Traffic Impact Study

Bluestem Data Center

Tonganoxie, Kansas

Prepared For:

Western Meadowlark ProjectCo LLC

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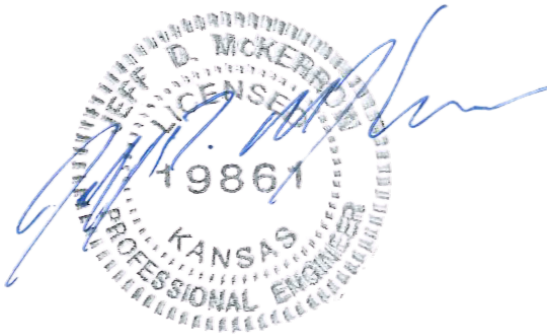
Kimley»Horn

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1.0 INTRODUCTION

This report serves as the traffic analysis for the proposed Bluestem Data Center, generally located in the southeast corner of the Honey Creek Road & 222nd Street intersection in Tonganoxie, Kansas. The location of the development is shown on **Exhibit 1** in **Appendix A**.

1.1 REPORT PURPOSE AND OBJECTIVES

The purpose of this study is to address traffic and transportation impacts of the proposed development on surrounding streets and intersections. This traffic impact study was prepared based on criteria set forth by the Kansas Department of Transportation (KDOT). The following information is provided:

- A description of the existing and proposed street network to be affected by the proposed development. This information includes existing and proposed roadway characteristics and Existing Year (2026) traffic volumes, Opening Year (2031) traffic volumes, Construction traffic volumes and Future Year (2046) traffic volumes.
- Trip generation calculations based on the Institute of Traffic Engineers (ITE) Trip Generation Manual, 12th Edition, for the proposed development. In addition, projected trip distributions and assignments onto the street network are provided.
- Review of site access drives with regard to the Kansas Department of Transportation's (KDOT) *Access Management Policy.*
- Analysis of impacts of the traffic generated by the proposed development on the street network, including analysis of peak period levels of service (LOS), delay times, and queuing at study area intersections.
- Discussion of potential improvements and traffic management measures identified to mitigate operational concerns.

In summary, the study is to determine the trip generation of the Bluestem Data Center, assign new development trips to the street network, analyze various scenarios to determine the impacts of proposed site traffic, and identify potential mitigation measures needed to achieve acceptable operations at the study intersections.

2.0 EXISTING CONDITIONS

2.1 STUDY AREA

The proposed development site is south of Tonganoxie, Kansas and consists of approximately 1,100 acres of undeveloped land currently used for agricultural purposes. The site also includes a parcel of undeveloped land located at the southeast corner of the intersection at 214th Street & Honey Creek Road. The land surrounding the site is largely undeveloped with several single-family homes. Directly north of the site there is a warehousing building and a small commercial business.

The following intersections were included within the study area for the traffic analysis:

- US-40 & Honey Creek Road (Side Street Stop)
- Honey Creek Road & 222nd Street (Side Street Stop)
- 222nd Street & Hemphill Road (Side Street Stop)
- 222nd Street & Interstate 70 Westbound Ramps (Side Street Stop)
- 222nd Street & Interstate 70 Eastbound Ramps (Side Street Stop)

2.2 STREET NETWORK

The existing street network within the study area includes Interstate 70 (I-70), US-40, 222nd Street, Honey Creek Road, and Hemphill Road. Each of these roadways are part of one or more of the study intersections. The following provides a summary of the characteristics of the existing streets within the study area:

I-70 is an east-west freeway located south of the development site. I-70 is a four-lane, divided highway with paved shoulders separated by a median with a concrete barrier. There is a diamond interchange at I-70 and 222nd Street. At the interchange, there is a bridge carrying 222nd Street over I-70. The bridge is three-lanes wide, providing one through lane in each direction as well as left-turn lanes for northbound and southbound traffic. The exit ramps are stop sign controlled at the intersections with 222nd Street. The posted speed limit through the study area is 75 miles per hour (mph).

According to the Kansas Department of Transportation (KDOT) 2025 Traffic Flow Map, the Annual Average Daily Traffic (AADT) volume along I-70 through the study area is 30,000 to 50,000 vehicles per day. Approximately 18% of the AADT is truck traffic through the study area.

US-40 is a north-south highway that runs to the west of the development site. US-40 is a two-lane undivided highway with 12-foot travel lanes and 2-foot paved shoulders. Through the study area, US-40 has a posted speed limit of 65 mph. According to the KDOT 2025 Traffic Flow Map, the AADT on this segment of US-40 is 2,500 to 5,000 vehicles per day. Approximately 8% of the AADT is truck traffic through the study area.

222nd Street is a north-south roadway that bounds the west side of the proposed development site. Through the study area, 222nd Street is a two-lane undivided roadway with paved shoulders and a posted speed limit of 55 mph. According to Tonganoxie's *Long Range (2030) Access and Major Roadway Plan*, 222nd Street is classified as an arterial.

Honey Creek Road is an east-west roadway located west of the proposed development site. To the west of US-40, Honey Creek Road is a gravel road measuring approximately 22 feet wide with no posted speed limit. According to Tonganoxie's *Long Range (2030) Access and Major Roadway Plan,* this portion of Honey Creek Road is classified as a collector. To the east of US-40, Honey Creek Road is a two-lane undivided roadway with 12-foot travel lanes and 4-foot shoulders. Honey Creek Road is classified as a

future parkway to the west of US-40 according to Tonganoxie's *Long Range (2030) Access and Major Roadway Plan.* The posted speed limit on Honey Creek Road through the study area is 55 mph.

Hemphill Road is an east-west roadway that bounds the south side of the proposed development site. Through the study area, Hemphill Road is a gravel road measuring approximately 20 feet wide with no posted speed limit. According to Tonganoxie's *Long Range (2030) Access and Major Roadway Plan,* Hemphill Road is classified as an arterial.

2.3 TRAFFIC DATA COLLECTION

Turning movement counts were collected on Tuesday, February 17th, 2026. The turning movement count data collected is included in **Appendix B**. The AM peak hour occurred between 7:00 AM and 8:00 AM, and the PM peak hour occurred between 4:30 PM and 5:30 PM.

The Existing Conditions peak hour turning movement volumes are shown on **Exhibit 2**. The existing geometry with lane configurations and intersection control at the study intersections is shown in **Exhibit 3**.

3.0 CRASH ANALYSIS

KDOT provided crash reports for the US-40 & Honey Creek Road intersection and along 222nd Street at the interchange with I-70. From January 1, 2019, to December 31, 2024, a total of 9 crashes were reported. A summary of the types of crashes reported during the analysis period is shown in **Table 1**.

TABLE 1: SUMMARY OF CRASH TYPES

Crash Type	Fatality	Injury	Property Damage Only	Total
Angle	0	3	2	5
Rear End	0	0	1	1
Collision with Fixed Object	0	1	2	3
Total	0	4	5	9

The two types of crashes that occurred which involved another vehicle were angle and rear end crashes. Angle crashes are of concern because they are typically the most severe type of crashes. Four of the five total crashes that occurred on the 222nd Street & I-70 WB Ramps intersections were side-angle crashes. Three of the crash reports indicated that these crashes occurred when vehicles exiting the westbound off ramp failed to yield to the vehicles traveling north on 222nd Street.

The locations of the intersection crashes and the corresponding crash rate per million entering vehicles (MEV) is shown in **Table 2.** For comparison purposes, the critical crash rate for each intersection is included in **Table 2**. The average crash rate at intersections along the state highway system is 0.4 crashes per MEV. This was used when calculating the critical crash rate for each intersection.

TABLE 2: INTERSECTION CRASH STATISTICS

Intersection	Crashes	Intersection Crash Rate (MEV)	Critical Crash Rate (MEV)
US-40 & Honey Creek Road	4	0.31	0.73
222nd Street & I-70 EB Ramps	0	--	--
222nd Street & I-70 WB Ramps	5	0.57	0.81

The data in **Table 2** indicated that the crash rates at the study intersections are below the average crash rate. No crashes were reported at the 222nd Street & I-70 eastbound ramps intersection during the analysis period.

4.0 PROPOSED DEVELOPMENT

4.1 SITE DESCRIPTION

Analysis for the development was initially performed for a denser, more conservative site plan. The site plan originally provided for this study has since been updated to reflect a more realistic, less-intense development with fewer buildings. The previous and updated site plans are referenced throughout this study.

The proposed development site is bounded by 222nd Street to the west and Hemphill Road to the south. The updated site comprises five data center buildings, each approximately 618,000 square feet, totaling 3,090,000 square feet, although the study was based off of a more intense development with 18 data center buildings to model a worst-case traffic scenario. These buildings are located within the center of the site and are interconnected via an internal street network. Parking is provided for each building. Two office buildings and a 250,000-square-foot warehouse building are located along the western edge of the site. A substation building is situated at the southeast corner of the 214th Street & Honey Creek Road intersection. Across 214th Street is an area marked for power generation or battery storage development. An emergency site access intersects with 214th Street and connects the power generation building to the rest of the development.

While this analysis focused on the potential full-build out of the previous site plan, the project may be constructed in phases and align with the updated site plan. As such, the analysis presented in this study represents a conservative assessment of the site's traffic impact in the near term.

The new proposed development site plan is included in **Appendix C** for reference.

4.2 SITE ACCESS AND CIRCULATION

The proposed development has two access points located along 222nd Street. Access A is a full-access driveway, located approximately 925 feet north of the 222nd Street & Honey Creek Road intersection. Access B is a full-access driveway located approximately 2,500 feet south of the 222nd Street & Honey Creek Road intersection. There is an access along 214th Street approximately 625 feet south of Honey Creek Road that will provide a connection between the main data center campus and the potential generation or battery storage area. Access C is a full-access driveway that is noted to be for emergency access. It is located 600 feet south of the 214th Street & Honey Creek Road intersection. Per the nature of the emergency access, once the site is operating, it is assumed that vehicles will not enter the site from this access. However, vehicles already internal to the site may use it to cross 214th Street to get to the power generation building.

4.3 DEVELOPMENT TRIP GENERATION

Trip generation estimates were prepared for both operational and construction traffic conditions. Operational traffic volumes were generated using the ITE *Trip Generation Manual*, 12th Edition. Since two site plans have been provided for this development, **Table 3** on the next page presents the anticipated trip generation associated with both the original and newly proposed site plans. Traffic volumes from the original site plan were utilized in the analysis to maintain a conservative approach and to ensure the full extent of potential traffic generated by the development was captured.

The total trip generation from the original site plan is anticipated to be 9,052 daily trips, 868 trips during the AM peak hour (616 entering and 252 exiting), and 620 trips during the PM peak hour (118 entering and 502 exiting).

The total trip generation from the new site plan is anticipated to be 3,161 daily trips, 303 trips during the AM peak hour (215 entering and 88 exiting), and 217 trips during the PM peak hour (41 entering and 176 exiting).

TABLE 3: DEVELOPMENT TRIP GENERATION

Land Use Description	ITE Code	Intensity / Units	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Previous Site Plan									
Data Center	160	12,400,000 Square Feet	9,052	616	252	868	118	502	620
Current Site Plan									
Data Center*	160	4,330,870 Square Feet	3,161	215	88	303	41	176	217

*Power Generation and Substation trips included within Data Center Land Use

Appendix D provides the calculations from the *Trip Generation Manual* that were used to determine the trip generation for the proposed development. Power generation and substation facilities are ancillary and included in the data center trip generation provided in the table.

4.4 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The estimated primary trips generated by the proposed development were assigned to the street network based on the trip distribution summarized in **Table 4** on the following page. This distribution is based on existing traffic patterns, the surrounding street network, area demographics, and engineering judgment.

TABLE 4: TRIP DISTRIBUTION

Direction To/From	Percentage
West on I-70	50%
East on I-70	35%
South on 222nd Street	5%
North on US-40	5%
South on US-40	5%
Total	100%

A large portion of the traffic generated by the development is expected to travel to/from the west on I-70 and should be encouraged to minimize the impact of construction traffic on other Leavenworth County and Tonganoxie streets. As feasible, it is recommended that non-local (i.e. non-Leavenworth County residents) traveling to the site utilize I-70. The detailed traffic distribution patterns at the study intersections are shown on **Exhibit 4 and 5** for construction and operational conditions, respectively. The resulting development trip assignments for construction and operational conditions are illustrated on **Exhibit 6** and **Exhibit 9**, respectively.

The construction vehicle estimates were added to the Existing Conditions traffic volumes. **Exhibit 7** illustrates the Existing plus Construction Conditions peak hour traffic volumes. The proposed development trip assignments were added to the Opening Year (Year 2031) Build Conditions and are shown on **Exhibit 10**.

5.0 ACCESS MANAGEMENT

The Kansas Department of Transportation's *Access Management Policy* includes guidelines for the location and design of access points along the state highway system. The guidelines were used to review proposed access spacing and the need for turn lanes at the study intersections.

5.1 ACCESS LOCATION

Access spacing guidelines are based on the area type, posted speed limit, and route classification. While 222nd Street does not have a KDOT route classification, it would be most similar to a Class D route in an undeveloped area. The minimum access spacing for such a route along a 55-mph is 500 feet. The distance between the intersection of Honey Creek Road & 222nd Street and Access A is approximately 925 feet. The distance between the intersection of Honey Creek Road & 222nd Street and Access B is approximately 2,500 feet. Therefore, the site driveways are adequately spaced according to KDOT's access spacing criteria.

5.2 AUXILIARY TURN LANES

The need for turns lanes are based on capacity, level of service, and safety factors. The *Access Management Policy* provides turn lanes warrants for right- and left- turn lanes based on traffic volumes and operating speeds. Turn lane warrants were completed at the site accesses along 222nd Street with the greater traffic volume generation to be conservative. These turn lanes are recommended for the smaller current development plan as well given the speeds of traffic along 222nd Street and the potential impact construction traffic may have. For each movement, both the AM & PM peak hour volumes were used for the Build Conditions scenarios. The turn lane analysis is included in **Appendix E** for each turning movement analyzed. The results of the turn lane warrant analysis are shown in **Table 5.**

TABLE 5: TURN LANE WARRANT ANALYSIS

Intersection	Movement	Opening Year (2031) Build Conditions	Future (2046) Build Conditions
222nd Street & Access A	SB Left-Turn	NO	NO
	NB Right-Turn	YES	YES
222nd Street & Access B	SB Left-Turn	YES	YES
	NB Right-Turn	YES	YES

The results in the table indicate that turn lanes are warranted at both site accesses along 222nd Street.

6.0 INTERSECTION CAPACITY ANALYSIS

6.1 LEVEL OF SERVICE OVERVIEW

Intersection capacity analysis was performed at the study intersections utilizing the higher trip generation associated with the original site plan. Capacity analysis was conducted for the following scenarios:

- Existing (Year 2026) Conditions
- Existing plus Construction Conditions
- Opening Year (Year 2031) – Build Conditions
- Future (Year 2046) – No Build Conditions
- Future (Year 2046) – Build Conditions

The capacity analysis was performed for the weekday AM and PM peak hours using Synchro version 12 traffic modeling software to determine intersection delay and level of service (LOS). Calculations were performed based on the methodologies outlined in the *Highway Capacity Manual* (HCM), 7th Edition, which was published by the Transportation Research Board in 2022.

LOS is a qualitative measure used to describe the operations of an intersection. For vehicles, it ranges from A to F, with A being the best and F being the worst level of operation. LOS A conditions are characterized by minimal vehicle delay and free-flow conditions, while LOS F is characterized by long vehicle delay – usually when demand exceeds available roadway capacity. **Table 6** shows the definition of LOS for unsignalized and signalized intersections.

TABLE 6: MOTOR VEHICLE LEVEL OF SERVICE

Level of Service	Average Control Delay (seconds/vehicle) at:	
	Unsignalized Intersections & Roundabouts	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	> 50	> 80

Levels of service are evaluated based on the movement groupings which are required to yield to other traffic. Typically, these are left turns off the major street and the side street approaches for two-way stop-controlled intersections. For signalized intersections each movement grouping is evaluated, and LOS is evaluated for the intersection as a whole.

LOS D is typically acceptable at thoroughfare and collector street intersections. LOS C is typically acceptable at all other intersections. At unsignalized intersections LOS E, or even LOS F, may be considered acceptable for low to moderate traffic volumes where the installation of a traffic signal is not warranted by the conditions at the intersection, or the location has been deemed undesirable for signalization.

The decision to install a traffic signal is based on an evaluation of the warrants listed in the 2009 Edition of the *Manual on Uniform Traffic Control Devices* (MUTCD). The warranting criteria are based on traffic volumes, speeds, pedestrian volumes, crash history, and the adjacent street network. The traffic volume warrants were evaluated for this study.

The volume-to-capacity (v/c) ratio is a secondary measure of intersection performance. The v/c ratio represents the sufficiency of an intersection to accommodate the vehicular demand. A v/c ratio less than 0.85 generally indicates that adequate capacity is available, and vehicles are not expected to experience significant queues and delays. As the v/c ratio approaches 1.0, traffic flow may become unstable, and delay and queuing conditions may occur. Once the demand exceeds the capacity (a v/c ratio greater than 1.0), traffic flow is unstable and excessive delay and queuing is expected. The v/c ratio is important in understanding low-volume movements that, due to their nature, may experience relatively high delays yet operate will under capacity.

Traffic queues were also evaluated as part of the analyses. Long traffic queues which extend beyond the amount of storage available, either between intersections or within turn lanes, can have significant impacts on operations. The 95th percentile vehicular queues were analyzed to ensure the analyses are reflective of the physical constraints of the study intersections and to identify if additional storage is needed for turn lanes. The 95th percentile queue represents the queue length that has only a 5% chance of being exceeded during the analysis period.

6.2 EXISTING (YEAR 2026) LEVEL OF SERVICE ANALYSIS

Capacity analysis was conducted for Existing (Year 2026) traffic conditions at the study intersections to determine baseline conditions for the existing analysis year and to calibrate the models. The analysis was performed for weekday AM and PM peak hours and is based on the lane configurations, traffic controls, and traffic volumes shown on **Exhibits 2** and **3**.

Table 7 provides a summary of the capacity analysis at the study intersections. The Synchro reports are provided in **Appendix F**.

TABLE 7: EXISTING (YEAR 2026) PEAK HOUR CONDITIONS

Intersection	Control	Movement	Operational Analysis Results							
			AM Peak Hour				PM Peak Hour			
			Delay (sec/veh)	LOS	95% Queue	V/C	Delay (sec/veh)	LOS	95% Queue	V/C
US-40* & Honey Creek Road	Side-Street Stop	EB	21.3	C	< 50'	0.03	18.7	C	< 50'	0.03
		WBL	21.3	C	< 50'	0.02	16.2	C	< 50'	0.03
		WBT/R	9.9	A	< 50'	0.17	11.0	B	< 50'	0.29
		NBL	7.6	A	< 50'	0.00	7.6	A	< 50'	0.01
		SBL	8.1	A	< 50'	0.19	7.9	A	< 50'	0.11
222nd Street & Honey Creek Road	Side-Street Stop	WB	10.3	B	< 50'	0.06	10.5	B	< 50'	0.07
		SBL	7.8	A	< 50'	0.02	7.7	A	< 50'	0.01
222nd Street & Hemphill Road	Side-Street Stop	EB	11.2	A	< 50'	0.01	10.9	B	< 50'	0.01
		WB	10.8	B	< 50'	0.01	11.0	B	< 50'	0.01
		NBL	7.8	A	< 50'	0.01	7.6	A	< 50'	0.01
		SBL	7.5	A	< 50'	0.01	7.7	A	< 50'	0.01
222nd Street & I-70 WB Ramps	Side-Street Stop	WB	8.8	A	< 50'	0.03	9.0	A	< 50'	0.10
		NBL	7.9	A	< 50'	0.02	7.6	A	< 50'	0.01
222nd Street & I-70 EB Ramps	Side-Street Stop	EB	10.7	B	< 50'	0.13	10.4	B	< 50'	0.17
		SBL	7.7	A	< 50'	0.05	7.7	A	< 50'	0.02

*For the purposes of this study, US-40 is analyzed assuming a north–south orientation

The results in **Table 7** indicate that all movements at the study intersections currently operate at acceptable levels of service. All 95th percentile queue lengths are projected to be less than 50 feet.

