.018	-
HCM Control Delay (s/veh)	9.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

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	1	1	1	1	1	1	1	45	1	1	10	1
Future Vol, veh/h	1	1	1	1	1	1	1	45	1	1	10	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	20	2
Mvmt Flow	1	1	1	1	1	1	1	47	1	1	11	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	63	64	11	63	64	48	12	0	0	48	0	0
Stage 1	13	13	-	50	50	-	-	-	-	-	-	-
Stage 2	50	51	-	13	14	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	931	827	1070	931	827	1021	1607	-	-	1559	-	-
Stage 1	1007	885	-	963	853	-	-	-	-	-	-	-
Stage 2	963	853	-	1007	884	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	928	826	1070	928	826	1021	1607	-	-	1559	-	-
Mov Cap-2 Maneuver	928	826	-	928	826	-	-	-	-	-	-	-
Stage 1	1006	884	-	962	853	-	-	-	-	-	-	-
Stage 2	960	852	-	1004	883	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.88	8.93	0.15	0.61
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	38	-	-	931	918	147	-	-
HCM Lane V/C Ratio	0.001	-	-	0.003	0.003	0.001	-	-
HCM Control Delay (s/veh)	7.2	0	-	8.9	8.9	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	24.8

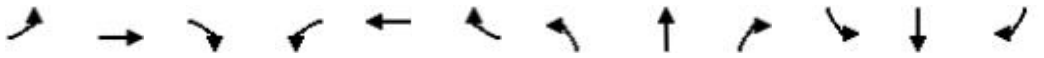
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	90	1	25	1	1120	130	25	835	1
Future Vol, veh/h	1	1	1	90	1	25	1	1120	130	25	835	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	345	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	8	2	8	2	19	6	2
Mvmt Flow	1	1	1	95	1	26	1	1179	137	26	879	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1524	2250	440	1742	2182	658	880	0	0	1316	0	0
Stage 1	932	932	-	1249	1249	-	-	-	-	-	-	-
Stage 2	592	1318	-	493	933	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	7.06	4.14	-	-	4.48	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.38	2.22	-	-	2.39	-	-
Pot Cap-1 Maneuver	81	41	565	~ 55	45	393	764	-	-	439	-	-
Stage 1	287	343	-	183	243	-	-	-	-	-	-	-
Stage 2	459	225	-	527	343	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	69	39	565	~ 51	43	393	764	-	-	439	-	-
Mov Cap-2 Maneuver	69	39	-	~ 51	43	-	-	-	-	-	-	-
Stage 1	269	323	-	183	242	-	-	-	-	-	-	-
Stage 2	426	225	-	493	323	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	57.97	$ 471.94	0.03	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	3	-	-	71	50	393	439	-	-
HCM Lane V/C Ratio	0.001	-	-	0.044	1.898	0.067	0.06	-	-
HCM Control Delay (s/veh)	9.7	0	-	58	$ 597.5	14.8	13.7	-	-
HCM Lane LOS	A	A	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	9.5	0.2	0.2	-	-

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	1	70	5	1	40	30	895	5	30	720	195
Future Volume (veh/h)	205	1	70	5	1	40	30	895	5	30	720	195
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1826	1870	1870	1767	1707	1767	1870	1663	1796	1841
Adj Flow Rate, veh/h	216	1	74	5	1	42	32	942	5	32	758	205
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	5	2	2	9	13	9	2	16	7	4
Cap, veh/h	429	4	328	216	3	110	258	1279	604	221	1300	817
Arrive On Green	0.14	0.21	0.21	0.00	0.07	0.07	0.02	0.38	0.38	0.02	0.38	0.38
Sat Flow, veh/h	1767	21	1567	1781	37	1554	1626	3357	1585	1584	3413	1560
Grp Volume(v), veh/h	216	0	75	5	0	43	32	942	5	32	758	205
Grp Sat Flow(s),veh/h/ln	1767	0	1588	1781	0	1591	1626	1678	1585	1584	1706	1560
Q Serve(g_s), s	6.5	0.0	2.4	0.2	0.0	1.6	0.7	15.1	0.1	0.8	11.0	4.5
Cycle Q Clear(g_c), s	6.5	0.0	2.4	0.2	0.0	1.6	0.7	15.1	0.1	0.8	11.0	4.5
Prop In Lane	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	429	0	333	216	0	112	258	1279	604	221	1300	817
V/C Ratio(X)	0.50	0.00	0.23	0.02	0.00	0.38	0.12	0.74	0.01	0.14	0.58	0.25
Avail Cap(c_a), veh/h	1055	0	917	295	0	204	302	2907	1373	265	2956	1574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	0.0	20.4	26.8	0.0	27.7	12.4	16.6	12.0	13.3	15.4	8.1
Incr Delay (d2), s/veh	0.9	0.0	0.3	0.0	0.0	2.1	0.2	0.8	0.0	0.3	0.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.6	0.0	1.6	0.1	0.0	1.2	0.4	8.0	0.1	0.4	6.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	0.0	20.8	26.8	0.0	29.8	12.6	17.4	12.0	13.6	15.8	8.3
LnGrp LOS	C		C	C		C	B	B	B	B	B	A
Approach Vol, veh/h		291			48			979			995	
Approach Delay, s/veh		21.1			29.5			17.3			14.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	29.8	6.2	19.1	7.3	29.8	14.9	10.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	3.0	54.0	3.0	36.0	3.0	54.0	31.0	8.0
Max Q Clear Time (g_c+I1), s	2.8	17.1	2.2	4.4	2.7	13.0	8.5	3.6
Green Ext Time (p_c), s	0.0	6.7	0.0	0.4	0.0	5.9	0.6	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	16.7
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	1	70	5	1	40	30	895	5	30	720	195
Future Volume (veh/h)	205	1	70	5	1	40	30	895	5	30	720	195
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1870	1826	1870	1870	1767	1707	1767	1870	1663	1796	1841
Adj Flow Rate, veh/h	216	1	74	5	1	42	32	942	5	32	758	205
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	5	2	2	9	13	9	2	16	7	4
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	429	4	328	216	3	110	258	1279	604	221	1300	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.21	0.21	0.00	0.07	0.07	0.02	0.38	0.38	0.02	0.38	0.38
Unsig. Movement Delay												
Ln Grp Delay, s/veh	21.2	0.0	20.8	26.8	0.0	29.8	12.6	17.4	12.0	13.6	15.8	8.3
Ln Grp LOS	C		C	C		C	B	B	B	B	B	A
Approach Vol, veh/h		291			48			979			995	
Approach Delay, s/veh		21.1			29.5			17.3			14.2	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	7.3	29.8	6.2	19.1	7.3	29.8	14.9	10.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	3.0	54.0	3.0	36.0	3.0	54.0	31.0	8.0
Max Allow Headway (MAH), s	3.7	4.7	3.8	5.5	3.7	4.6	3.8	5.4
Max Q Clear (g_c+I1), s	2.8	17.1	2.2	4.4	2.7	13.0	8.5	3.6
Green Ext Time (g_e), s	0.0	6.7	0.0	0.4	0.0	5.9	0.6	0.0
Prob of Phs Call (p_c)	0.43	1.00	0.08	1.00	0.43	1.00	0.98	0.88
Prob of Max Out (p_x)	1.00	0.01	1.00	0.00	1.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1584		1781		1626		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3357		21		3413		37