6.2 EXISTING + CONSTRUCTION LEVEL OF SERVICE ANALYSIS

Capacity analysis was conducted for Existing plus Construction Conditions at the study intersections to determine the impacts of construction traffic from the proposed development. Construction vehicle estimates were utilized from previous data center campus evaluations to determine a preliminary estimation of daily vehicles loads for construction activity.

An estimate of 1,500 vehicles per day was identified as a potential peak load during construction activity, but the actual intensity of construction traffic will be based on the contractor and how many data centers are being constructed at a single time. For the purposes of this study, it was assumed that half of the daily trips would occur during the AM and PM peak hours. Peak hours of 6:00 to 7:00 AM and 3:00 to 4:00 PM were evaluated, which corresponds with typical construction workforce shift start and end times. The analysis is based on the lane configurations, traffic controls, and traffic volumes shown on **Exhibits 7** and **8**.

Table 8 provides a summary of the capacity analysis at the study intersections. The Synchro reports are provided in **Appendix F**.

TABLE 8: EXISTING + CONSTRUCTION PEAK HOUR CONDITIONS

Intersection	Control	Movement	Operational Analysis Results							
			AM Peak Hour				PM Peak Hour			
			Delay (sec/veh)	LOS	95% Queue	V/C	Delay (sec/veh)	LOS	95% Queue	V/C
US-40* & Honey Creek Road	Side-Street Stop	EB	11.6	B	< 50'	0.01	16.2	C	< 50'	0.04
		WBL	14.4	B	< 50'	0.02	16.6	C	< 50'	0.04
		WBT/R	9.1	A	< 50'	0.09	10.1	B	< 50'	0.2
		NBL	7.4	A	< 50'	0.01	7.6	A	< 50'	0.01
		SBL	7.8	A	< 50'	0.12	8.0	A	< 50'	0.12
222nd Street & Honey Creek Road	Side-Street Stop	WB	11.4	B	< 50'	0.14	12.1	B	< 50'	0.2
		SBL	8.0	A	< 50'	0.03	8.1	A	< 50'	0.02
222nd Street & Hemphill Road	Side-Street Stop	EB	12.5	B	< 50'	0.01	12.9	B	< 50'	0.01
		WB	14.8	B	< 50'	0.12	15.6	C	< 50'	0.13
		NBL	7.9	A	< 50'	0.01	7.9	A	< 50'	0.01
		SBL	7.8	A	< 50'	0.01	8.0	A	< 50'	0.01
222nd Street & I-70 WB Ramps	Side-Street Stop	WB	9.5	A	< 50'	0.13	9.2	A	< 50'	0.17
		NBL	8.1	A	< 50'	0.02	8.0	A	< 50'	0.01
222nd Street & I-70 EB Ramps	Side-Street Stop	EB	14.6	B	< 50'	0.27	14.4	B	< 50'	0.32
		SBL	8.1	A	< 50'	0.11	8.0	A	< 50'	0.09
222nd Street & Access A	Side-Street Stop	WB	9.9	A	< 50'	0.09	9.8	A	< 50'	0.09
		SBL	7.5	A	< 50'	0.01	7.4	A	< 50'	0.01
222nd Street & Access B	Side-Street Stop	WB	13.6	B	< 50'	0.18	14.0	B	< 50'	0.19
		SBL	7.8	A	< 50'	0.01	7.9	A	< 50'	0.01
214th Street & Access C	Side-Street Stop	WB	8.8	A	< 50'	0.04	8.8	A	< 50'	0.04
		SBL	7.3	A	< 50'	0.01	7.3	A	< 50'	0.01

*For the purposes of this study, US-40 is analyzed assuming a north–south orientation

The analysis results in **Table 8** indicate that all movements at the study intersections are projected to operate at acceptable levels of service with the addition of construction traffic. However, if construction traffic is routed via Hemphill Road and 214th Street to reach Access C and the power generation building, these gravel roads will need to be paved prior to the start of construction to accommodate construction traffic. When possible, construction traffic should be kept primarily along 222nd Street.

At the time of this study, the end user of the site is unknown nor the exact means of construction. Additional analysis may be desired as details evolve on the final user and the means of construction become known with additional clarity.

For times when the roadway is under construction the following traffic control can be anticipated but will ultimately be determined by the permitting process.

- Reduce the posted speed limit to 35 mph through construction zones.
- Post W20-1 signs in both directions of travel a minimum of 500 feet in advance of the work area.
- Maintain two-way traffic by shifting traffic onto the paved shoulder where feasible. Temporary widening of the shoulder may be required.
    - Use channelizing devices when diverting traffic from the usual path.
    - Provide appropriate taper of at least 330 feet when shifting traffic from the typical travel lane.
- Roadway should remain open to local traffic at all times.
    - Coordinate with property owners if road closure is necessary adjacent to their property.
- Alternative routes should be provided if sections of 222nd Street must be closed.
    - Detours are available via US-40 and 214th Street.

6.3 OPENING YEAR (2031) – BUILD LEVEL OF SERVICE ANALYSIS

For opening year traffic forecasts, background traffic growth was added to the existing traffic volumes. To estimate background traffic growth, the existing traffic volumes at the study intersections were assumed to increase at a rate of 2% per year for a 5-year planning horizon.

Capacity analysis was performed for Opening Year Build Conditions at the study intersections utilizing the original site plans trip generation to determine how the study area is expected to operate once the development becomes operational. The existing traffic volumes are projected forward by 5 years to reflect the existing traffic levels in the year in which the data center will open and begin functioning.

Several turn lanes were found to be warranted with the addition of development traffic at the site driveway intersections. These turn lanes are recommended for both trip generation scenarios, as they facilitate safe and efficient ingress and egress at the site accesses. These turn lanes are included in the analysis of Opening Year Build Conditions. These improvements include the following:

222nd Street & Access A

- Construct a northbound right-turn lane with a storage length of 385 feet and a 300-foot radius symmetrical reverse curve taper (118 feet in length).

222nd Street & Access B

- Construct a southbound left-turn lane with a storage length of 450 feet and a 300-foot radius symmetrical reverse curve taper (118 feet in length).
- Construct a northbound right-turn lane with a storage length of 385 feet and a 300-foot radius symmetrical reverse curve taper (118 feet in length).

The Opening Year Build Conditions capacity analysis was performed for weekday AM and PM peak hours and is based on the traffic volumes shown on **Exhibit 10**. The lane configurations and traffic controls are shown on **Exhibit 11** and reflect the aforementioned improvements. Access C was not included in the analysis, as this access point is assumed to be for emergency access only once the site is operational. Any trips entering the power generation site are assumed to originate from within the main site and are therefore considered internal trips.

Table 9 on the following page provides a summary of the capacity analysis at the study intersections. The Synchro reports are provided in **Appendix F**.

TABLE 9: OPENING YEAR – BUILD PEAK HOUR CONDITIONS

Intersection	Control	Movement	Operational Analysis Results							
			AM Peak Hour				PM Peak Hour			
			Delay (sec/veh)	LOS	95% Queue	V/C	Delay (sec/veh)	LOS	95% Queue	V/C
US-40* & Honey Creek Road	Side-Street Stop	EB	27.9	D	< 50'	0.08	20.9	C	< 50'	0.09
		WBL	31.6	D	< 50'	0.16	20.9	C	< 50'	0.16
		WBT/R	10.8	B	<50'	0.23	12.2	B	< 50'	0.38
		NBL	7.6	A	< 50'	0.01	7.6	A	< 50'	0.01
		SBL	8.4	A	< 50'	0.24	8.1	A	< 50'	0.14
222nd Street & Honey Creek Road	Side-Street Stop	WB	16.6	C	< 50'	0.36	19.5	C	85'	0.56
		SBL	8.8	A	< 50'	0.06	8.3	A	< 50'	0.02
222nd Street & Hemphill Road	Side-Street Stop	EB	25.6	D	< 50'	0.04	21.0	C	< 50'	0.04
		WB	27.7	D	< 50'	0.09	19.4	C	< 50'	0.03
		NBL	8.5	A	< 50'	0.01	9.0	A	< 50'	0.01
		SBL	9.3	A	< 50'	0.01	8.1	A	< 50'	0.01
222nd Street & I-70 WB Ramps	Side-Street Stop	WB	17.6	C	90'	0.57	10.7	B	< 50'	0.23
		NBL	8.8	A	< 50'	0.03	9.1	A	< 50'	0.02
222nd Street & I-70 EB Ramps	Side-Street Stop	EB	86.3	F	290'	1.01	49.7	E	138'	0.75
		SBL	8.2	A	< 50'	0.16	8.4	A	< 50'	0.22
222nd Street & Access A	Side-Street Stop	WB	9.7	A	< 50'	0.14	10.3	B	< 50'	0.27
		SBL	8.0	A	< 50'	0.01	7.4	A	< 50'	0.01
222nd Street & Access B	Side-Street Stop	WB	27.9	D	< 50'	0.07	35.2	E	150'	0.74
		SBL	9.5	A	< 50'	0.01	8.1	A	< 50'	0.01

*For the purposes of this study, US-40 is analyzed assuming a north–south orientation

The results in **Table 9** indicate that increases in queueing and delays are projected for eastbound approach at the I-70 eastbound ramps intersection during both peak hours. The eastbound approach is projected to operate at LOS F during the AM peak hour with a 95th percentile queue length of 290 feet.

The westbound left-turn movement at Access B is projected to operate at LOS E during the PM peak hour with a projected 95th percentile queue length of 150 feet.

Given the lower levels of service at Access B and the I-70 eastbound ramp, the traffic volumes were compared for both to the warranting thresholds of the Peak Hour Signal Warrant from the MUTCD. Traffic signal warrant analysis is provided in **Appendix G**. The Opening Year Build Conditions traffic volumes satisfy the minimum volume thresholds of the Peak Hour signal warrant for the AM peak hour at the eastbound ramp, and satisfy the minimum volume thresholds for both the AM and PM peak hour at Access B.

All other movements at the study intersections operate at acceptable levels of service with the addition of development traffic.

Table 10 on the following page provides a summary of the capacity analysis at the study intersections with the mitigations identified. The Synchro reports are provided in **Appendix F**.

TABLE 10: MITIGATED OPENING YEAR – BUILD PEAK HOUR CONDITIONS

Intersection	Control	Movement	Operational Analysis Results							
			AM Peak Hour				PM Peak Hour			
			Delay (sec/veh)	LOS	95% Queue	V/C	Delay (sec/veh)	LOS	95% Queue	V/C
222nd Street & I-70 EB Ramps	Signalized	EBT/L	14.5	B	235'	0.73	17.9	B	123'	0.66
		EBR	11.7	B	> 50'	0.05	13.9	B	> 50'	0.13
		NBT/R	17.0	B	147'	0.66	16.2	B	123'	0.62
		SBL	11.0	B	104'	0.46	9.0	A	97'	0.49
		SBT	7.2	A	69'	0.17	4.9	A	60'	0.16
		Overall	14.5	B	-	-	11.6	B	-	-
222nd Street & Access B	Signalized	WB	14.1	B	71'	0.67	9.9	B	137'	0.72
		NBT	6.7	A	134'	0.58	7.4	A	117'	0.49
		NBR	6.4	A	> 50'	0.52	6.4	A	> 50'	0.12
		SBL	8.3	A	> 50'	0.08	8.9	A	> 50'	0.02
		SBT	6.4	A	123'	0.54	7.9	A	162'	0.65
		Overall	7.4	A	-	-	9.5	A	-	-

With the mitigations identified, all movements at both intersections are anticipated to operate acceptably during both peak hours.

If the new site plan traffic volumes were utilized, all intersections would operate at an improved level of service overall. The reduced trip generation would result in a traffic signal not being warranted by the traffic volumes at the 222nd Street & I-70 EB Ramps and 222nd Street & Access B intersections. It is recommended that these intersections be monitored over time to determine when signal warrants are met and the traffic signals installed at that time.

6.4 FUTURE (YEAR 2046) - NO BUILD LEVEL OF SERVICE ANALYSIS

For future year traffic forecasts, background traffic growth was added to the existing traffic volumes. To estimate background traffic growth, the existing traffic volumes at the study intersections were assumed to increase at a rate of 2% per year for a 20-year planning horizon.

Capacity analysis was performed for Future - No Build Conditions at the study intersections to determine how the study area is expected to operate in the future if no development is built on the site. The Future – No Build Conditions capacity analysis was performed for weekday AM and PM peak hours and is based on the traffic volumes shown on **Exhibit 12**. The lane configurations and traffic controls are shown on **Exhibit 3.**

Table 11 provides a summary of the capacity analysis at the study intersections. The Synchro reports are provided in **Appendix F**.

TABLE 11: FUTURE – NO BUILD PEAK HOUR CONDITIONS

Intersection	Control	Movement	Operational Analysis Results							
			AM Peak Hour				PM Peak Hour			
			Delay (sec/veh)	LOS	95% Queue	V/C	Delay (sec/veh)	LOS	95% Queue	V/C
US-40* & Honey Creek Road	Side-Street Stop	EB	45.4	E	< 50'	0.12	38.3	E	< 50'	0.12
		WBL	44.2	E	< 50'	0.09	26.7	D	< 50'	0.09
		WBT/R	11.5	B	< 50'	0.29	14.5	B	68'	0.49
		NBL	7.8	A	< 50'	0.01	7.7	A	< 50'	0.01
		SBL	8.7	A	< 50'	0.29	8.5	A	< 50'	0.18
222nd Street & Honey Creek Road	Side-Street Stop	WB	12.0	B	< 50'	0.11	12.2	B	< 50'	0.12
		SBL	8.0	A	< 50'	0.03	8.0	A	< 50'	0.01
222nd Street & Hemphill Road	Side-Street Stop	EB	13.2	B	< 50'	0.02	12.7	B	< 50'	0.01
		WB	12.7	B	< 50'	0.02	12.8	B	< 50'	0.01
		NBL	8.1	A	< 50'	0.01	7.8	A	< 50'	0.01
		SBL	7.7	A	< 50'	0.01	8.0	A	< 50'	0.01
222nd Street & I-70 WB Ramps	Side-Street Stop	WB	10.0	A	< 50'	0.06	10.6	B	< 50'	0.20
		NBL	8.4	A	< 50'	0.03	7.8	A	< 50'	0.02
222nd Street & I-70 EB Ramps	Side-Street Stop	EB	13.6	B	< 50'	0.25	13.1	B	< 50'	0.32
		SBL	7.9	A	< 50'	0.08	7.9	A	< 50'	0.03

*For the purposes of this study, US-40 is analyzed assuming a north–south orientation

The results in **Table 11** indicate that the stop-controlled minor approaches at the US-40 & Honey Creek Road intersection are projected to operate at LOS D or E during both peak hours. However, these movements are projected to operate under capacity and the projected 95th percentile queue lengths are less than 50 feet. All other movements at the study intersections are projected to operate at acceptable levels of service in the future.

6.5 FUTURE (YEAR 2046) - BUILD LEVEL OF SERVICE ANALYSIS

For future year traffic forecasts, background traffic growth was added to the existing traffic volumes. To estimate background traffic growth, the existing traffic volumes at the study intersections were assumed to increase at a rate of 2% per year for a 20-year planning horizon.

Capacity analysis was performed for Future – Build Conditions at the study intersections to determine how the study area is expected to operate in the future if the development is built. The Future – Build conditions capacity analysis was performed for weekday AM and PM peak hours and is based on the traffic volumes shown on **Exhibit 13**. The lane configurations and traffic controls are shown on **Exhibit 11.** The turn lane and signal mitigations warranted in the Opening Year Build analysis have been carried forward and incorporated into the Future Build scenario.

Table 12 provides a summary of the capacity analysis at the study intersections. The Synchro reports are provided in **Appendix F**.

TABLE 12: FUTURE – BUILD PEAK HOUR CONDITIONS

Intersection	Control	Movement	Operational Analysis Results							
			AM Peak Hour				PM Peak Hour			
			Delay (sec/veh)	LOS	95% Queue	V/C	Delay (sec/veh)	LOS	95% Queue	V/C
US-40* & Honey Creek Road	Side-Street Stop	EB	54.6	F	< 50'	0.14	42.3	E	< 50'	0.13
		WBL	61.7	F	< 50'	0.27	31.9	D	< 50'	0.25
		WBT/R	11.8	B	< 50'	0.31	15.3	C	78'	0.53
		NBL	7.8	A	< 50'	0.01	7.7	A	< 50'	0.01
		SBL	9.0	A	< 50'	0.33	8.5	A	< 50'	0.19
222nd Street & Honey Creek Road	Side-Street Stop	WB	21.4	C	60'	0.47	29.2	D	133'	0.70
		SBL	9.1	A	< 50'	0.07	8.5	A	< 50'	0.02
222nd Street & Hemphill Road	Side-Street Stop	EB	14.7	B	< 50'	0.02	23.1	C	< 50'	0.03
		WB	17.0	C	< 50'	0.03	22.4	C	< 50'	0.03
		NBL	7.2	A	< 50'	0.01	9.2	A	< 50'	0.01
		SBL	9.5	A	< 50'	0.01	8.3	A	< 50'	0.01
222nd Street & I-70 WB Ramps	Side-Street Stop	WB	20.1	C	< 50'	0.63	13.1	B	< 50'	0.33
		NBL	9.2	A	< 50'	0.04	9.3	A	< 50'	0.03
222nd Street & I-70 EB Ramps	Signalized	EBT/L	18.6	B	263'	0.76	16.2	B	164'	0.70
		EBR	12.7	B	<50'	0.05	14.4	B	<50'	0.13
		NBT/R	2.3	C	184'	0.73	15.5	B	71'	0.70
		SBL	1.3	B	118'	0.52	9.2	B	<50'	0.54
		SBT	0.7	A	90'	0.22	5.4	A	<50'	0.25
		Overall	15.7	B	-	-	12.9	B	-	-
222nd Street & Access A	Side-Street Stop	WB	9.9	A	< 50'	0.18	10.5	B	< 50'	0.29
		SBL	8.0	A	< 50'	0.01	7.4	A	< 50'	0.01
222nd Street & Access B	Signalized	WB	11.5	B	79'	0.69	10.7	B	150'	0.73
		NBT	5.9	A	159'	0.61	7.6	A	157'	0.57
		NBR	5.5	A	< 50'	0.48	6.3	A	< 50'	0.11
		SBL	8.5	A	< 50'	0.08	9.7	A	< 50'	0.02
		SBT	5.9	A	161'	0.62	8.0	A	195'	0.68
		Overall	7.4	A	-	-	9.8	A	-	-

*For the purposes of this study, US-40 is analyzed assuming a north–south orientation

The results in **Table 12** indicate that several movements at the study intersections are projected to operate at LOS E or F in the future with the addition of site generated traffic. The minor street approaches at the US-40 & Honey Creek Road intersection are projected to operate at LOS F during the AM peak hour. However, these movements are projected to operate under capacity and the projected 95th percentile queue lengths are less than 50 feet.

All other movements at the study intersections operate at acceptable levels of service in the future with development traffic.

If the new site plan traffic volumes were utilized, all intersections would operate at an improved level of service overall.

7.0 CONCLUSIONS AND RECOMMENDATIONS

This report serves as the traffic analysis for the proposed Bluestem Data Center, generally located in the southeast corner of the Honey Creek Road & 222nd Street intersection in Tonganoxie, Kansas. The purpose of this study is to address traffic and transportation impacts of the proposed development on surrounding streets and intersections.

Intersection capacity analysis was performed at the study intersections for the following scenarios:

- Existing (Year 2026) Conditions
- Existing plus Construction Conditions
- Opening Year (2031) – Build Conditions
- Future (Year 2046) – No Build Conditions
- Future (Year 2046) – Build Conditions

The results of the Existing Conditions analysis indicate that the study intersections operate acceptably. Construction vehicle estimates were utilized from previous data center campus evaluations to determine a preliminary estimation of daily vehicles loads for construction activity. An estimate of 1,500 vehicles per day was identified as a potential peak load during construction activity. For the purposes of this study, it was assumed that half of the daily trips would occur during the AM and PM peak hours.

The study intersections are projected to operate at acceptable levels of service with the addition of construction traffic. However, if construction traffic is routed via Hemphill Road and 214th Street to reach Access C and the power generation building, these gravel roads will need to be paved prior to the start of construction to accommodate construction traffic. At the time of this study, the end user of the site is unknown nor the exact means of construction. Additional analysis may be desired as details evolve on the final user and the means of construction become known with additional clarity.

Two site plans were provided for the study. The original site plan showed a larger development which resulted in a greater trip generation. The new site plan is a smaller development resulting in less trip generation, however the impact during construction will be dependent on the contractor's plans and the speed of buildout. Trip generation is provided for both scenarios, however analysis was performed under the greater of the traffic burdens.

The previous site plan is projected to generate 9,052 daily trips, 868 trips during the AM peak hour (616 entering and 252 exiting), and 620 trips during the PM peak hour (118 entering and 502 exiting). The new site plan is projected to generate 3,161 daily trips, 303 trips during the AM peak hour (215 entering and 88 exiting), and 217 trips during the PM peak hour (41 entering and 176 exiting).

For opening year traffic forecasts, background traffic growth was added to the existing traffic volumes. To estimate background traffic growth, the existing traffic volumes at the study intersections were assumed to increase at a rate of 2% per year for a 5-year planning horizon. The site trips were added to the Opening Year (2031) traffic volumes for the Opening Year (2031) Build Conditions analysis.

Several turn lanes were found to be warranted with the addition of development traffic at the site driveway intersections. The Opening Year (2031) Build Conditions traffic volumes satisfy the minimum volume thresholds of the Peak Hour signal warrant at the 222nd Street & I-70 eastbound ramps intersection, as well as the 222nd Street & Access B intersection. The mitigations identified reflect the more intense development than the currently proposed plan. However, the recommendations to achieve acceptable operations at the study intersections would not change and include the following:

Local Road Restrictions

- Non-Leavenworth County residents and construction traffic destined to the site should be encouraged to utilize I-70 for access.

222nd Street & Access A

- Construct a northbound right-turn lane with a storage length of 385 feet and a 300-foot radius symmetrical reverse curve taper (118 feet in length).

222nd Street & Access B

- Install a traffic signal when warrants are met.
- Construct a southbound left-turn lane with a storage length of 450 feet and a 300-foot radius symmetrical reverse curve taper (118 feet in length).
- Construct a northbound right-turn lane with a storage length of 385 feet and a 300-foot radius symmetrical reverse curve taper (118 feet in length).

222nd Street & Eastbound I-70 Ramp

- Install a traffic signal when warrants are met.

The study intersections are projected to operate acceptably in the Opening Year (2031) Build Conditions analysis with the mitigations identified.

For future year traffic forecasts, background traffic growth was added to the existing traffic volumes. To estimate background traffic growth, the existing traffic volumes at the study intersections were assumed to increase at a rate of 2% per year for a 20-year planning horizon. The Future Year (2046) Build Conditions analysis results indicate that several movements at the study intersections are projected to operate at LOS E or F in the future with the addition of site generated traffic. This analysis was based on a more intense development than the current proposal and as such these operating conditions will likely be better than what is shown. However, these movements are projected to operate under capacity and the projected 95th percentile queue lengths are less than 50 feet.

APPENDIX

Appendix A: EXHIBITS

Appendix B: TRAFFIC COUNT DATA

Appendix C: SITE PLAN

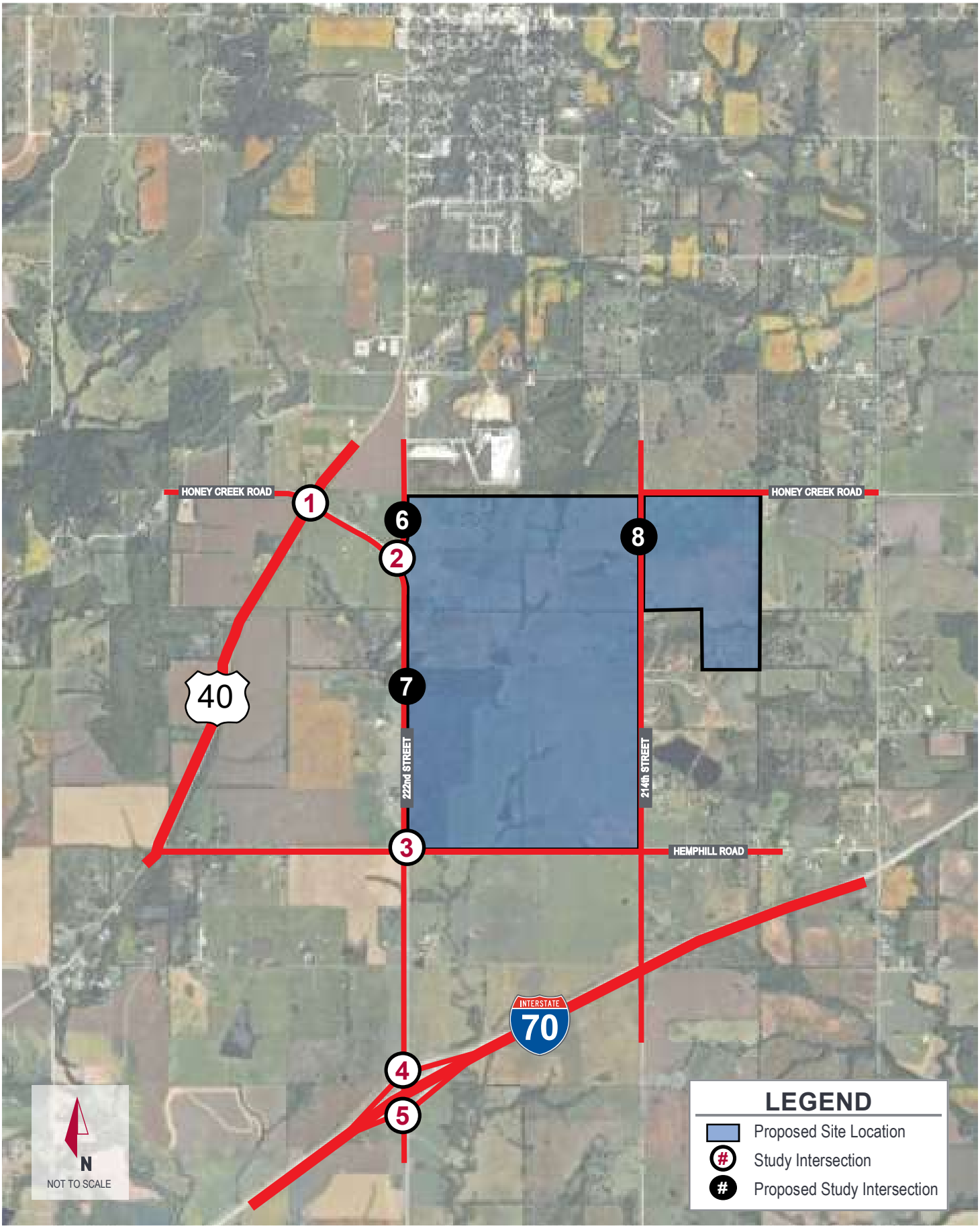
Appendix D: ITE TRIP GENERATION

Appendix E: TURN LANE ANALYSIS

Appendix F: SYNCHRO REPORTS

Appendix G: SIGNAL WARRANT ANALYSIS

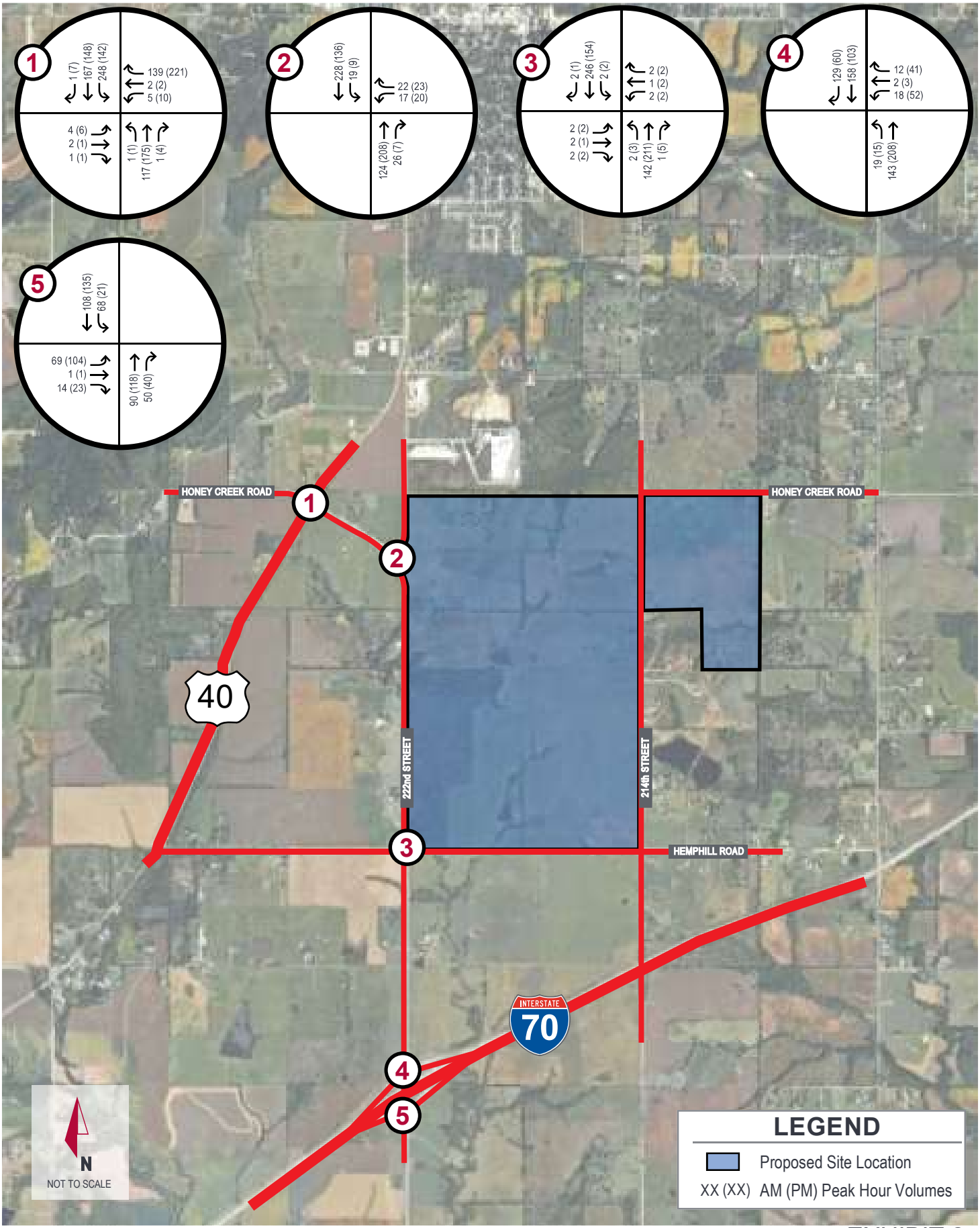
Appendix A: Exhibits



Kimley»Horn

EXHIBIT 1

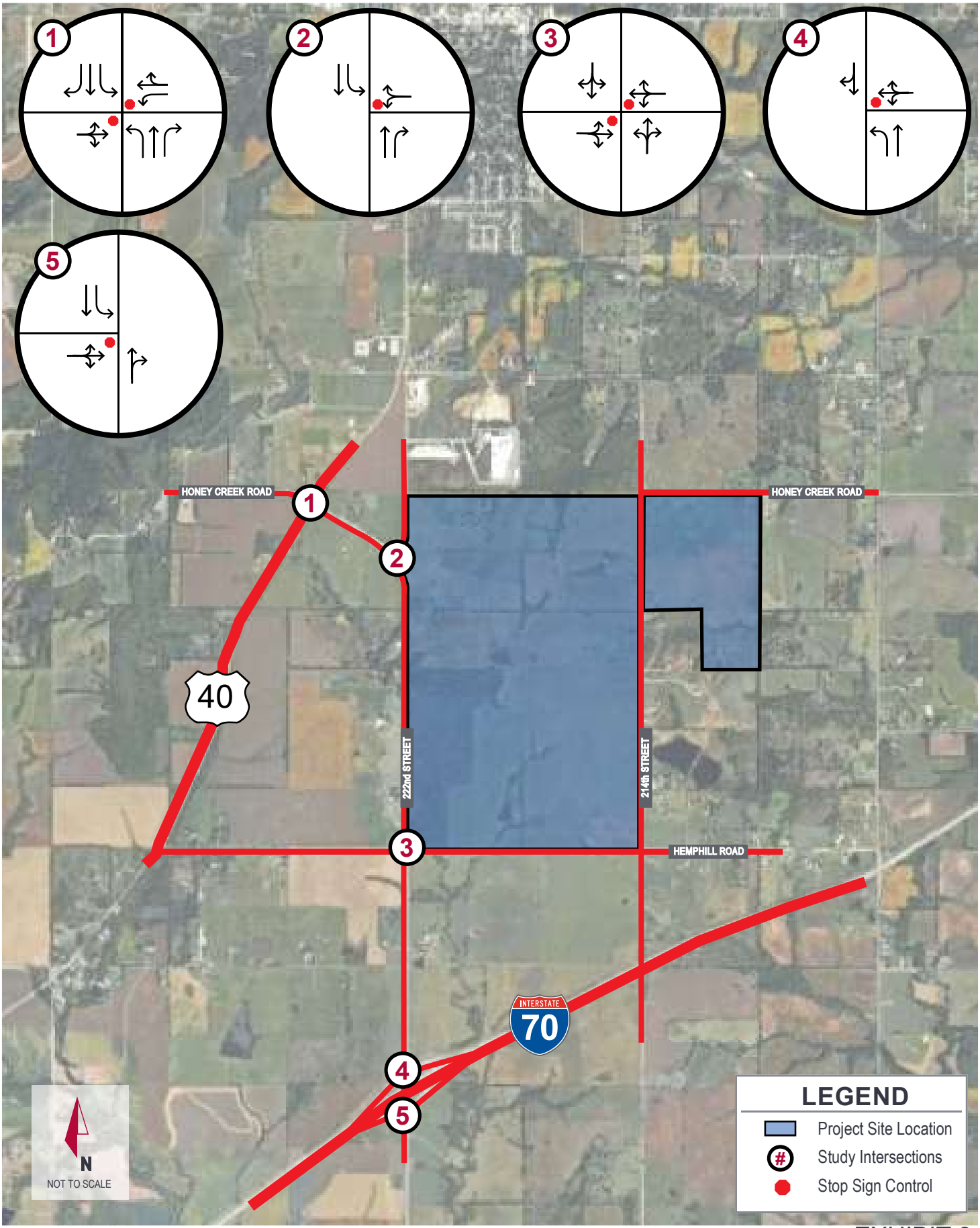
SITE LOCATION AND STUDY AREA



Kimley»Horn

EXHIBIT 2

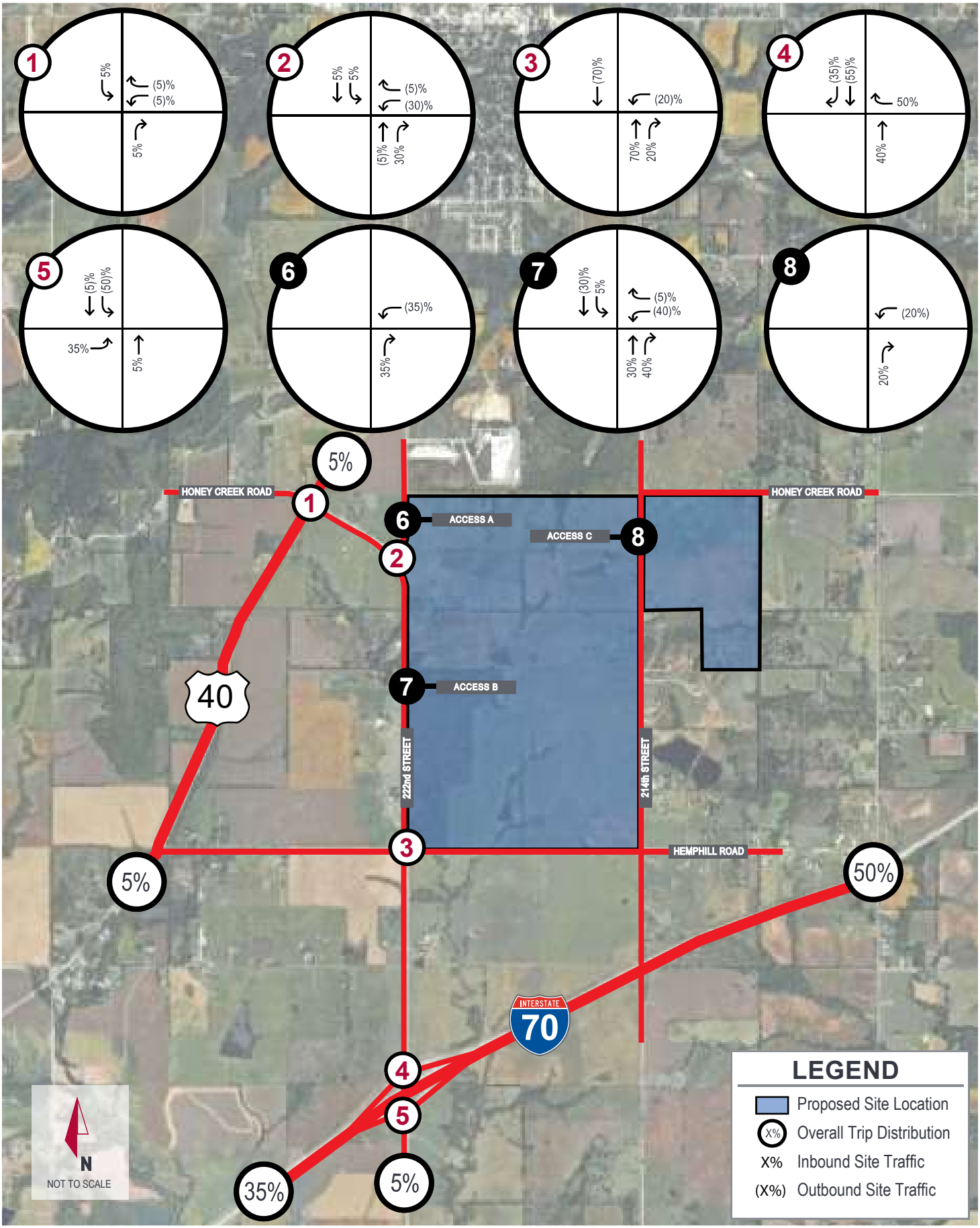
EXISTING CONDITIONS (YEAR 2026) PEAK HOUR TRAFFIC VOLUMES