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1567		1560		1554

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	32	0	5	0	32	0	216	0
Grp Sat Flow (s), veh/h/ln	1584	0	1781	0	1626	0	1767	0
Q Serve Time (g_s), s	0.8	0.0	0.2	0.0	0.7	0.0	6.5	0.0
Cycle Q Clear Time (g_c), s	0.8	0.0	0.2	0.0	0.7	0.0	6.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	526	0	1325	0	532	0	1353	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	23.8	0.0	4.4	0.0	23.8	0.0	6.4	0.0
Perm LT Serve Time (g_u), s	8.7	0.0	4.4	0.0	12.7	0.0	2.8	0.0
Perm LT Q Serve Time (g_ps), s	1.0	0.0	0.0	0.0	0.7	0.0	0.7	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	221	0	216	0	258	0	429	0
V/C Ratio (X)	0.14	0.00	0.02	0.00	0.12	0.00	0.50	0.00
Avail Cap (c_a), veh/h	265	0	295	0	302	0	1055	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	13.3	0.0	26.8	0.0	12.4	0.0	20.3	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.2	0.0	0.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	13.6	0.0	26.8	0.0	12.6	0.0	21.2	0.0
1st-Term Q (Q1), veh/ln	0.2	0.0	0.1	0.0	0.2	0.0	2.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.4	0.0	0.1	0.0	0.4	0.0	4.6	0.0
%ile Storage Ratio (RQ%)	0.04	0.00	0.00	0.00	0.05	0.00	0.31	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	942	0	0	0	758	0	0
Grp Sat Flow (s), veh/h/ln	0	1678	0	0	0	1706	0	0
Q Serve Time (g_s), s	0.0	15.1	0.0	0.0	0.0	11.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.1	0.0	0.0	0.0	11.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1279	0	0	0	1300	0	0
V/C Ratio (X)	0.00	0.74	0.00	0.00	0.00	0.58	0.00	0.00
Avail Cap (c_a), veh/h	0	2907	0	0	0	2956	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.6	0.0	0.0	0.0	15.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.4	0.0	0.0	0.0	15.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	0.0	0.0	3.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.77	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.0	0.0	0.0	0.0	6.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.00	0.00	0.03	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	5	0	75	0	205	0	43
Grp Sat Flow (s), veh/h/ln	0	1585	0	1588	0	1560	0	1591
Q Serve Time (g_s), s	0.0	0.1	0.0	2.4	0.0	4.5	0.0	1.6
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	2.4	0.0	4.5	0.0	1.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	1559.9	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	8.9	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.99	0.00	1.00	0.00	0.98
Lane Grp Cap (c), veh/h	0	604	0	333	0	817	0	112
V/C Ratio (X)	0.00	0.01	0.00	0.23	0.00	0.25	0.00	0.38
Avail Cap (c_a), veh/h	0	1373	0	917	0	1574	0	204
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	20.4	0.0	8.1	0.0	27.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.2	0.0	2.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.0	0.0	20.8	0.0	8.3	0.0	29.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.8	0.0	1.2	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	1.6	0.0	2.2	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.02	0.00	0.20	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	16.7
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	150	5	10	115	1	1	1	25	1	1	1
Future Vol, veh/h	1	150	5	10	115	1	1	1	25	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	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	-	-	-	-	-	40	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	4	50	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	158	5	11	121	1	1	1	26	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	122	0	0	163	0	0	303	303	158	303	307	121
Stage 1	-	-	-	-	-	-	160	160	-	142	142	-
Stage 2	-	-	-	-	-	-	143	143	-	161	165	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1465	-	-	1415	-	-	650	610	887	650	607	930
Stage 1	-	-	-	-	-	-	842	766	-	861	779	-
Stage 2	-	-	-	-	-	-	860	778	-	842	762	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1465	-	-	1415	-	-	642	605	887	624	601	930
Mov Cap-2 Maneuver	-	-	-	-	-	-	642	605	-	624	601	-
Stage 1	-	-	-	-	-	-	841	765	-	854	773	-
Stage 2	-	-	-	-	-	-	851	772	-	815	761	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.05	0.6	9.33	10.23
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	860	12	-	-	144	-	-	691
HCM Lane V/C Ratio	0.033	0.001	-	-	0.007	-	-	0.005
HCM Control Delay (s/veh)	9.3	7.5	0	-	7.6	0	-	10.2
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	165	10	50	115	10	30
Future Vol, veh/h	165	10	50	115	10	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	30	2	2	17	7
Mvmt Flow	174	11	53	121	11	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	184	0	405	179
Stage 1	-	-	-	-	179	-
Stage 2	-	-	-	-	226	-
Critical Hdwy	-	-	4.12	-	6.57	6.27
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	-	-	2.218	-	3.653	3.363
Pot Cap-1 Maneuver	-	-	1391	-	574	851
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	777	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1391	-	550	851
Mov Cap-2 Maneuver	-	-	-	-	550	-
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	746	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.33	10.09
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	749	-	-	545	-
HCM Lane V/C Ratio	0.056	-	-	0.038	-
HCM Control Delay (s/veh)	10.1	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

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	1	1	1	1	1	1	1	25	1	1	60	1
Future Vol, veh/h	1	1	1	1	1	1	1	25	1	1	60	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	17	2	2	2	2
Mvmt Flow	1	1	1	1	1	1	1	26	1	1	63	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	95	95	64	95	95	27	64	0	0	27	0	0
Stage 1	66	66	-	29	29	-	-	-	-	-	-	-
Stage 2	29	29	-	66	66	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	888	795	1001	888	795	1049	1538	-	-	1586	-	-
Stage 1	945	840	-	988	871	-	-	-	-	-	-	-
Stage 2	988	871	-	945	840	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	885	794	1001	885	794	1049	1538	-	-	1586	-	-
Mov Cap-2 Maneuver	885	794	-	885	794	-	-	-	-	-	-	-
Stage 1	944	840	-	987	870	-	-	-	-	-	-	-
Stage 2	985	870	-	942	839	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.08	9.03	0.27	0.12
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	66	-	-	885	897	29	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.004	0.001	-	-
HCM Control Delay (s/veh)	7.3	0	-	9.1	9	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

FUTURE (2032) BUILD CAPACITY REPORTS

Intersection	
Int Delay, s/veh	20.2

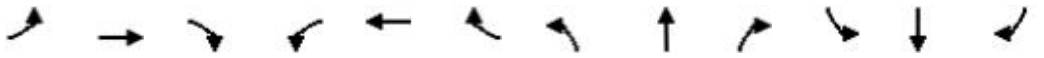
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	70	1	115	1	830	80	145	1065	10
Future Vol, veh/h	1	1	1	70	1	115	1	830	80	145	1065	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	265	345	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	71	2	4	2	9	7	2
Mvmt Flow	1	1	1	74	1	121	1	874	84	153	1121	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1871	2392	566	1742	2313	437	1132	0	0	958	0	0
Stage 1	1432	1432	-	876	876	-	-	-	-	-	-	-
Stage 2	439	960	-	866	1437	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	8.32	4.14	-	-	4.28	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	4.01	2.22	-	-	2.29	-	-
Pot Cap-1 Maneuver	44	33	468	~ 55	37	413	613	-	-	672	-	-
Stage 1	141	198	-	310	365	-	-	-	-	-	-	-
Stage 2	566	333	-	314	197	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	23	26	468	~ 41	29	413	613	-	-	672	-	-
Mov Cap-2 Maneuver	23	26	-	~ 41	29	-	-	-	-	-	-	-
Stage 1	109	153	-	309	364	-	-	-	-	-	-	-
Stage 2	398	332	-	241	152	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.89	240.91	0.04	1.42
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	4	-	-	36	41	413	672	-	-
HCM Lane V/C Ratio	0.002	-	-	0.088	1.821	0.293	0.227	-	-
HCM Control Delay (s/veh)	10.9	0	-	114.9	$ 603.1	17.3	11.9	-	-
HCM Lane LOS	B	A	-	F	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	7.8	1.2	0.9	-	-