Kimley»Horn

EXHIBIT 3

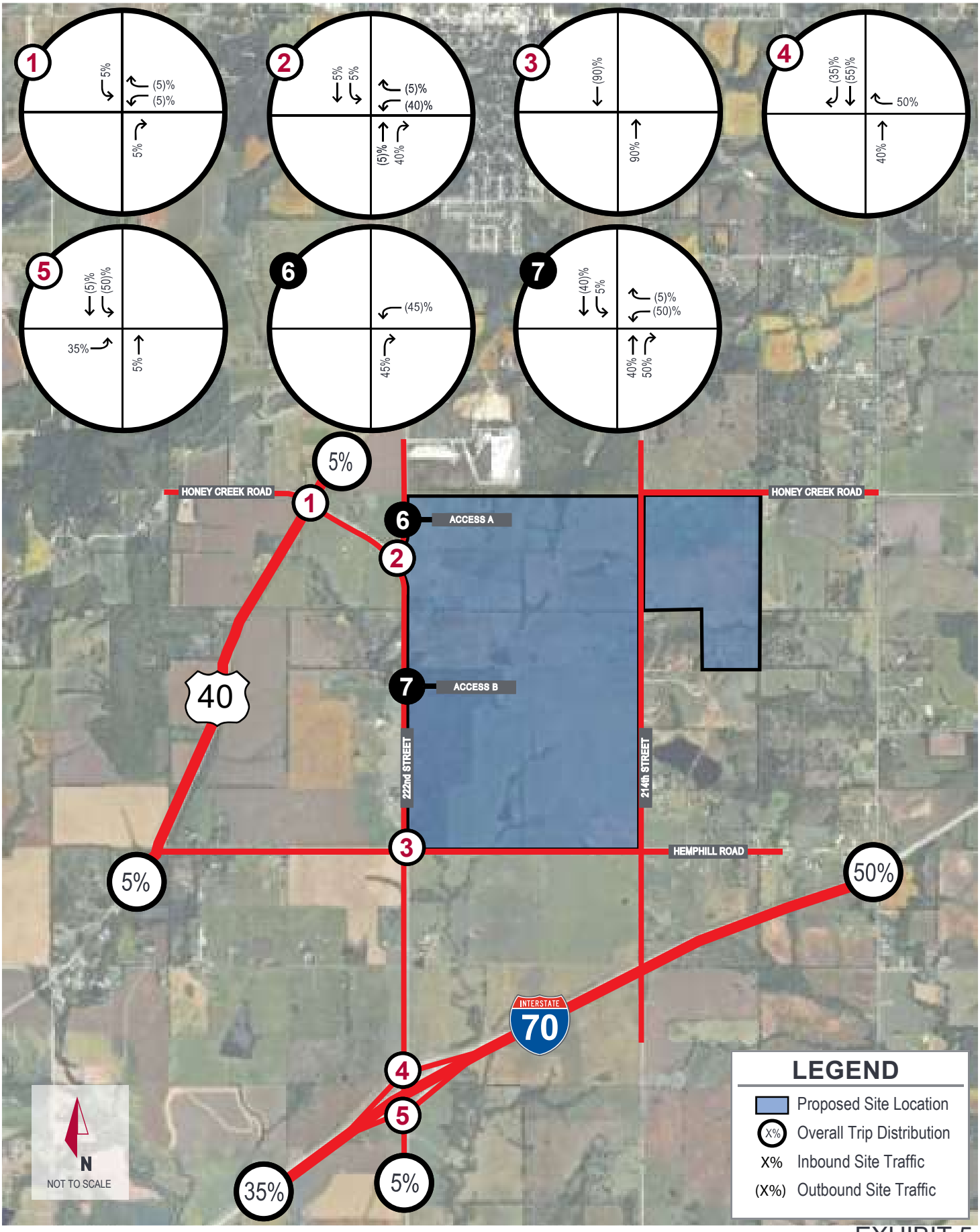
EXISTING GEOMETRY AND INTERSECTION CONTROL



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EXHIBIT 4

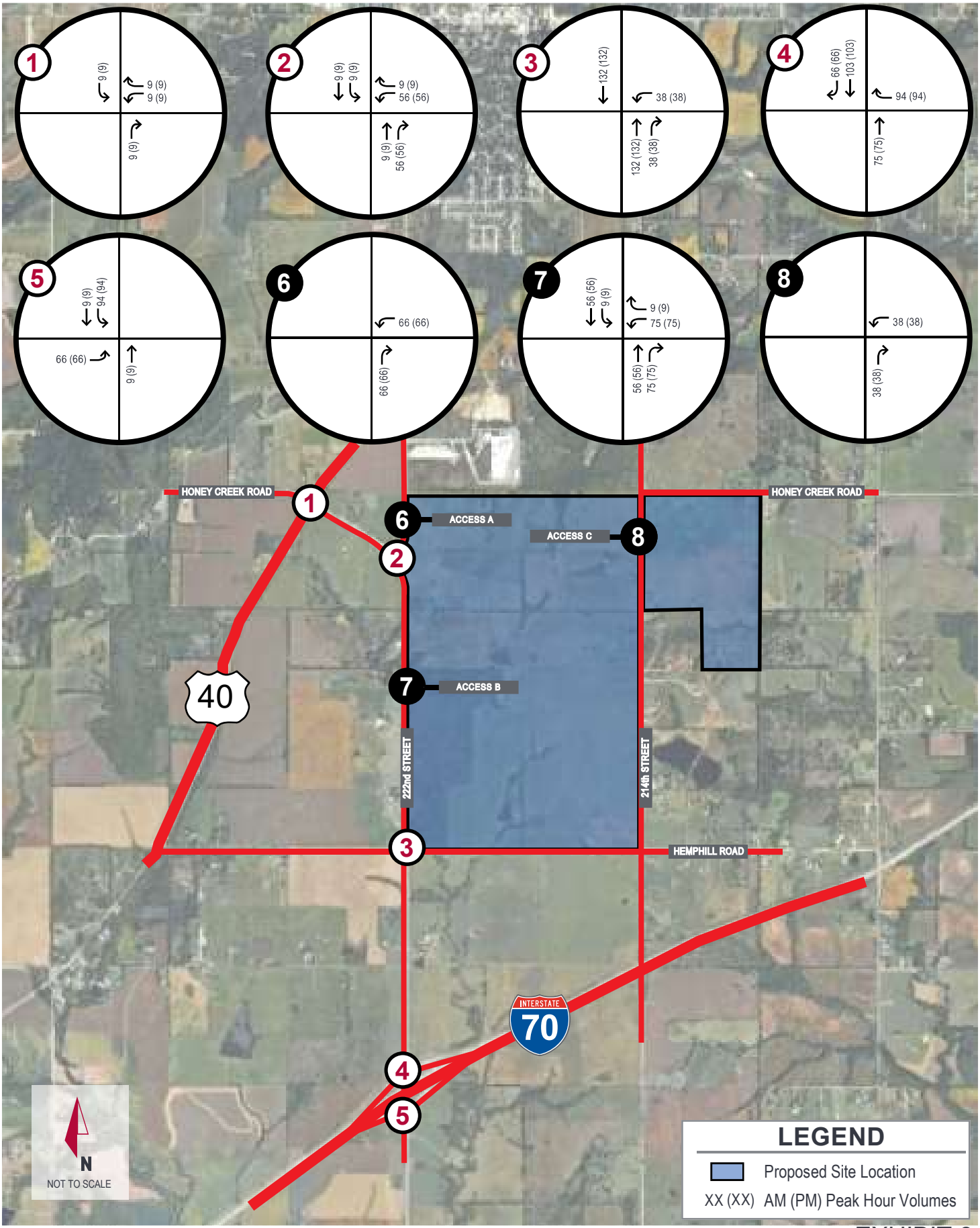
CONSTRUCTION SITE TRIP DISTRIBUTION



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EXHIBIT 5

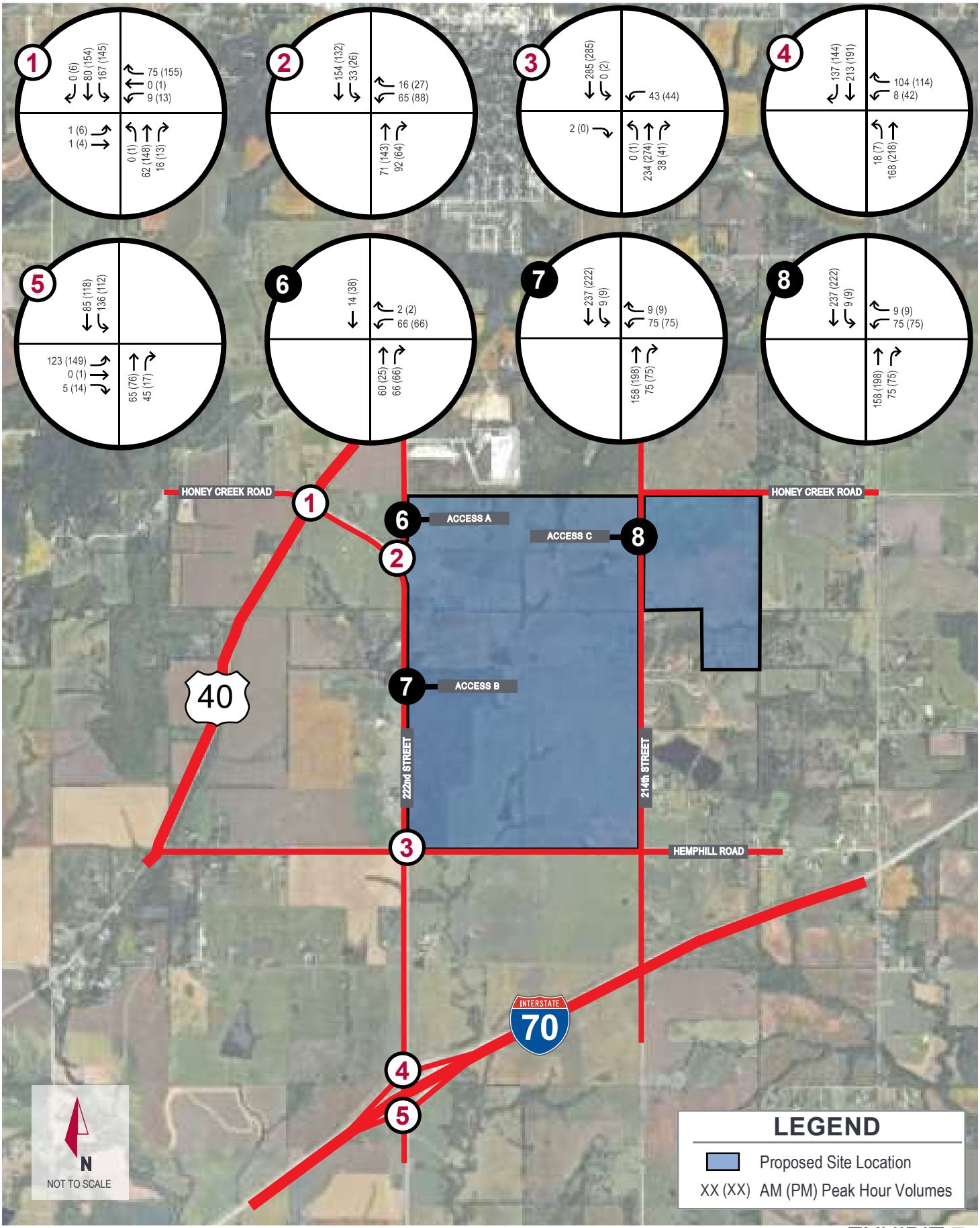
SITE TRIP DISTRIBUTION



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EXHIBIT 6

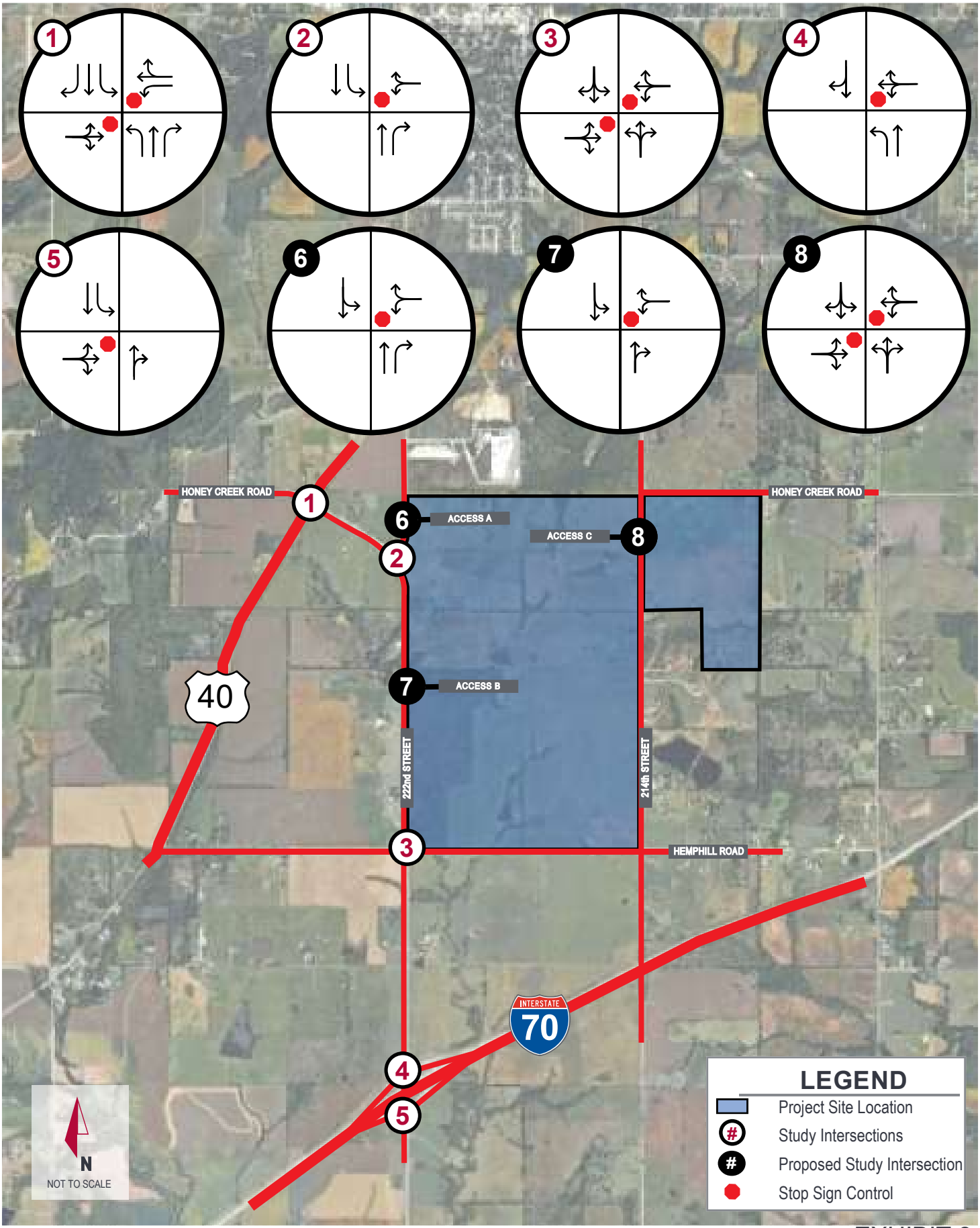
CONSTRUCTION TRAFFIC VOLUMES



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EXHIBIT 7

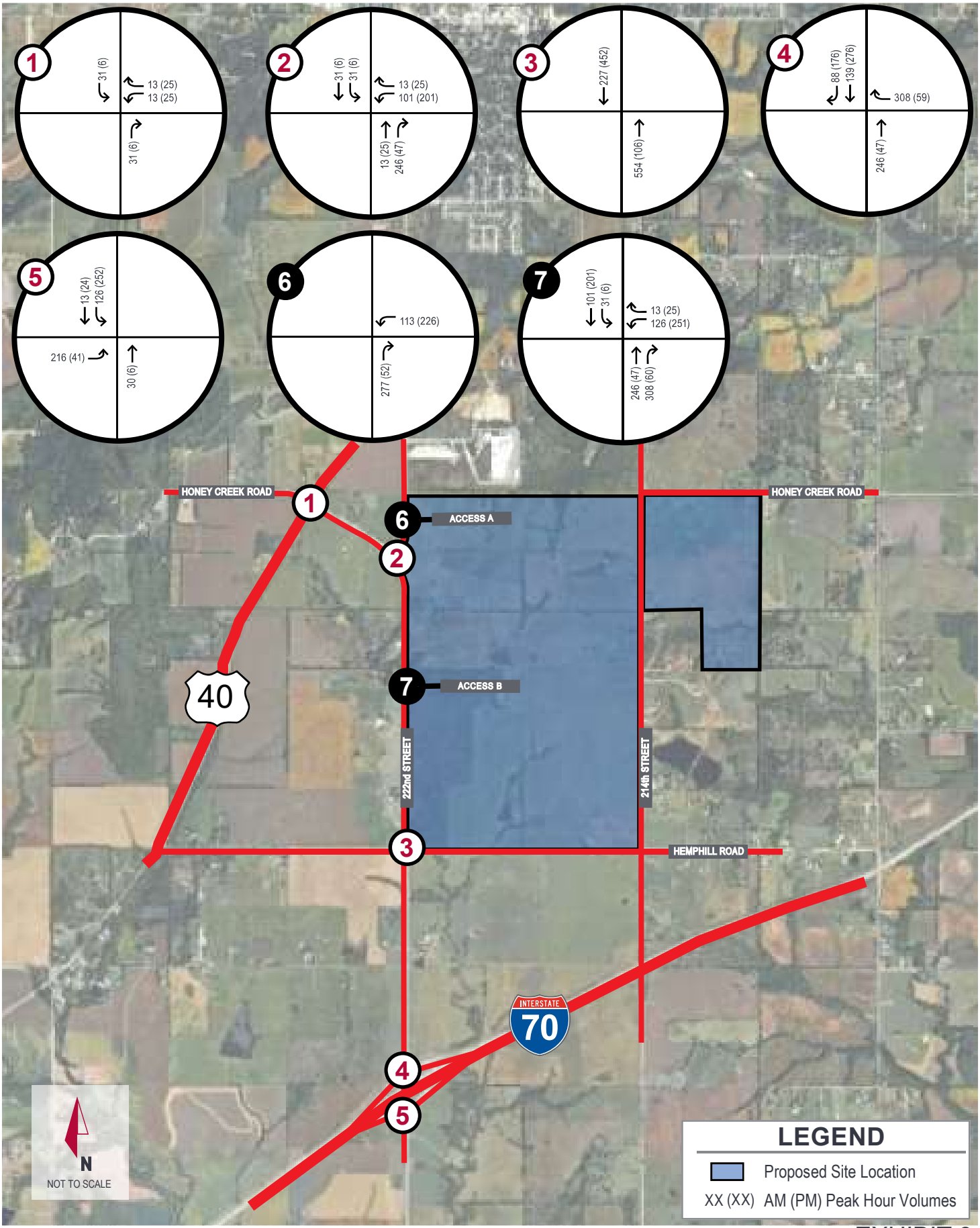
EXISTING PLUS CONSTRUCTION PEAK HOUR TRAFFIC VOLUMES



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EXHIBIT 8

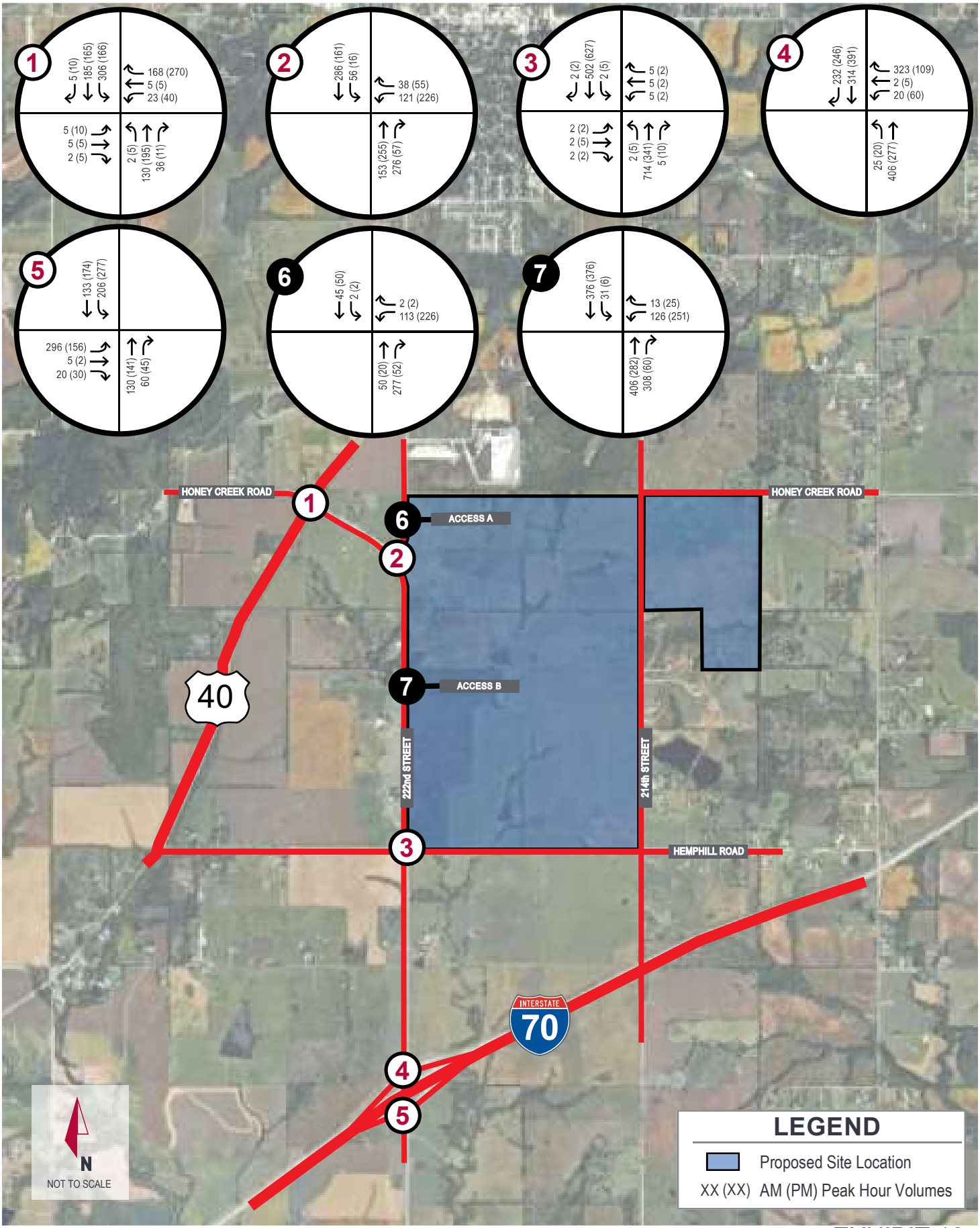
EXISTING PLUS CONSTRUCTION GEOMETRY AND INTERSECTION CONTROL