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1	5	150	1	105	15	640	190	165	545	385
Future Volume (veh/h)	155	1	5	150	1	105	15	640	190	165	545	385
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1678	1826	1870	1811	1737	1870
Adj Flow Rate, veh/h	163	1	5	158	1	111	16	674	200	174	574	405
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	15	5	2	6	11	2
Cap, veh/h	376	44	221	373	1	164	252	1032	471	301	1121	717
Arrive On Green	0.11	0.16	0.16	0.05	0.10	0.10	0.01	0.30	0.30	0.05	0.34	0.34
Sat Flow, veh/h	1781	271	1355	1781	14	1573	1598	3469	1585	1725	3300	1585
Grp Volume(v), veh/h	163	0	6	158	0	112	16	674	200	174	574	405
Grp Sat Flow(s),veh/h/ln	1781	0	1626	1781	0	1587	1598	1735	1585	1725	1650	1585
Q Serve(g_s), s	4.4	0.0	0.2	3.0	0.0	3.8	0.4	9.4	5.6	3.0	7.7	10.5
Cycle Q Clear(g_c), s	4.4	0.0	0.2	3.0	0.0	3.8	0.4	9.4	5.6	3.0	7.7	10.5
Prop In Lane	1.00		0.83	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	376	0	265	373	0	165	252	1032	471	301	1121	717
V/C Ratio(X)	0.43	0.00	0.02	0.42	0.00	0.68	0.06	0.65	0.42	0.58	0.51	0.57
Avail Cap(c_a), veh/h	1169	0	1053	373	0	228	319	3370	1540	301	3206	1718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.9	0.0	19.5	21.7	0.0	24.0	13.7	17.0	15.7	16.5	14.7	11.2
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.8	0.0	4.8	0.1	0.7	0.6	2.7	0.4	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.0	0.0	0.1	3.2	0.0	2.7	0.2	5.3	3.3	2.5	4.0	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.7	0.0	19.6	22.4	0.0	28.8	13.8	17.7	16.3	19.3	15.0	11.9
LnGrp LOS	B		B	C		C	B	B	B	B	B	B
Approach Vol, veh/h		169			270			890			1153	
Approach Delay, s/veh		19.7			25.1			17.3			14.6	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	22.5	9.0	15.1	6.7	24.9	12.3	11.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	3.0	54.0	3.0	36.0	3.0	54.0	31.0	8.0
Max Q Clear Time (g_c+I1), s	5.0	11.4	5.0	2.2	2.4	12.5	6.4	5.8
Green Ext Time (p_c), s	0.0	5.1	0.0	0.0	0.0	5.3	0.4	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	17.1
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1	5	150	1	105	15	640	190	165	545	385
Future Volume (veh/h)	155	1	5	150	1	105	15	640	190	165	545	385
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1678	1826	1870	1811	1737	1870
Adj Flow Rate, veh/h	163	1	5	158	1	111	16	674	200	174	574	405
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	15	5	2	6	11	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	376	44	221	373	1	164	252	1032	471	301	1121	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.16	0.16	0.05	0.10	0.10	0.01	0.30	0.30	0.05	0.34	0.34
Unsig. Movement Delay												
Ln Grp Delay, s/veh	19.7	0.0	19.6	22.4	0.0	28.8	13.8	17.7	16.3	19.3	15.0	11.9
Ln Grp LOS	B		B	C		C	B	B	B	B	B	B
Approach Vol, veh/h		169			270			890			1153	
Approach Delay, s/veh		19.7			25.1			17.3			14.6	
Approach LOS		B			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	9.0	22.5	9.0	15.1	6.7	24.9	12.3	11.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	3.0	54.0	3.0	36.0	3.0	54.0	31.0	8.0
Max Allow Headway (MAH), s	3.7	4.5	3.8	5.4	3.7	4.4	3.8	5.5
Max Q Clear (g_c+I1), s	5.0	11.4	5.0	2.2	2.4	12.5	6.4	5.8
Green Ext Time (g_e), s	0.0	5.1	0.0	0.0	0.0	5.3	0.4	0.1
Prob of Phs Call (p_c)	0.93	1.00	0.91	0.99	0.22	1.00	0.92	0.99
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1725		1781		1598		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3469		271		3300		14

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1355		1585		1573

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	174	0	158	0	16	0	163	0
Grp Sat Flow (s), veh/h/ln	1725	0	1781	0	1598	0	1781	0
Q Serve Time (g_s), s	3.0	0.0	3.0	0.0	0.4	0.0	4.4	0.0
Cycle Q Clear Time (g_c), s	3.0	0.0	3.0	0.0	0.4	0.0	4.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	614	0	1410	0	515	0	1281	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	16.5	0.0	5.8	0.0	16.5	0.0	5.8	0.0
Perm LT Serve Time (g_u), s	7.1	0.0	5.8	0.0	11.1	0.0	2.0	0.0
Perm LT Q Serve Time (g_ps), s	7.1	0.0	2.0	0.0	0.2	0.0	0.6	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	301	0	373	0	252	0	376	0
V/C Ratio (X)	0.58	0.00	0.42	0.00	0.06	0.00	0.43	0.00
Avail Cap (c_a), veh/h	301	0	373	0	319	0	1169	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	16.5	0.0	21.7	0.0	13.7	0.0	18.9	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.8	0.0	0.1	0.0	0.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	19.3	0.0	22.4	0.0	13.8	0.0	19.7	0.0
1st-Term Q (Q1), veh/ln	1.2	0.0	1.7	0.0	0.1	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	2.5	0.0	3.2	0.0	0.2	0.0	3.0	0.0
%ile Storage Ratio (RQ%)	0.24	0.00	0.06	0.00	0.03	0.00	0.21	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	674	0	0	0	574	0	0
Grp Sat Flow (s), veh/h/ln	0	1735	0	0	0	1650	0	0
Q Serve Time (g_s), s	0.0	9.4	0.0	0.0	0.0	7.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.4	0.0	0.0	0.0	7.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1032	0	0	0	1121	0	0
V/C Ratio (X)	0.00	0.65	0.00	0.00	0.00	0.51	0.00	0.00
Avail Cap (c_a), veh/h	0	3370	0	0	0	3206	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.0	0.0	0.0	0.0	14.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.7	0.0	0.0	0.0	15.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	0.0	0.0	2.2	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	5.3	0.0	0.0	0.0	4.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	200	0	6	0	405	0	112
Grp Sat Flow (s), veh/h/ln	0	1585	0	1626	0	1585	0	1587
Q Serve Time (g_s), s	0.0	5.6	0.0	0.2	0.0	10.5	0.0	3.8
Cycle Q Clear Time (g_c), s	0.0	5.6	0.0	0.2	0.0	10.5	0.0	3.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.83	0.00	1.00	0.00	0.99
Lane Grp Cap (c), veh/h	0	471	0	265	0	717	0	165
V/C Ratio (X)	0.00	0.42	0.00	0.02	0.00	0.57	0.00	0.68
Avail Cap (c_a), veh/h	0	1540	0	1053	0	1718	0	228
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.7	0.0	19.5	0.0	11.2	0.0	24.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.7	0.0	4.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.3	0.0	19.6	0.0	11.9	0.0	28.8
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	0.1	0.0	2.9	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.3	0.0	0.1	0.0	5.5	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	0.48	0.00	0.00	0.00	0.48	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	17.1
HCM 7th LOS	B

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	1	165	60	55	135	1	50	1	30	1	1	1
Future Vol, veh/h	1	165	60	55	135	1	50	1	30	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	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	-	-	-	-	-	40	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	3	2	2	13	2	2	2	2	2	2	2
Mvmt Flow	1	174	63	58	142	1	53	1	32	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	143	0	0	237	0	0	434	435	174	434	497	142
Stage 1	-	-	-	-	-	-	176	176	-	258	258	-
Stage 2	-	-	-	-	-	-	258	259	-	176	239	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1439	-	-	1330	-	-	532	515	870	532	475	906
Stage 1	-	-	-	-	-	-	826	754	-	747	694	-
Stage 2	-	-	-	-	-	-	746	694	-	825	708	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1439	-	-	1330	-	-	505	490	870	487	452	906
Mov Cap-2 Maneuver	-	-	-	-	-	-	505	490	-	487	452	-
Stage 1	-	-	-	-	-	-	825	753	-	711	661	-
Stage 2	-	-	-	-	-	-	709	661	-	794	707	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	2.25	12.03	11.48
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	597	11	-	-	521	-	-	559
HCM Lane V/C Ratio	0.143	0.001	-	-	0.044	-	-	0.006
HCM Control Delay (s/veh)	12	7.5	0	-	7.8	0	-	11.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	110	85	40	115	75	50
Future Vol, veh/h	110	85	40	115	75	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	12	2	77	3
Mvmt Flow	116	89	42	121	79	53

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	205	0	366	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	205	-
Critical Hdwy	-	-	4.22	-	7.17	6.23
Critical Hdwy Stg 1	-	-	-	-	6.17	-
Critical Hdwy Stg 2	-	-	-	-	6.17	-
Follow-up Hdwy	-	-	2.308	-	4.193	3.327
Pot Cap-1 Maneuver	-	-	1309	-	509	882
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	679	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1309	-	491	882
Mov Cap-2 Maneuver	-	-	-	-	491	-
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	656	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.02	12.73
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	597	-	-	465	-
HCM Lane V/C Ratio	0.22	-	-	0.032	-
HCM Control Delay (s/veh)	12.7	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

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	1	1	1	1	1	1	1	115	1	1	100	1
Future Vol, veh/h	1	1	1	1	1	1	1	115	1	1	100	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	20	2
Mvmt Flow	1	1	1	1	1	1	1	121	1	1	105	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	232	232	106	232	232	122	106	0	0	122	0	0
Stage 1	108	108	-	124	124	-	-	-	-	-	-	-
Stage 2	124	124	-	108	108	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	723	668	949	723	668	930	1485	-	-	1465	-	-
Stage 1	898	806	-	880	794	-	-	-	-	-	-	-
Stage 2	880	793	-	898	806	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	720	667	949	720	667	930	1485	-	-	1465	-	-
Mov Cap-2 Maneuver	720	667	-	720	667	-	-	-	-	-	-	-
Stage 1	897	805	-	880	793	-	-	-	-	-	-	-
Stage 2	878	793	-	895	805	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.75	9.78	0.06	0.07
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	15	-	-	761	757	18	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.004	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	9.8	9.8	7.5	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	61.5