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EXHIBIT 9

TOTAL OPERATIONAL TRAFFIC VOLUMES



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EXHIBIT 10

OPENING YEAR (2031) BUILD TRAFFIC VOLUMES

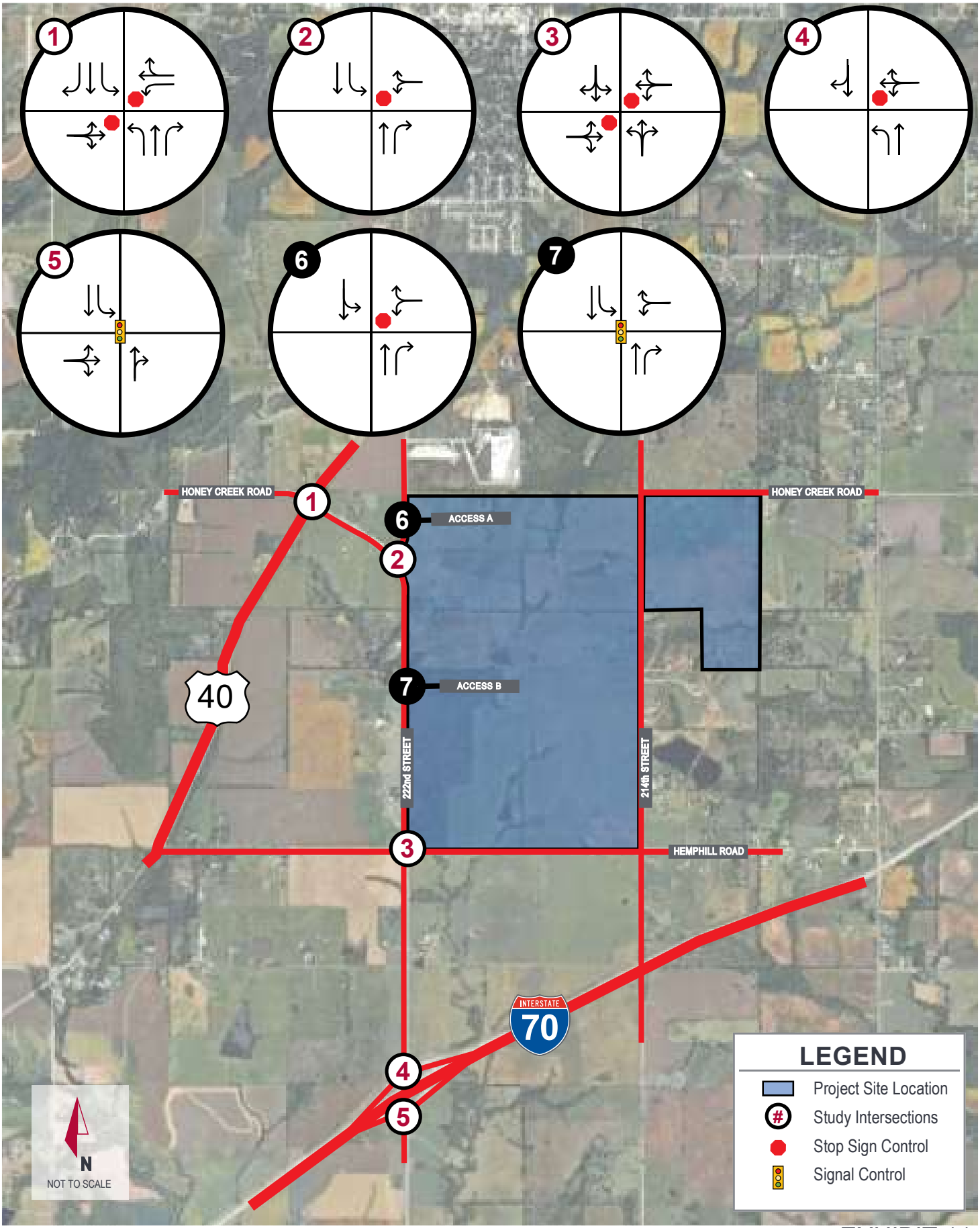
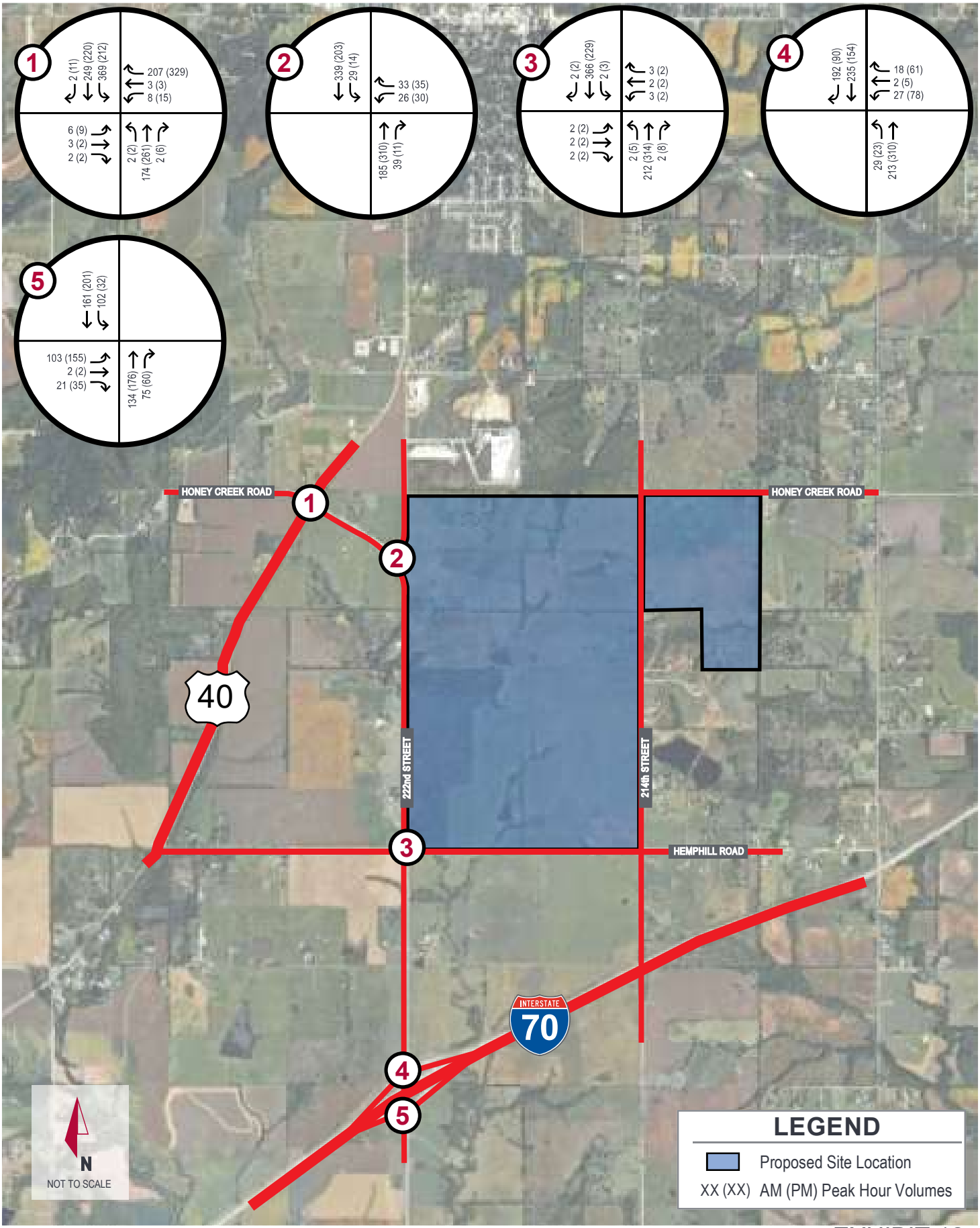


EXHIBIT 11

Kimley»Horn

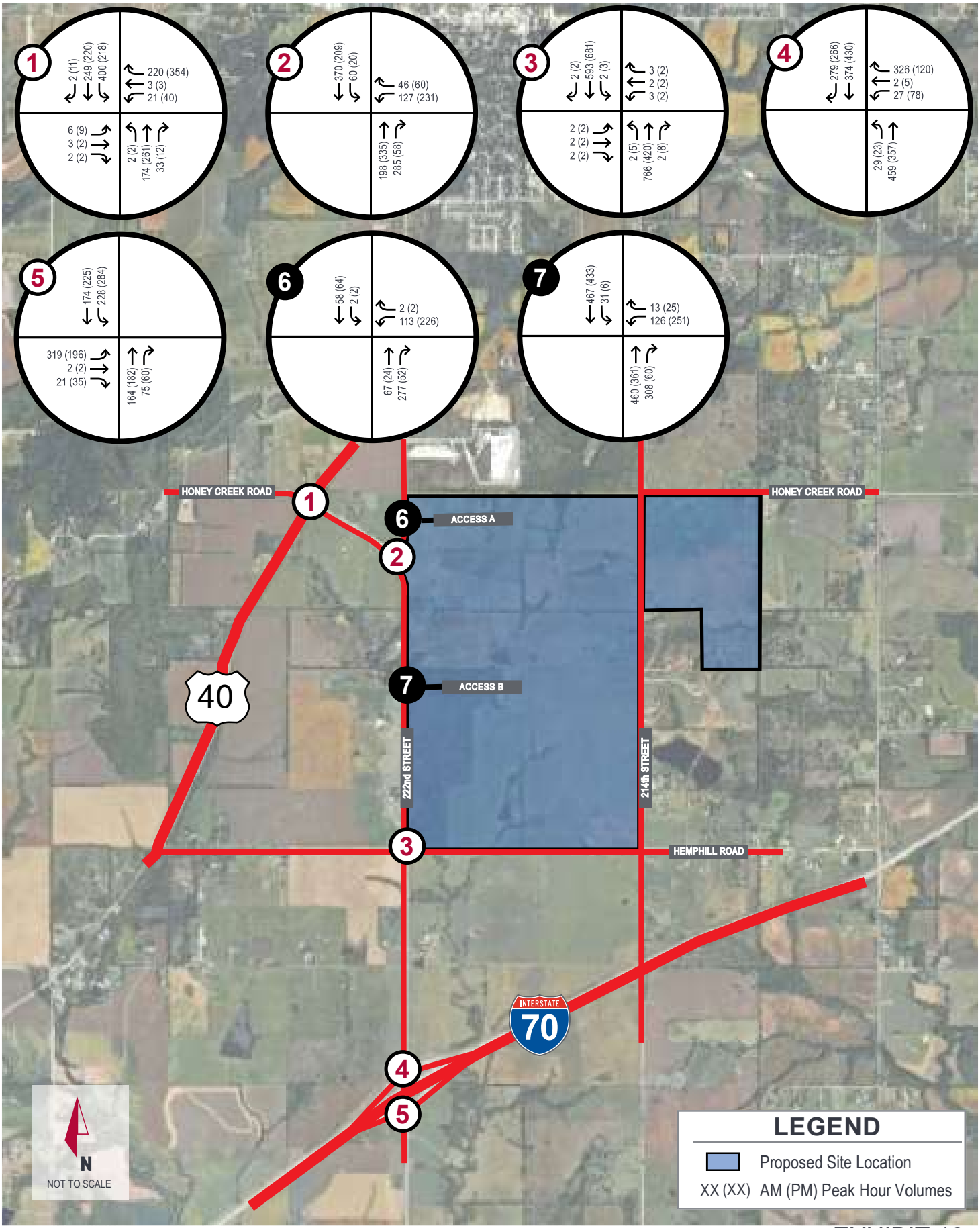
OPENING YEAR (YEAR 2031) BUILD GEOMETRY AND INTERSECTION CONTROL



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EXHIBIT 12

FUTURE (2046) NO BUILD TRAFFIC VOLUMES



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EXHIBIT 13

FUTURE (2046) BUILD TRAFFIC VOLUMES

Appendix B: Traffic Count Data

222nd and CR 1 - TMC

Tue Feb 17, 2026
Full Length (6 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377671, Location: 39.076362, -95.09467

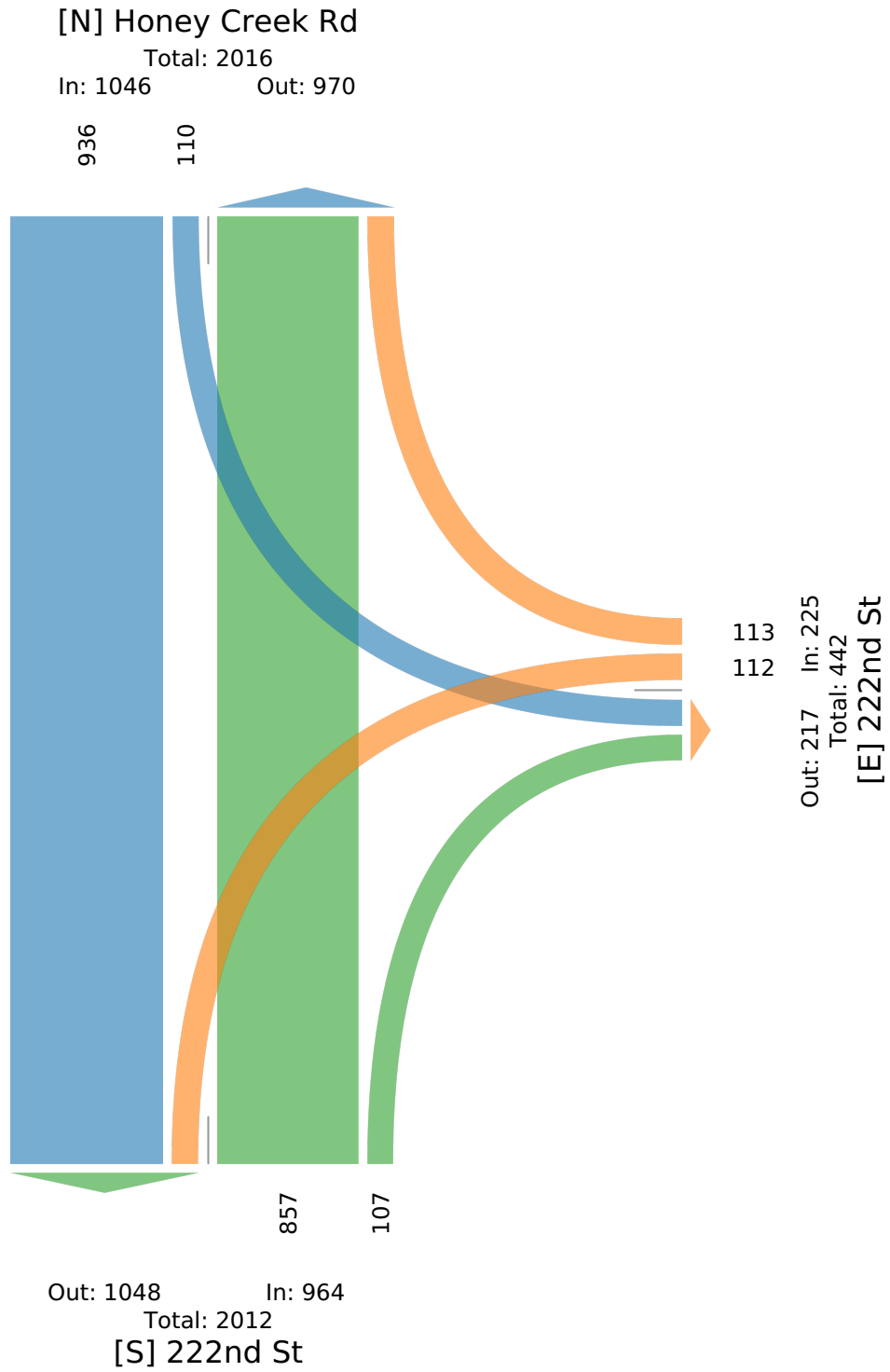
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	222nd St				222nd St				Honey Creek Rd				
Direction	Westbound				Northbound				Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2026-02-17 6:00AM	3	2	0	**5**	7	5	0	**12**	0	31	0	**31**	**48**
6:15AM	1	0	0	**1**	15	4	0	**19**	5	30	0	**35**	**55**
6:30AM	4	1	0	**5**	19	6	0	**25**	5	51	0	**56**	**86**
6:45AM	1	4	0	**5**	21	21	0	**42**	14	33	0	**47**	**94**
Hourly Total	9	7	0	**16**	62	36	0	**98**	24	145	0	**169**	**283**
7:00AM	3	6	0	**9**	28	6	0	**34**	4	72	0	**76**	**119**
7:15AM	1	5	0	**6**	38	10	0	**48**	6	50	0	**56**	**110**
7:30AM	8	10	0	**18**	31	3	0	**34**	3	54	0	**57**	**109**
7:45AM	5	1	0	**6**	27	7	0	**34**	6	52	0	**58**	**98**
Hourly Total	17	22	0	**39**	124	26	0	**150**	19	228	0	**247**	**436**
8:00AM	6	2	0	**8**	21	2	0	**23**	1	33	0	**34**	**65**
8:15AM	3	0	0	**3**	21	4	0	**25**	0	39	0	**39**	**67**
8:30AM	3	1	0	**4**	13	2	0	**15**	4	25	0	**29**	**48**
8:45AM	2	2	0	**4**	17	6	0	**23**	4	20	0	**24**	**51**
Hourly Total	14	5	0	**19**	72	14	0	**86**	9	117	0	**126**	**231**
2:00PM	2	4	0	**6**	21	1	0	**22**	4	20	0	**24**	**52**
2:15PM	1	3	0	**4**	19	2	0	**21**	7	19	0	**26**	**51**
2:30PM	2	7	0	**9**	20	5	0	**25**	5	20	0	**25**	**59**
2:45PM	2	4	0	**6**	34	4	0	**38**	3	19	0	**22**	**66**
Hourly Total	7	18	0	**25**	94	12	0	**106**	19	78	0	**97**	**228**
3:00PM	6	1	0	**7**	29	1	0	**30**	4	27	0	**31**	**68**
3:15PM	5	2	0	**7**	27	2	0	**29**	8	30	0	**38**	**74**
3:30PM	14	11	0	**25**	37	1	0	**38**	3	37	0	**40**	**103**
3:45PM	7	4	0	**11**	41	4	0	**45**	2	29	0	**31**	**87**
Hourly Total	32	18	0	**50**	134	8	0	**142**	17	123	0	**140**	**332**
4:00PM	4	8	0	**12**	34	1	0	**35**	3	32	0	**35**	**82**
4:15PM	2	2	0	**4**	50	2	0	**52**	3	24	0	**27**	**83**
4:30PM	7	5	0	**12**	56	2	0	**58**	3	34	0	**37**	**107**
4:45PM	9	6	0	**15**	49	1	0	**50**	3	35	0	**38**	**103**
Hourly Total	22	21	0	**43**	189	6	0	**195**	12	125	0	**137**	**375**
5:00PM	2	9	0	**11**	46	2	0	**48**	2	36	0	**38**	**97**
5:15PM	2	3	0	**5**	57	2	0	**59**	1	31	0	**32**	**96**
5:30PM	3	7	0	**10**	46	0	0	**46**	1	27	0	**28**	**84**
5:45PM	4	3	0	**7**	33	1	0	**34**	6	26	0	**32**	**73**
Hourly Total	11	22	0	**33**	182	5	0	**187**	10	120	0	**130**	**350**
Total	112	113	0	**225**	857	107	0	**964**	110	936	0	**1046**	**2235**
% Approach	49.8%	50.2%	0%	**-**	88.9%	11.1%	0%	**-**	10.5%	89.5%	0%	**-**	-
% Total	5.0%	5.1%	0%	**10.1%**	38.3%	4.8%	0%	**43.1%**	4.9%	41.9%	0%	**46.8%**	-
Lights	97	108	0	**205**	832	92	0	**924**	100	912	0	**1012**	2141
% Lights	86.6%	95.6%	0%	**91.1%**	97.1%	86.0%	0%	**95.9%**	90.9%	97.4%	0%	**96.7%**	95.8%
Articulated Trucks	8	1	0	**9**	14	12	0	**26**	3	8	0	**11**	46
% Articulated Trucks	7.1%	0.9%	0%	**4.0%**	1.6%	11.2%	0%	**2.7%**	2.7%	0.9%	0%	**1.1%**	2.1%
Buses and Single-Unit Trucks	7	4	0	**11**	11	3	0	**14**	7	16	0	**23**	48
% Buses and Single-Unit Trucks	6.3%	3.5%	0%	**4.9%**	1.3%	2.8%	0%	**1.5%**	6.4%	1.7%	0%	**2.2%**	2.1%