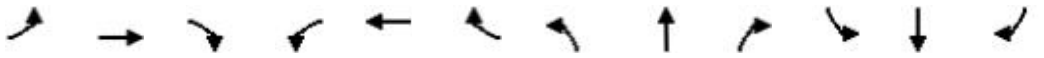
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	100	1	155	1	1255	135	80	895	1
Future Vol, veh/h	1	1	1	100	1	155	1	1255	135	80	895	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	265	345	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	8	2	8	2	19	6	2
Mvmt Flow	1	1	1	105	1	163	1	1321	142	84	942	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1774	2576	472	1963	2435	661	943	0	0	1463	0	0
Stage 1	1111	1111	-	1323	1323	-	-	-	-	-	-	-
Stage 2	663	1465	-	640	1112	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	7.06	4.14	-	-	4.48	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.38	2.22	-	-	2.39	-	-
Pot Cap-1 Maneuver	52	25	539	~ 38	31	391	723	-	-	381	-	-
Stage 1	223	283	-	165	224	-	-	-	-	-	-	-
Stage 2	417	191	-	430	283	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	23	20	539	~ 28	24	391	723	-	-	381	-	-
Mov Cap-2 Maneuver	23	20	-	~ 28	24	-	-	-	-	-	-	-
Stage 1	174	220	-	164	223	-	-	-	-	-	-	-
Stage 2	241	190	-	333	220	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	133.13	$ 624.27	0.03	1.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	3	-	-	31	28	391	381	-	-
HCM Lane V/C Ratio	0.001	-	-	0.101	3.803	0.417	0.221	-	-
HCM Control Delay (s/veh)	10	0	-	133.3	$ 1550.7	20.6	17.1	-	-
HCM Lane LOS	A	A	-	F	F	C	C	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	12.9	2	0.8	-	-

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	1	70	205	1	175	30	900	85	90	730	195
Future Volume (veh/h)	205	1	70	205	1	175	30	900	85	90	730	195
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1826	1870	1870	1767	1707	1767	1870	1663	1796	1841
Adj Flow Rate, veh/h	216	1	74	216	1	184	32	947	89	95	768	205
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	5	2	2	9	13	9	2	16	7	4
Cap, veh/h	340	4	322	325	1	177	249	1252	591	229	1350	828
Arrive On Green	0.14	0.21	0.21	0.04	0.11	0.11	0.02	0.37	0.37	0.04	0.40	0.40
Sat Flow, veh/h	1767	21	1567	1781	9	1578	1626	3357	1585	1584	3413	1560
Grp Volume(v), veh/h	216	0	75	216	0	185	32	947	89	95	768	205
Grp Sat Flow(s),veh/h/ln	1767	0	1588	1781	0	1586	1626	1678	1585	1584	1706	1560
Q Serve(g_s), s	7.2	0.0	2.8	3.0	0.0	8.0	0.9	17.5	2.7	2.7	12.5	5.1
Cycle Q Clear(g_c), s	7.2	0.0	2.8	3.0	0.0	8.0	0.9	17.5	2.7	2.7	12.5	5.1
Prop In Lane	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	340	0	326	325	0	178	249	1252	591	229	1350	828
V/C Ratio(X)	0.64	0.00	0.23	0.66	0.00	1.04	0.13	0.76	0.15	0.41	0.57	0.25
Avail Cap(c_a), veh/h	871	0	803	325	0	178	286	2547	1203	229	2590	1394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	0.0	23.6	29.5	0.0	31.6	14.3	19.5	14.8	15.6	16.8	9.0
Incr Delay (d2), s/veh	2.0	0.0	0.4	5.0	0.0	77.6	0.2	1.0	0.1	1.2	0.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	0.0	1.8	7.0	0.0	11.2	0.5	9.6	1.6	1.5	7.2	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.9	0.0	23.9	34.6	0.0	109.2	14.5	20.4	14.9	16.8	17.2	9.2
LnGrp LOS	C		C	C		F	B	C	B	B	B	A
Approach Vol, veh/h		291			401			1068			1068	
Approach Delay, s/veh		23.9			69.0			19.8			15.6	
Approach LOS		C			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	32.5	9.0	20.6	7.4	34.1	15.6	14.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	3.0	54.0	3.0	36.0	3.0	54.0	31.0	8.0
Max Q Clear Time (g_c+I1), s	4.7	19.5	5.0	4.8	2.9	14.5	9.2	10.0
Green Ext Time (p_c), s	0.0	7.0	0.0	0.4	0.0	5.9	0.6	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	25.6
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	1	70	205	1	175	30	900	85	90	730	195
Future Volume (veh/h)	205	1	70	205	1	175	30	900	85	90	730	195
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1870	1826	1870	1870	1767	1707	1767	1870	1663	1796	1841
Adj Flow Rate, veh/h	216	1	74	216	1	184	32	947	89	95	768	205
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	5	2	2	9	13	9	2	16	7	4
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	340	4	322	325	1	177	249	1252	591	229	1350	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.21	0.21	0.04	0.11	0.11	0.02	0.37	0.37	0.04	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	23.9	0.0	23.9	34.6	0.0	109.2	14.5	20.4	14.9	16.8	17.2	9.2
Ln Grp LOS	C		C	C		F	B	C	B	B	B	A
Approach Vol, veh/h		291			401			1068			1068	
Approach Delay, s/veh		23.9			69.0			19.8			15.6	
Approach LOS		C			E			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	9.0	32.5	9.0	20.6	7.4	34.1	15.6	14.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	3.0	54.0	3.0	36.0	3.0	54.0	31.0	8.0
Max Allow Headway (MAH), s	3.7	4.7	3.8	5.5	3.7	4.6	3.8	5.5
Max Q Clear (g_c+I1), s	4.7	19.5	5.0	4.8	2.9	14.5	9.2	10.0
Green Ext Time (g_e), s	0.0	7.0	0.0	0.4	0.0	5.9	0.6	0.0
Prob of Phs Call (p_c)	0.85	1.00	0.99	1.00	0.47	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.01	1.00	0.00	1.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1584		1781		1626		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3357		21		3413		9

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1567		1560		1578

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	95	0	216	0	32	0	216	0
Grp Sat Flow (s), veh/h/ln	1584	0	1781	0	1626	0	1767	0
Q Serve Time (g_s), s	2.7	0.0	3.0	0.0	0.9	0.0	7.2	0.0
Cycle Q Clear Time (g_c), s	2.7	0.0	3.0	0.0	0.9	0.0	7.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	484	0	1325	0	527	0	1189	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	26.5	0.0	8.0	0.0	26.5	0.0	10.0	0.0
Perm LT Serve Time (g_u), s	9.0	0.0	8.0	0.0	15.7	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	4.3	0.0	7.5	0.0	0.7	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	229	0	325	0	249	0	340	0
V/C Ratio (X)	0.41	0.00	0.66	0.00	0.13	0.00	0.64	0.00
Avail Cap (c_a), veh/h	229	0	325	0	286	0	871	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	15.6	0.0	29.5	0.0	14.3	0.0	22.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	5.0	0.0	0.2	0.0	2.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	16.8	0.0	34.6	0.0	14.5	0.0	23.9	0.0
1st-Term Q (Q1), veh/ln	0.8	0.0	3.4	0.0	0.3	0.0	2.8	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.5	0.0	0.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	1.5	0.0	7.0	0.0	0.5	0.0	5.3	0.0
%ile Storage Ratio (RQ%)	0.16	0.00	0.13	0.00	0.06	0.00	0.36	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	947	0	0	0	768	0	0
Grp Sat Flow (s), veh/h/ln	0	1678	0	0	0	1706	0	0
Q Serve Time (g_s), s	0.0	17.5	0.0	0.0	0.0	12.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.5	0.0	0.0	0.0	12.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	1252	0	0	0	1350	0	0
V/C Ratio (X)	0.00	0.76	0.00	0.00	0.00	0.57	0.00	0.00
Avail Cap (c_a), veh/h	0	2547	0	0	0	2590	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.5	0.0	0.0	0.0	16.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.4	0.0	0.0	0.0	17.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.5	0.0	0.0	0.0	3.9	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.69	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	9.6	0.0	0.0	0.0	7.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.46	0.00	0.00	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	89	0	75	0	205	0	185
Grp Sat Flow (s), veh/h/ln	0	1585	0	1588	0	1560	0	1586
Q Serve Time (g_s), s	0.0	2.7	0.0	2.8	0.0	5.1	0.0	8.0
Cycle Q Clear Time (g_c), s	0.0	2.7	0.0	2.8	0.0	5.1	0.0	8.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	1559.9	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.99	0.00	1.00	0.00	0.99
Lane Grp Cap (c), veh/h	0	591	0	326	0	828	0	178
V/C Ratio (X)	0.00	0.15	0.00	0.23	0.00	0.25	0.00	1.04
Avail Cap (c_a), veh/h	0	1203	0	803	0	1394	0	178
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.8	0.0	23.6	0.0	9.0	0.0	31.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.4	0.0	0.2	0.0	77.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.9	0.0	23.9	0.0	9.2	0.0	109.2
1st-Term Q (Q1), veh/ln	0.0	0.9	0.0	1.0	0.0	1.5	0.0	2.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.66
%ile Back of Q (95%), veh/ln	0.0	1.6	0.0	1.8	0.0	2.7	0.0	11.2
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.02	0.00	0.24	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	25.6
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	185	30	30	190	1	65	1	65	1	1	1
Future Vol, veh/h	1	185	30	30	190	1	65	1	65	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	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	-	-	-	-	-	40	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	4	50	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	195	32	32	200	1	68	1	68	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	201	0	0	226	0	0	461	461	195	461	492	200
Stage 1	-	-	-	-	-	-	197	197	-	263	263	-
Stage 2	-	-	-	-	-	-	264	264	-	197	228	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1371	-	-	1342	-	-	511	497	847	511	478	841
Stage 1	-	-	-	-	-	-	805	738	-	742	691	-
Stage 2	-	-	-	-	-	-	741	690	-	804	715	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1371	-	-	1342	-	-	495	484	847	456	465	841
Mov Cap-2 Maneuver	-	-	-	-	-	-	495	484	-	456	465	-
Stage 1	-	-	-	-	-	-	804	737	-	722	672	-
Stage 2	-	-	-	-	-	-	720	672	-	738	714	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.04	1.05	12.4	11.68
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	624	10	-	-	245	-	-	542
HCM Lane V/C Ratio	0.221	0.001	-	-	0.024	-	-	0.006
HCM Control Delay (s/veh)	12.4	7.6	0	-	7.7	0	-	11.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	205	45	55	135	85	45
Future Vol, veh/h	205	45	55	135	85	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	30	2	2	17	7
Mvmt Flow	216	47	58	142	89	47