*L: Left, R: Right, T: Thru, U: U-Turn

222nd and CR 1 - TMC
Tue Feb 17, 2026
Full Length (6 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377671, Location: 39.076362, -95.09467

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



222nd and CR 1 - TMC

Tue Feb 17, 2026
AM Peak (7 AM - 8 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377671, Location: 39.076362, -95.09467

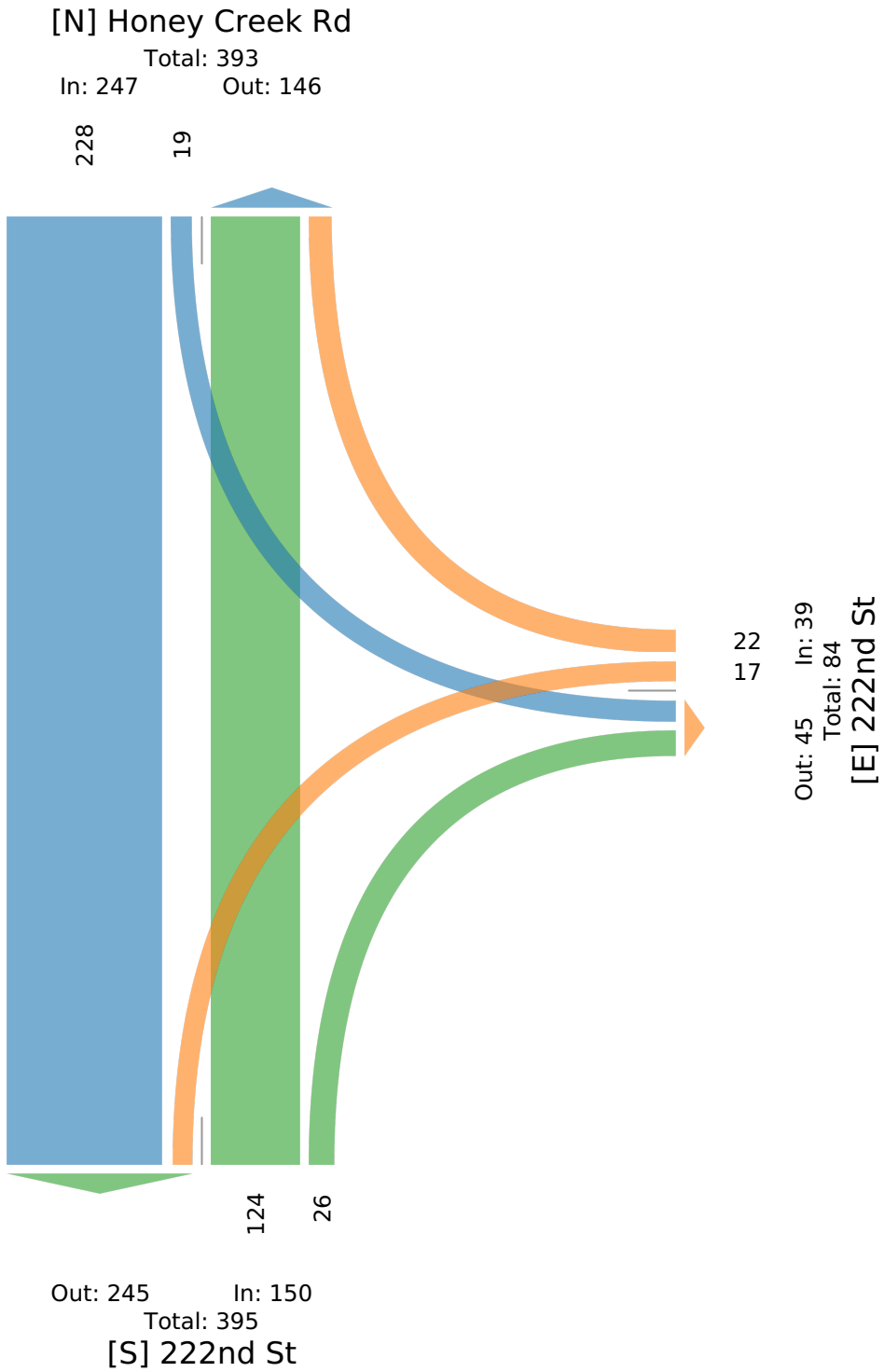
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	222nd St				222nd St				Honey Creek Rd				
Direction	Westbound				Northbound				Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2026-02-17 7:00AM	3	6	0	**9**	28	6	0	**34**	4	72	0	**76**	**119**
7:15AM	1	5	0	**6**	38	10	0	**48**	6	50	0	**56**	**110**
7:30AM	8	10	0	**18**	31	3	0	**34**	3	54	0	**57**	**109**
7:45AM	5	1	0	**6**	27	7	0	**34**	6	52	0	**58**	**98**
Total	17	22	0	**39**	124	26	0	**150**	19	228	0	**247**	**436**
% Approach	43.6%	56.4%	0%	**-**	82.7%	17.3%	0%	**-**	7.7%	92.3%	0%	**-**	-
% Total	3.9%	5.0%	0%	**8.9%**	28.4%	6.0%	0%	**34.4%**	4.4%	52.3%	0%	**56.7%**	-
PHF	0.531	0.550	-	**0.542**	0.816	0.650	-	**0.781**	0.792	0.792	-	**0.813**	0.916
Lights	15	21	0	**36**	120	23	0	**143**	15	224	0	**239**	418
% Lights	88.2%	95.5%	0%	**92.3%**	96.8%	88.5%	0%	**95.3%**	78.9%	98.2%	0%	**96.8%**	95.9%
Articulated Trucks	2	0	0	**2**	1	3	0	**4**	1	1	0	**2**	8
% Articulated Trucks	11.8%	0%	0%	**5.1%**	0.8%	11.5%	0%	**2.7%**	5.3%	0.4%	0%	**0.8%**	1.8%
Buses and Single-Unit Trucks	0	1	0	**1**	3	0	0	**3**	3	3	0	**6**	10
% Buses and Single-Unit Trucks	0%	4.5%	0%	**2.6%**	2.4%	0%	0%	**2.0%**	15.8%	1.3%	0%	**2.4%**	2.3%

*L: Left, R: Right, T: Thru, U: U-Turn

222nd and CR 1 - TMC
Tue Feb 17, 2026
AM Peak (7 AM - 8 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377671, Location: 39.076362, -95.09467

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



222nd and CR 1 - TMC

Tue Feb 17, 2026
PM Peak (4:30 PM - 5:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377671, Location: 39.076362, -95.09467

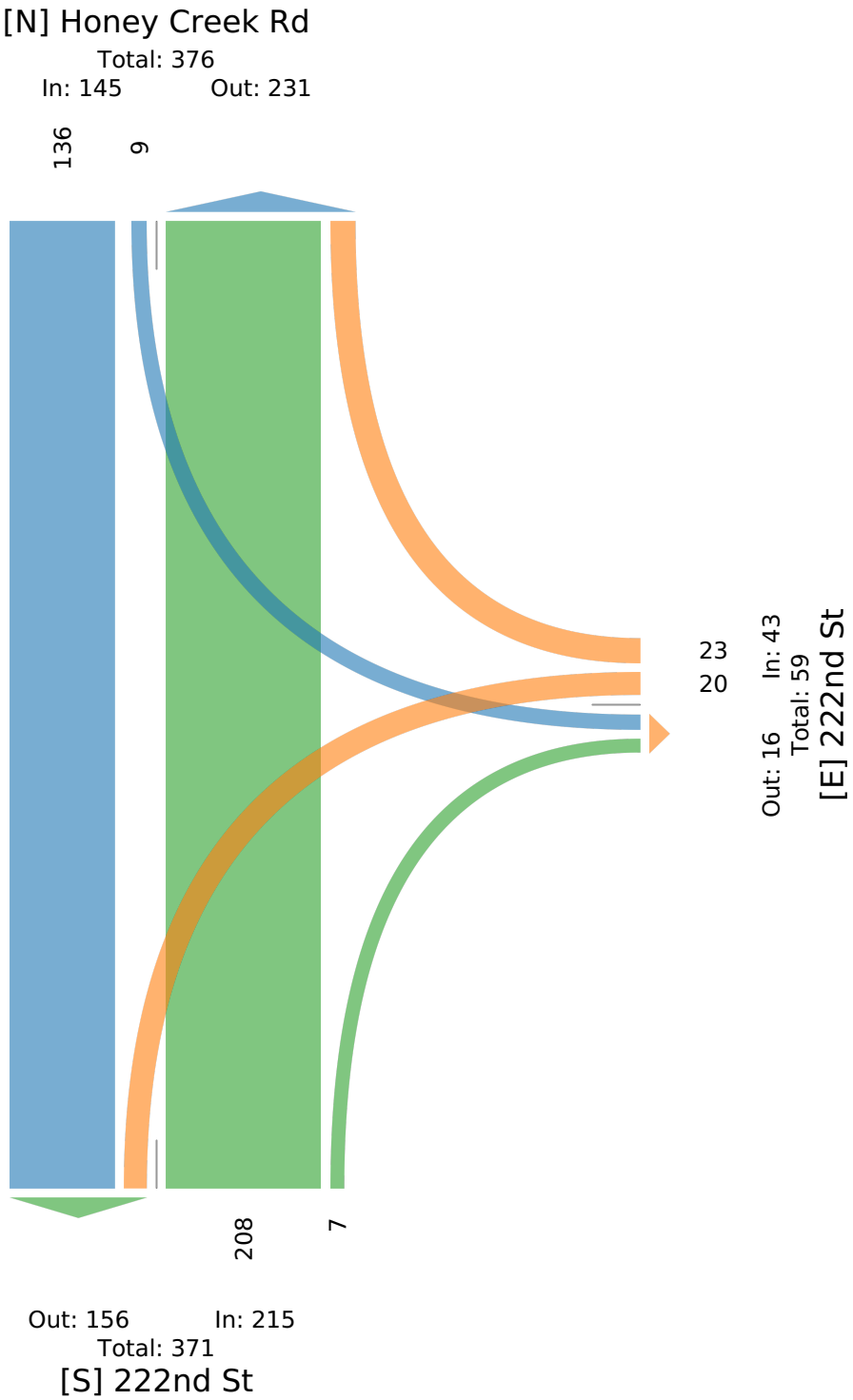
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	222nd St				222nd St				Honey Creek Rd				
Direction	Westbound				Northbound				Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2026-02-17 4:30PM	7	5	0	**12**	56	2	0	**58**	3	34	0	**37**	**107**
4:45PM	9	6	0	**15**	49	1	0	**50**	3	35	0	**38**	**103**
5:00PM	2	9	0	**11**	46	2	0	**48**	2	36	0	**38**	**97**
5:15PM	2	3	0	**5**	57	2	0	**59**	1	31	0	**32**	**96**
Total	20	23	0	**43**	208	7	0	**215**	9	136	0	**145**	**403**
% Approach	46.5%	53.5%	0%	**-**	96.7%	3.3%	0%	**-**	6.2%	93.8%	0%	**-**	-
% Total	5.0%	5.7%	0%	**10.7%**	51.6%	1.7%	0%	**53.3%**	2.2%	33.7%	0%	**36.0%**	-
PHF	0.556	0.639	-	**0.717**	0.912	0.875	-	**0.911**	0.750	0.944	-	**0.954**	0.942
Lights	20	23	0	**43**	206	7	0	**213**	9	136	0	**145**	401
% Lights	100%	100%	0%	**100%**	99.0%	100%	0%	**99.1%**	100%	100%	0%	**100%**	99.5%
Articulated Trucks	0	0	0	**0**	1	0	0	**1**	0	0	0	**0**	1
% Articulated Trucks	0%	0%	0%	**0%**	0.5%	0%	0%	**0.5%**	0%	0%	0%	**0%**	0.2%
Buses and Single-Unit Trucks	0	0	0	**0**	1	0	0	**1**	0	0	0	**0**	1
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	0.5%	0%	0%	**0.5%**	0%	0%	0%	**0%**	0.2%

*L: Left, R: Right, T: Thru, U: U-Turn

222nd and CR 1 - TMC
Tue Feb 17, 2026
PM Peak (4:30 PM - 5:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377671, Location: 39.076362, -95.09467

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



EB I-70 and CR 1 - TMC

Tue Feb 17, 2026
Full Length (6 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377673, Location: 39.042659, -95.09343

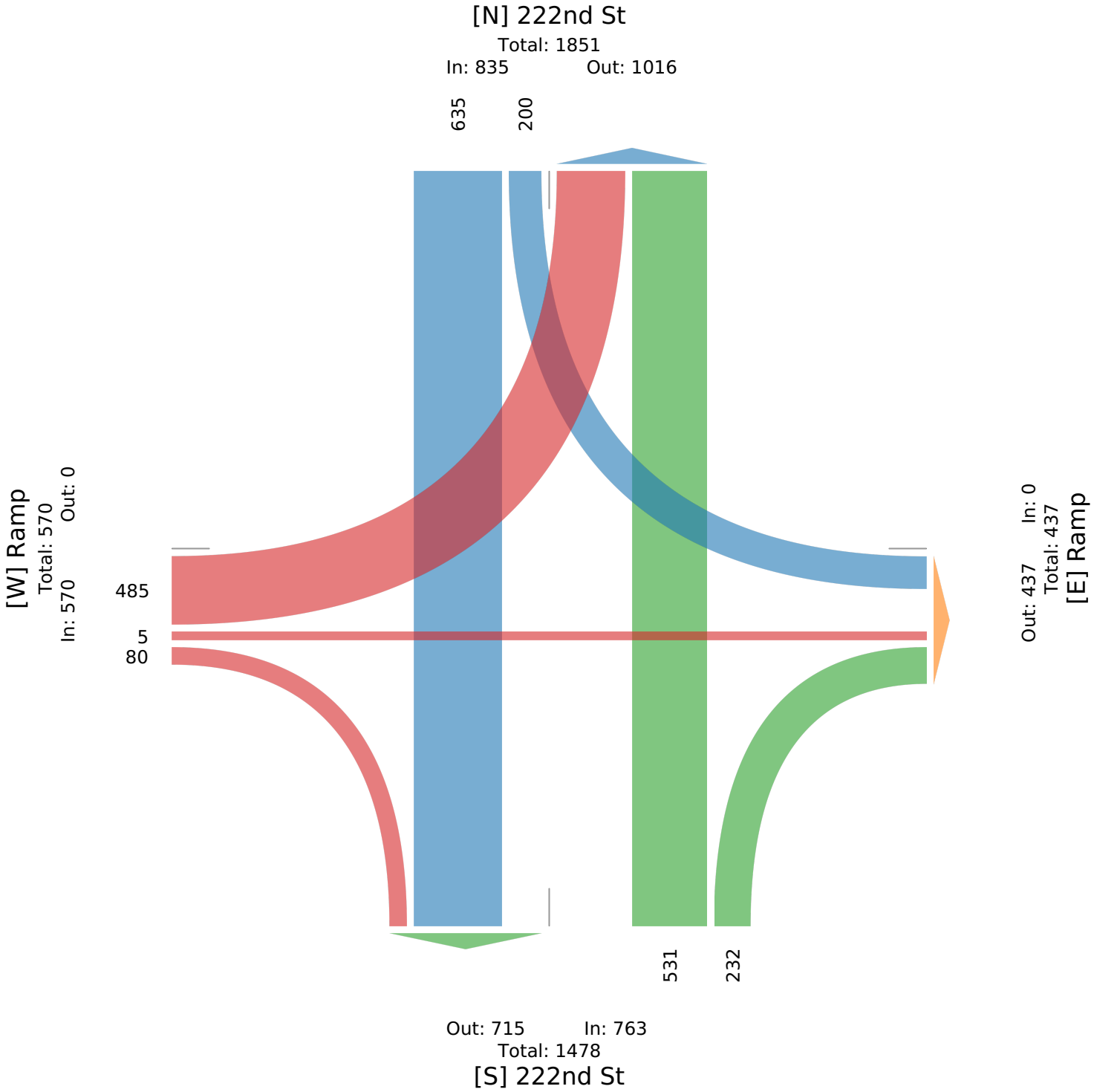
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Ramp					Ramp					222nd St					222nd St					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2026-02-17 6:00AM	11	0	0	0	**11**	0	0	0	0	**0**	0	7	8	0	**15**	8	16	0	0	**24**	**50**
6:15AM	13	0	2	0	**15**	0	0	0	0	**0**	0	6	11	0	**17**	13	21	0	0	**34**	**66**
6:30AM	16	0	3	0	**19**	0	0	0	0	**0**	0	20	9	0	**29**	15	24	0	0	**39**	**87**
6:45AM	17	0	0	0	**17**	0	0	0	0	**0**	0	23	17	0	**40**	6	15	0	0	**21**	**78**
Hourly Total	57	0	5	0	**62**	0	0	0	0	**0**	0	56	45	0	**101**	42	76	0	0	**118**	**281**
7:00AM	18	1	6	0	**25**	0	0	0	0	**0**	0	23	9	0	**32**	17	24	0	0	**41**	**98**
7:15AM	20	0	1	0	**21**	0	0	0	0	**0**	0	27	13	0	**40**	20	26	0	0	**46**	**107**
7:30AM	12	0	3	0	**15**	0	0	0	0	**0**	0	19	15	0	**34**	16	28	0	0	**44**	**93**
7:45AM	19	0	4	0	**23**	0	0	0	0	**0**	0	21	13	0	**34**	15	30	0	0	**45**	**102**
Hourly Total	69	1	14	0	**84**	0	0	0	0	**0**	0	90	50	0	**140**	68	108	0	0	**176**	**400**
8:00AM	9	0	6	0	**15**	0	0	0	0	**0**	0	16	13	0	**29**	8	20	0	0	**28**	**72**
8:15AM	12	0	1	0	**13**	0	0	0	0	**0**	0	14	6	0	**20**	5	11	0	0	**16**	**49**
8:30AM	8	0	2	0	**10**	0	0	0	0	**0**	0	12	13	0	**25**	4	9	0	0	**13**	**48**
8:45AM	10	0	1	0	**11**	0	0	0	0	**0**	0	12	3	0	**15**	3	7	0	0	**10**	**36**
Hourly Total	39	0	10	0	**49**	0	0	0	0	**0**	0	54	35	0	**89**	20	47	0	0	**67**	**205**
2:00PM	12	0	0	0	**12**	0	0	0	0	**0**	0	12	4	0	**16**	2	13	0	0	**15**	**43**
2:15PM	9	0	1	0	**10**	0	0	0	0	**0**	0	11	4	0	**15**	2	14	0	0	**16**	**41**
2:30PM	12	0	0	0	**12**	0	0	0	0	**0**	0	18	2	0	**20**	3	16	0	0	**19**	**51**
2:45PM	17	0	4	0	**21**	0	0	0	0	**0**	0	19	7	0	**26**	4	17	0	0	**21**	**68**
Hourly Total	50	0	5	0	**55**	0	0	0	0	**0**	0	60	17	0	**77**	11	60	0	0	**71**	**203**
3:00PM	19	0	3	0	**22**	0	0	0	0	**0**	0	12	3	0	**15**	4	23	0	0	**27**	**64**
3:15PM	16	1	4	0	**21**	0	0	0	0	**0**	0	18	4	0	**22**	3	24	0	0	**27**	**70**
3:30PM	22	0	1	0	**23**	0	0	0	0	**0**	0	19	7	0	**26**	6	33	0	0	**39**	**88**
3:45PM	26	0	6	0	**32**	0	0	0	0	**0**	0	18	3	0	**21**	5	29	0	0	**34**	**87**
Hourly Total	83	1	14	0	**98**	0	0	0	0	**0**	0	67	17	0	**84**	18	109	0	0	**127**	**309**
4:00PM	18	0	1	0	**19**	0	0	0	0	**0**	0	26	6	0	**32**	4	26	0	0	**30**	**81**
4:15PM	27	1	4	0	**32**	0	0	0	0	**0**	0	27	6	0	**33**	4	23	0	0	**27**	**92**
4:30PM	25	0	8	0	**33**	0	0	0	0	**0**	0	37	3	0	**40**	7	32	0	0	**39**	**112**
4:45PM	23	0	8	0	**31**	0	0	0	0	**0**	0	23	10	0	**33**	7	32	0	0	**39**	**103**
Hourly Total	93	1	21	0	**115**	0	0	0	0	**0**	0	113	25	0	**138**	22	113	0	0	**135**	**388**
5:00PM	28	0	5	0	**33**	0	0	0	0	**0**	0	29	13	0	**42**	6	31	0	0	**37**	**112**
5:15PM	28	0	2	0	**30**	0	0	0	0	**0**	0	29	14	0	**43**	1	40	0	0	**41**	**114**
5:30PM	23	2	3	0	**28**	0	0	0	0	**0**	0	18	4	0	**22**	6	27	0	0	**33**	**83**
5:45PM	15	0	1	0	**16**	0	0	0	0	**0**	0	15	12	0	**27**	6	24	0	0	**30**	**73**
Hourly Total	94	2	11	0	**107**	0	0	0	0	**0**	0	91	43	0	**134**	19	122	0	0	**141**	**382**
Total	485	5	80	0	**570**	0	0	0	0	**0**	0	531	232	0	**763**	200	635	0	0	**835**	**2168**
% Approach	85.1%	0.9%	14.0%	0%	**-**	0%	0%	0%	0%	**-**	0%	69.6%	30.4%	0%	**-**	24.0%	76.0%	0%	0%	**-**	-
% Total	22.4%	0.2%	3.7%	0%	**26.3%**	0%	0%	0%	0%	**0%**	0%	24.5%	10.7%	0%	**35.2%**	9.2%	29.3%	0%	0%	**38.5%**	-
Lights	469	3	76	0	**548**	0	0	0	0	**0**	0	514	220	0	**734**	181	622	0	0	**803**	2085
% Lights	96.7%	60.0%	95.0%	0%	**96.1%**	0%	0%	0%	0%	**-**	0%	96.8%	94.8%	0%	**96.2%**	90.5%	98.0%	0%	0%	**96.2%**	96.2%
Articulated Trucks	10	1	1	0	**12**	0	0	0	0	**0**	0	5	5	0	**10**	12	4	0	0	**16**	38
% Articulated Trucks	2.1%	20.0%	1.3%	0%	**2.1%**	0%	0%	0%	0%	**-**	0%	0.9%	2.2%	0%	**1.3%**	6.0%	0.6%	0%	0%	**1.9%**	1.8%
Buses and Single-Unit Trucks	6	1	3	0	**10**	0	0	0	0	**0**	0	12	7	0	**19**	7	9	0	0	**16**	45
% Buses and Single-Unit Trucks	1.2%	20.0%	3.8%	0%	**1.8%**	0%	0%	0%	0%	**-**	0%	2.3%	3.0%	0%	**2.5%**	3.5%	1.4%	0%	0%	**1.9%**	2.1%