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	263	0	497	239
Stage 1	-	-	-	-	239	-
Stage 2	-	-	-	-	258	-
Critical Hdwy	-	-	4.12	-	6.57	6.27
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	-	-	2.218	-	3.653	3.363
Pot Cap-1 Maneuver	-	-	1301	-	506	787
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	752	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1301	-	482	787
Mov Cap-2 Maneuver	-	-	-	-	482	-
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	715	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.29	13.56
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	557	-	-	521	-
HCM Lane V/C Ratio	0.246	-	-	0.045	-
HCM Control Delay (s/veh)	13.6	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1	-	-	0.1	-

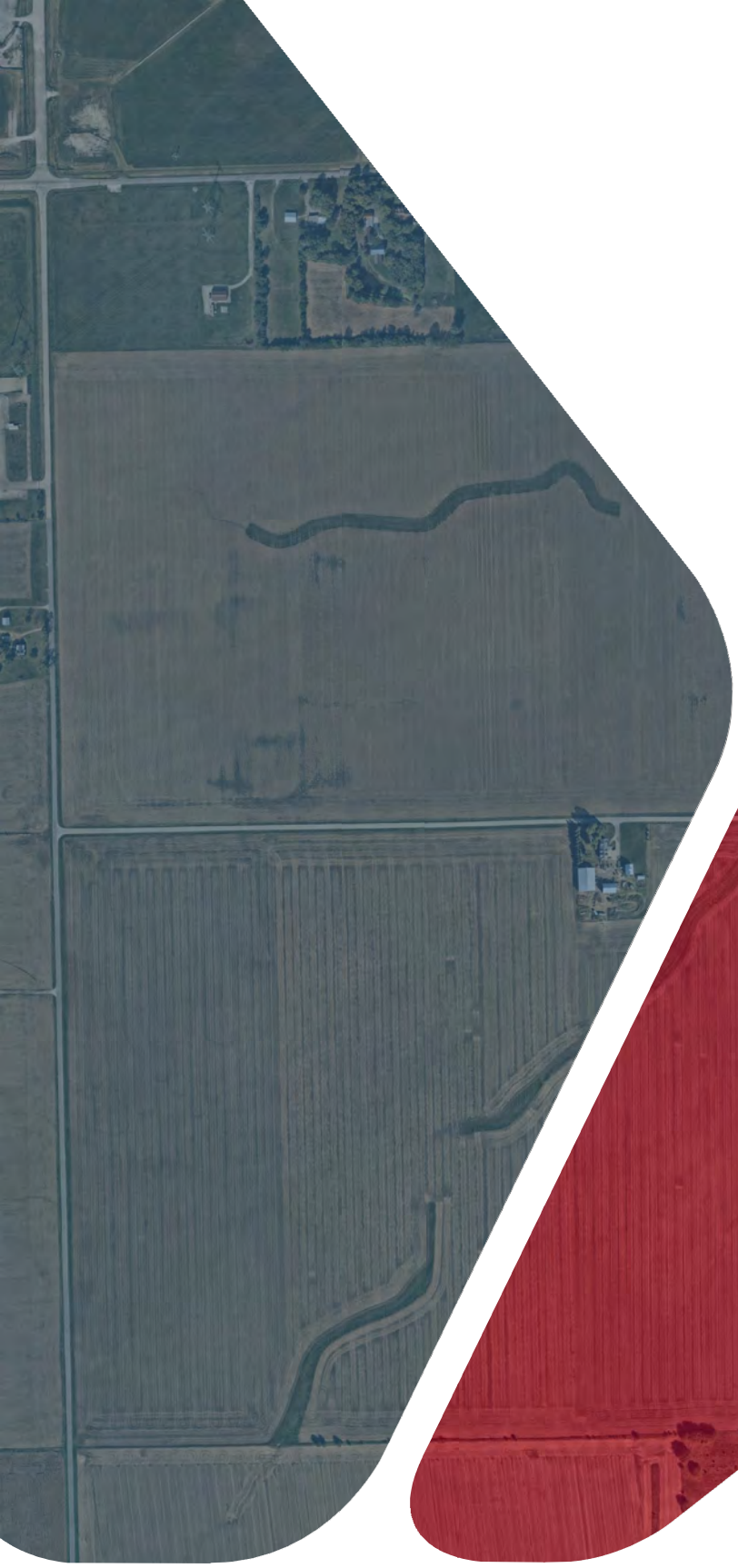
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	1	1	1	1	115	1	1	100	1
Future Vol, veh/h	1	1	1	1	1	1	1	115	1	1	100	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	17	2	2	2	2
Mvmt Flow	1	1	1	1	1	1	1	121	1	1	105	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	232	232	106	232	232	122	106	0	0	122	0	0
Stage 1	108	108	-	124	124	-	-	-	-	-	-	-
Stage 2	124	124	-	108	108	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	723	668	949	723	668	930	1485	-	-	1465	-	-
Stage 1	898	806	-	880	794	-	-	-	-	-	-	-
Stage 2	880	793	-	898	806	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	720	667	949	720	667	930	1485	-	-	1465	-	-
Mov Cap-2 Maneuver	720	667	-	720	667	-	-	-	-	-	-	-
Stage 1	897	805	-	880	793	-	-	-	-	-	-	-
Stage 2	878	793	-	895	805	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.75	9.78	0.06	0.07
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	15	-	-	761	757	18	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.004	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	9.8	9.8	7.5	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-



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