*L: Left, R: Right, T: Thru, U: U-Turn

EB I-70 and CR 1 - TMC
Tue Feb 17, 2026
Full Length (6 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377673, Location: 39.042659, -95.09343

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



EB I-70 and CR 1 - TMC

Tue Feb 17, 2026
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377673, Location: 39.042659, -95.09343

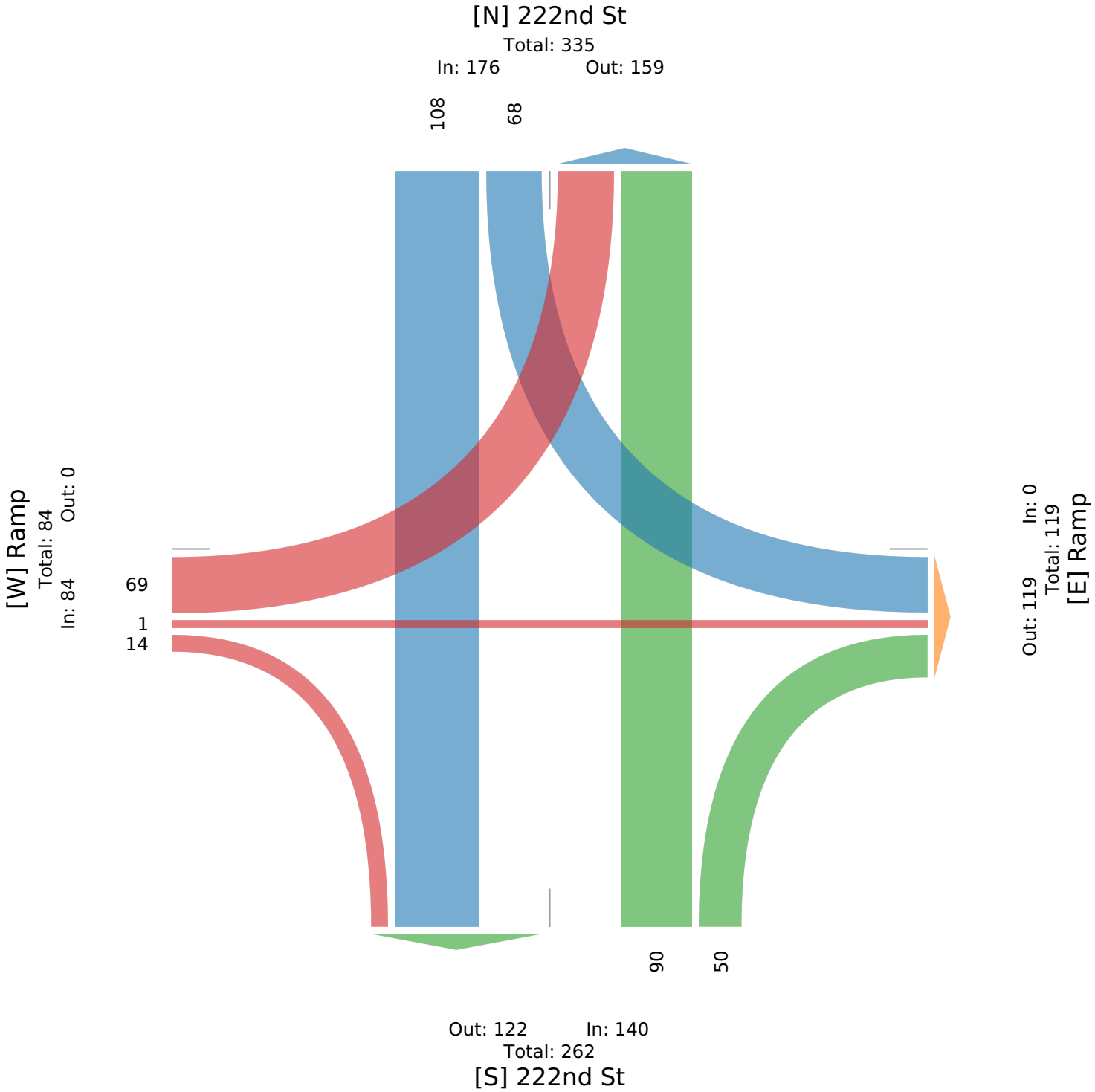
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Ramp					Ramp					222nd St					222nd St					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2026-02-17 7:00AM	18	1	6	0	**25**	0	0	0	0	**0**	0	23	9	0	**32**	17	24	0	0	**41**	**98**
7:15AM	20	0	1	0	**21**	0	0	0	0	**0**	0	27	13	0	**40**	20	26	0	0	**46**	**107**
7:30AM	12	0	3	0	**15**	0	0	0	0	**0**	0	19	15	0	**34**	16	28	0	0	**44**	**93**
7:45AM	19	0	4	0	**23**	0	0	0	0	**0**	0	21	13	0	**34**	15	30	0	0	**45**	**102**
Total	69	1	14	0	**84**	0	0	0	0	**0**	0	90	50	0	**140**	68	108	0	0	**176**	**400**
% Approach	82.1%	1.2%	16.7%	0%	**-**	0%	0%	0%	0%	**-**	0%	64.3%	35.7%	0%	**-**	38.6%	61.4%	0%	0%	**-**	-
% Total	17.3%	0.3%	3.5%	0%	**21.0%**	0%	0%	0%	0%	**0%**	0%	22.5%	12.5%	0%	**35.0%**	17.0%	27.0%	0%	0%	**44.0%**	-
PHF	0.863	0.250	0.583	-	**0.840**	-	-	-	-	**-**	-	0.833	0.833	-	**0.875**	0.850	0.900	-	-	**0.957**	0.935
Lights	67	0	12	0	**79**	0	0	0	0	**0**	0	88	50	0	**138**	67	106	0	0	**173**	390
% Lights	97.1%	0%	85.7%	0%	**94.0%**	0%	0%	0%	0%	**-**	0%	97.8%	100%	0%	**98.6%**	98.5%	98.1%	0%	0%	**98.3%**	97.5%
Articulated Trucks	2	1	0	0	**3**	0	0	0	0	**0**	0	0	0	0	**0**	1	2	0	0	**3**	6
% Articulated Trucks	2.9%	100%	0%	0%	**3.6%**	0%	0%	0%	0%	**-**	0%	0%	0%	0%	**0%**	1.5%	1.9%	0%	0%	**1.7%**	1.5%
Buses and Single-Unit Trucks	0	0	2	0	**2**	0	0	0	0	**0**	0	2	0	0	**2**	0	0	0	0	**0**	4
% Buses and Single-Unit Trucks	0%	0%	14.3%	0%	**2.4%**	0%	0%	0%	0%	**-**	0%	2.2%	0%	0%	**1.4%**	0%	0%	0%	0%	**0%**	1.0%

*L: Left, R: Right, T: Thru, U: U-Turn

EB I-70 and CR 1 - TMC
Tue Feb 17, 2026
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377673, Location: 39.042659, -95.09343

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



EB I-70 and CR 1 - TMC

Tue Feb 17, 2026
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377673, Location: 39.042659, -95.09343

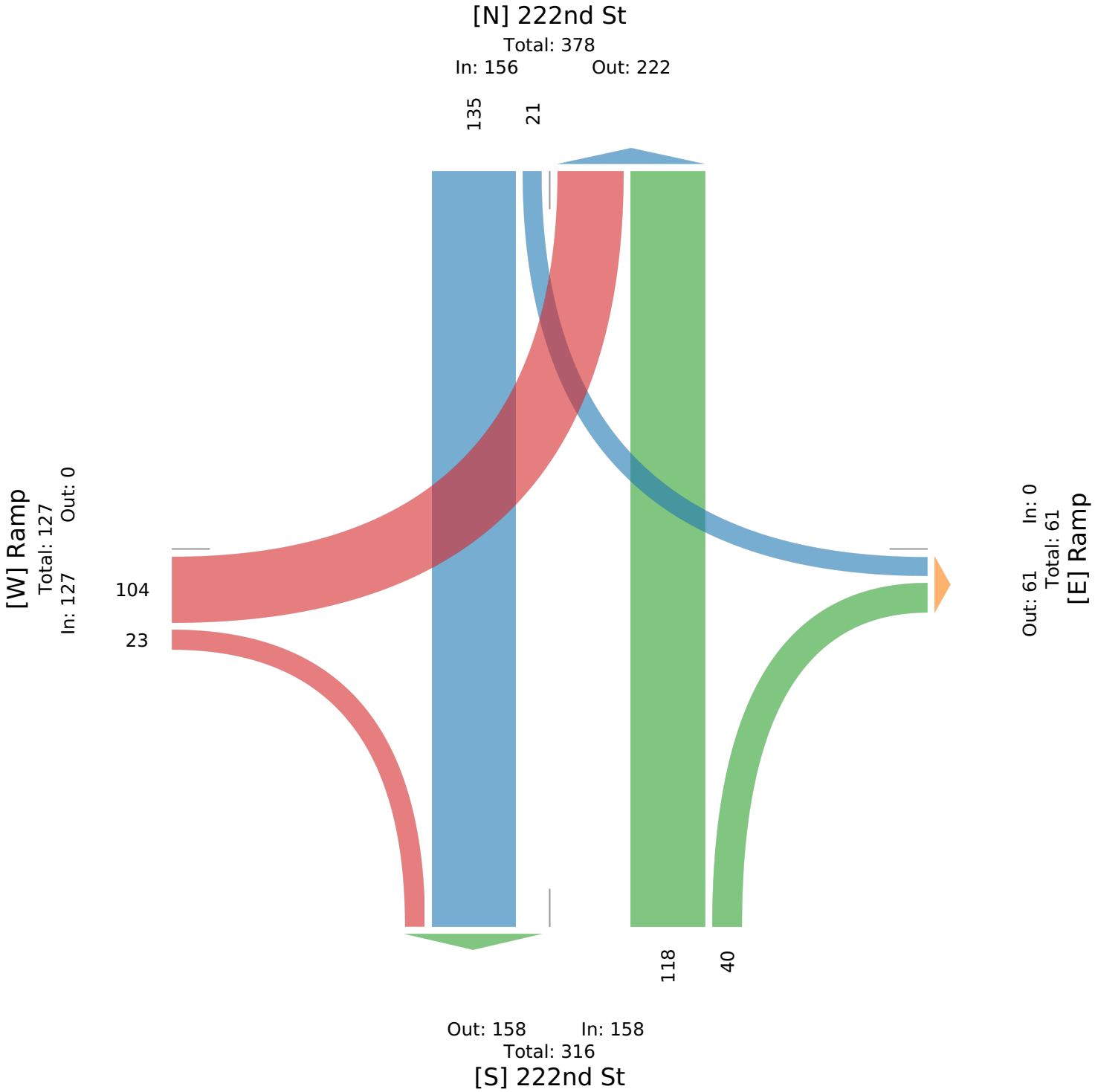
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Ramp					Ramp					222nd St					222nd St					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2026-02-17 4:30PM	25	0	8	0	**33**	0	0	0	0	**0**	0	37	3	0	**40**	7	32	0	0	**39**	**112**
4:45PM	23	0	8	0	**31**	0	0	0	0	**0**	0	23	10	0	**33**	7	32	0	0	**39**	**103**
5:00PM	28	0	5	0	**33**	0	0	0	0	**0**	0	29	13	0	**42**	6	31	0	0	**37**	**112**
5:15PM	28	0	2	0	**30**	0	0	0	0	**0**	0	29	14	0	**43**	1	40	0	0	**41**	**114**
Total	104	0	23	0	**127**	0	0	0	0	**0**	0	118	40	0	**158**	21	135	0	0	**156**	**441**
% Approach	81.9%	0%	18.1%	0%	**-**	0%	0%	0%	0%	**-**	0%	74.7%	25.3%	0%	**-**	13.5%	86.5%	0%	0%	**-**	-
% Total	23.6%	0%	5.2%	0%	**28.8%**	0%	0%	0%	0%	**0%**	0%	26.8%	9.1%	0%	**35.8%**	4.8%	30.6%	0%	0%	**35.4%**	-
PHF	0.929	-	0.719	-	**0.962**	-	-	-	-	**-**	-	0.797	0.714	-	**0.919**	0.750	0.844	-	-	**0.951**	0.967
Lights	104	0	23	0	**127**	0	0	0	0	**0**	0	115	37	0	**152**	19	135	0	0	**154**	433
% Lights	100%	0%	100%	0%	**100%**	0%	0%	0%	0%	**-**	0%	97.5%	92.5%	0%	**96.2%**	90.5%	100%	0%	0%	**98.7%**	98.2%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	1	1	0	**2**	0	0	0	0	**0**	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**-**	0%	0.8%	2.5%	0%	**1.3%**	0%	0%	0%	0%	**0%**	0.5%
Buses and Single-Unit Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	2	2	0	**4**	2	0	0	0	**2**	6
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**-**	0%	1.7%	5.0%	0%	**2.5%**	9.5%	0%	0%	0%	**1.3%**	1.4%

*L: Left, R: Right, T: Thru, U: U-Turn

EB I-70 and CR 1 - TMC
Tue Feb 17, 2026
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377673, Location: 39.042659, -95.09343

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



Hemphill Road and CR 1 - TMC

Tue Feb 17, 2026
Full Length (6 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377674, Location: 39.058454, -95.093442

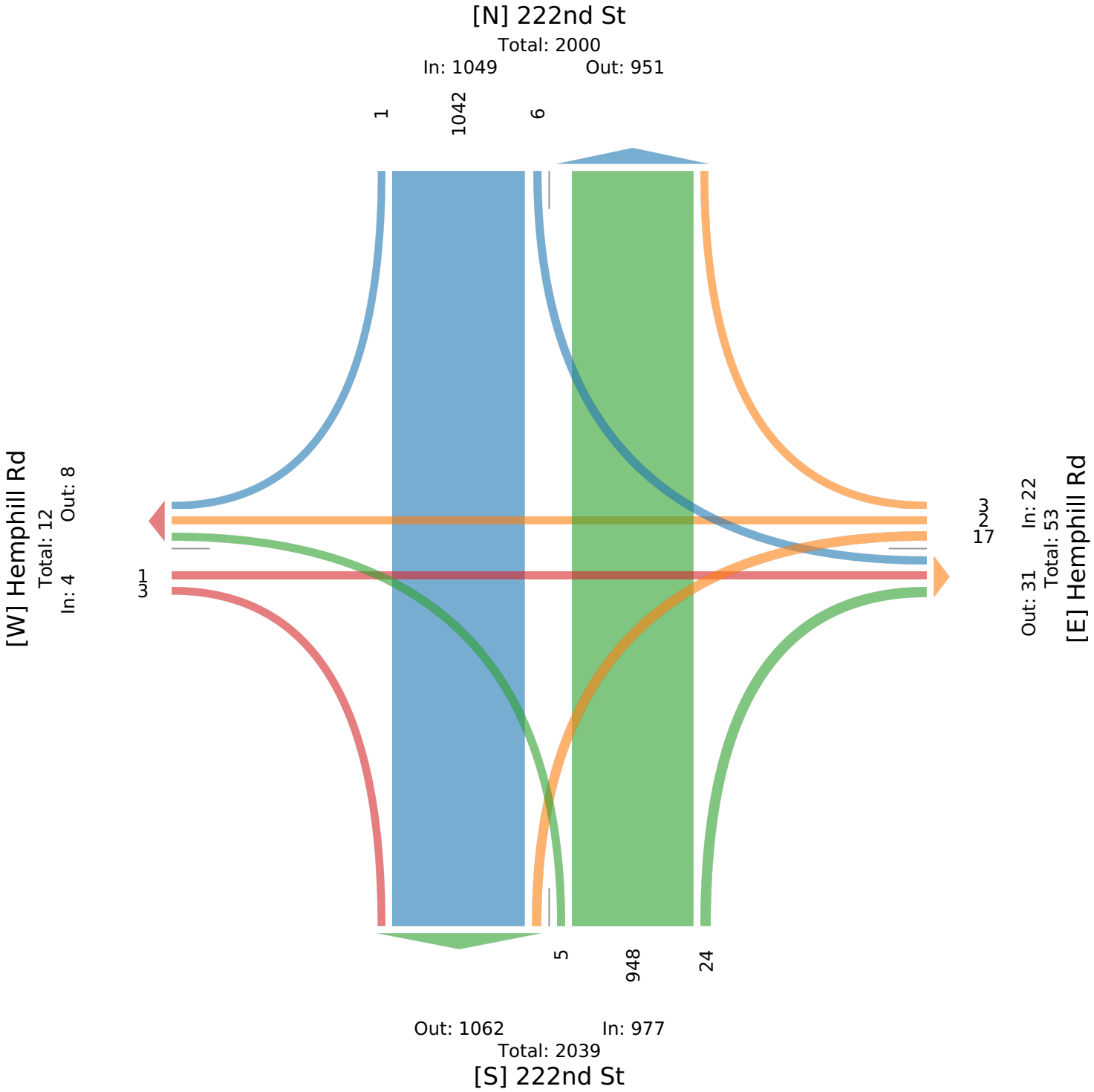
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Hemphill Rd					Hemphill Rd					222nd St					222nd St					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2026-02-17 6:00AM	0	0	0	0	**0**	3	0	0	0	**3**	0	16	0	0	**16**	0	32	0	0	**32**	**51**
6:15AM	0	0	1	0	**1**	1	0	0	0	**1**	0	18	0	0	**18**	0	31	0	0	**31**	**51**
6:30AM	0	0	0	0	**0**	1	0	0	0	**1**	0	28	0	0	**28**	0	55	0	0	**55**	**84**
6:45AM	0	0	1	0	**1**	0	0	0	0	**0**	0	40	0	0	**40**	0	35	0	0	**35**	**76**
Hourly Total	0	0	2	0	**2**	5	0	0	0	**5**	0	102	0	0	**102**	0	153	0	0	**153**	**262**
7:00AM	0	0	0	0	**0**	1	1	1	0	**3**	0	33	0	0	**33**	0	67	0	0	**67**	**103**
7:15AM	0	0	0	0	**0**	0	0	1	0	**1**	0	44	0	0	**44**	0	59	0	0	**59**	**104**
7:30AM	0	0	0	0	**0**	1	0	0	0	**1**	0	29	1	0	**30**	0	61	0	0	**61**	**92**
7:45AM	0	0	0	0	**0**	0	0	0	0	**0**	0	36	0	0	**36**	0	59	0	0	**59**	**95**
Hourly Total	0	0	0	0	**0**	2	1	2	0	**5**	0	142	1	0	**143**	0	246	0	0	**246**	**394**
8:00AM	0	0	0	0	**0**	0	1	0	0	**1**	0	24	0	0	**24**	1	39	0	0	**40**	**65**
8:15AM	0	0	1	0	**1**	0	0	0	0	**0**	0	24	0	0	**24**	0	35	1	0	**36**	**61**
8:30AM	0	0	0	0	**0**	1	0	0	0	**1**	0	15	0	0	**15**	0	29	0	0	**29**	**45**
8:45AM	0	0	0	0	**0**	1	0	0	0	**1**	0	21	1	0	**22**	0	24	0	0	**24**	**47**
Hourly Total	0	0	1	0	**1**	2	1	0	0	**3**	0	84	1	0	**85**	1	127	1	0	**129**	**218**
2:00PM	0	0	0	0	**0**	2	0	0	0	**2**	0	22	2	0	**24**	0	21	0	0	**21**	**47**
2:15PM	0	0	0	0	**0**	0	0	0	0	**0**	0	21	1	0	**22**	0	23	0	0	**23**	**45**
2:30PM	0	0	0	0	**0**	0	0	0	0	**0**	1	22	1	0	**24**	0	19	0	0	**19**	**43**
2:45PM	0	0	0	0	**0**	0	0	0	0	**0**	0	38	2	0	**40**	0	27	0	0	**27**	**67**
Hourly Total	0	0	0	0	**0**	2	0	0	0	**2**	1	103	6	0	**110**	0	90	0	0	**90**	**202**
3:00PM	0	0	0	0	**0**	2	0	0	0	**2**	0	30	0	0	**30**	0	31	0	0	**31**	**63**
3:15PM	0	0	0	0	**0**	1	0	0	0	**1**	0	28	2	0	**30**	1	35	0	0	**36**	**67**
3:30PM	0	0	0	0	**0**	3	0	0	0	**3**	1	36	0	0	**37**	1	50	0	0	**51**	**91**
3:45PM	0	0	0	0	**0**	0	0	0	0	**0**	0	48	1	0	**49**	0	37	0	0	**37**	**86**
Hourly Total	0	0	0	0	**0**	6	0	0	0	**6**	1	142	3	0	**146**	2	153	0	0	**155**	**307**
4:00PM	0	0	0	0	**0**	0	0	0	0	**0**	0	34	4	0	**38**	0	32	0	0	**32**	**70**
4:15PM	0	0	0	0	**0**	0	0	0	0	**0**	0	54	3	0	**57**	0	30	0	0	**30**	**87**
4:30PM	0	0	0	0	**0**	0	0	0	0	**0**	1	56	2	0	**59**	1	36	0	0	**37**	**96**
4:45PM	0	0	0	0	**0**	0	0	0	0	**0**	1	48	1	0	**50**	0	45	0	0	**45**	**95**
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	2	192	10	0	**204**	1	143	0	0	**144**	**348**
5:00PM	0	1	0	0	**1**	0	0	0	0	**0**	0	52	0	0	**52**	0	40	0	0	**40**	**93**
5:15PM	0	0	0	0	**0**	0	0	0	0	**0**	1	55	2	0	**58**	1	33	0	0	**34**	**92**
5:30PM	0	0	0	0	**0**	0	0	1	0	**1**	0	46	1	0	**47**	0	29	0	0	**29**	**77**
5:45PM	0	0	0	0	**0**	0	0	0	0	**0**	0	30	0	0	**30**	1	28	0	0	**29**	**59**
Hourly Total	0	1	0	0	**1**	0	0	1	0	**1**	1	183	3	0	**187**	2	130	0	0	**132**	**321**
Total	0	1	3	0	**4**	17	2	3	0	**22**	5	948	24	0	**977**	6	1042	1	0	**1049**	**2052**
% Approach	0%	25.0%	75.0%	0%	**-**	77.3%	9.1%	13.6%	0%	**-**	0.5%	97.0%	2.5%	0%	**-**	0.6%	99.3%	0.1%	0%	**-**	-
% Total	0%	0%	0.1%	0%	**0.2%**	0.8%	0.1%	0.1%	0%	**1.1%**	0.2%	46.2%	1.2%	0%	**47.6%**	0.3%	50.8%	0%	0%	**51.1%**	-
Lights	0	0	3	0	**3**	16	1	3	0	**20**	5	904	23	0	**932**	5	1000	1	0	**1006**	1961
% Lights	0%	0%	100%	0%	**75.0%**	94.1%	50.0%	100%	0%	**90.9%**	100%	95.4%	95.8%	0%	**95.4%**	83.3%	96.0%	100%	0%	**95.9%**	95.6%
Articulated Trucks	0	0	0	0	**0**	0	1	0	0	**1**	0	23	0	0	**23**	0	17	0	0	**17**	41
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	50.0%	0%	0%	**4.5%**	0%	2.4%	0%	0%	**2.4%**	0%	1.6%	0%	0%	**1.6%**	2.0%
Buses and Single-Unit Trucks	0	1	0	0	**1**	1	0	0	0	**1**	0	21	1	0	**22**	1	25	0	0	**26**	50
% Buses and Single-Unit Trucks	0%	100%	0%	0%	**25.0%**	5.9%	0%	0%	0%	**4.5%**	0%	2.2%	4.2%	0%	**2.3%**	16.7%	2.4%	0%	0%	**2.5%**	2.4%

*L: Left, R: Right, T: Thru, U: U-Turn

Hemphill Road and CR 1 - TMC
Tue Feb 17, 2026
Full Length (6 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377674, Location: 39.058454, -95.093442

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



Hemphill Road and CR 1 - TMC

Tue Feb 17, 2026
AM Peak (7 AM - 8 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377674, Location: 39.058454, -95.093442

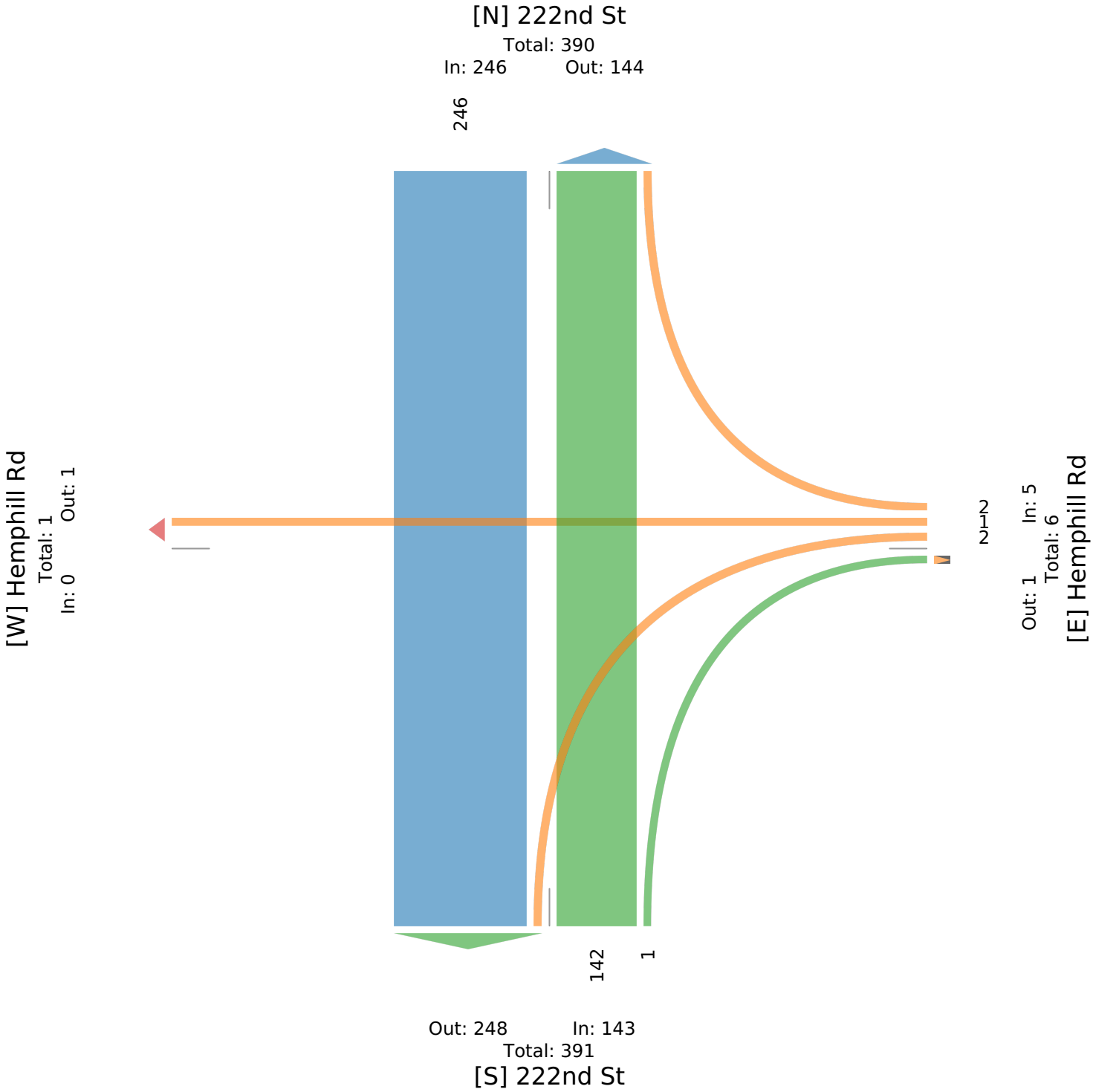
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Hemphill Rd					Hemphill Rd					222nd St					222nd St					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2026-02-17 7:00AM	0	0	0	0	**0**	1	1	1	0	**3**	0	33	0	0	**33**	0	67	0	0	**67**	**103**
7:15AM	0	0	0	0	**0**	0	0	1	0	**1**	0	44	0	0	**44**	0	59	0	0	**59**	**104**
7:30AM	0	0	0	0	**0**	1	0	0	0	**1**	0	29	1	0	**30**	0	61	0	0	**61**	**92**
7:45AM	0	0	0	0	**0**	0	0	0	0	**0**	0	36	0	0	**36**	0	59	0	0	**59**	**95**
Total	0	0	0	0	**0**	2	1	2	0	**5**	0	142	1	0	**143**	0	246	0	0	**246**	**394**
% Approach	0%	0%	0%	0%	**-**	40.0%	20.0%	40.0%	0%	**-**	0%	99.3%	0.7%	0%	**-**	0%	100%	0%	0%	**-**	-
% Total	0%	0%	0%	0%	**0%**	0.5%	0.3%	0.5%	0%	**1.3%**	0%	36.0%	0.3%	0%	**36.3%**	0%	62.4%	0%	0%	**62.4%**	-
PHF	-	-	-	-	**-**	0.500	0.250	0.500	-	**0.417**	-	0.807	0.250	-	**0.813**	-	0.918	-	-	**0.918**	0.947
Lights	0	0	0	0	**0**	2	0	2	0	**4**	0	135	1	0	**136**	0	238	0	0	**238**	378
% Lights	0%	0%	0%	0%	**-**	100%	0%	100%	0%	**80.0%**	0%	95.1%	100%	0%	**95.1%**	0%	96.7%	0%	0%	**96.7%**	95.9%
Articulated Trucks	0	0	0	0	**0**	0	1	0	0	**1**	0	3	0	0	**3**	0	3	0	0	**3**	7
% Articulated Trucks	0%	0%	0%	0%	**-**	0%	100%	0%	0%	**20.0%**	0%	2.1%	0%	0%	**2.1%**	0%	1.2%	0%	0%	**1.2%**	1.8%
Buses and Single-Unit Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	4	0	0	**4**	0	5	0	0	**5**	9
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**-**	0%	0%	0%	0%	**0%**	0%	2.8%	0%	0%	**2.8%**	0%	2.0%	0%	0%	**2.0%**	2.3%

*L: Left, R: Right, T: Thru, U: U-Turn

Hemphill Road and CR 1 - TMC
Tue Feb 17, 2026
AM Peak (7 AM - 8 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377674, Location: 39.058454, -95.093442

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



Hemphill Road and CR 1 - TMC

Tue Feb 17, 2026
PM Peak (4:30 PM - 5:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377674, Location: 39.058454, -95.093442

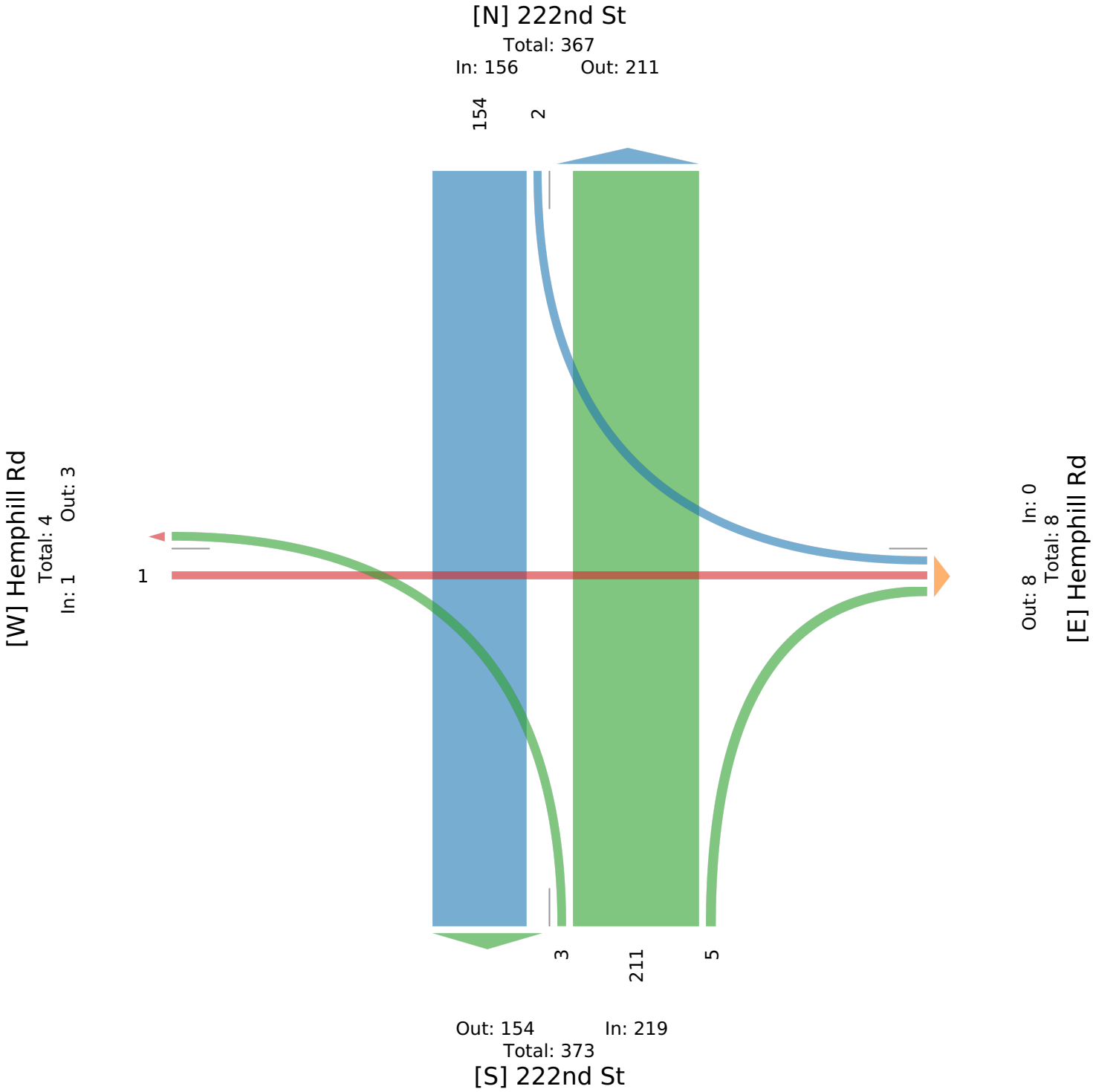
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Hemphill Rd					Hemphill Rd					222nd St					222nd St					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2026-02-17 4:30PM	0	0	0	0	**0**	0	0	0	0	**0**	1	56	2	0	**59**	1	36	0	0	**37**	**96**
4:45PM	0	0	0	0	**0**	0	0	0	0	**0**	1	48	1	0	**50**	0	45	0	0	**45**	**95**
5:00PM	0	1	0	0	**1**	0	0	0	0	**0**	0	52	0	0	**52**	0	40	0	0	**40**	**93**
5:15PM	0	0	0	0	**0**	0	0	0	0	**0**	1	55	2	0	**58**	1	33	0	0	**34**	**92**
Total	0	1	0	0	**1**	0	0	0	0	**0**	3	211	5	0	**219**	2	154	0	0	**156**	**376**
% Approach	0%	100%	0%	0%	**-**	0%	0%	0%	0%	**-**	1.4%	96.3%	2.3%	0%	**-**	1.3%	98.7%	0%	0%	**-**	-
% Total	0%	0.3%	0%	0%	**0.3%**	0%	0%	0%	0%	**0%**	0.8%	56.1%	1.3%	0%	**58.2%**	0.5%	41.0%	0%	0%	**41.5%**	-
PHF	-	0.250	-	-	**0.250**	-	-	-	-	**-**	0.750	0.942	0.625	-	**0.928**	0.500	0.856	-	-	**0.867**	0.979
Lights	0	0	0	0	**0**	0	0	0	0	**0**	3	206	5	0	**214**	2	153	0	0	**155**	369
% Lights	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**-**	100%	97.6%	100%	0%	**97.7%**	100%	99.4%	0%	0%	**99.4%**	98.1%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	1	0	0	**1**	0	0	0	0	**0**	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**-**	0%	0.5%	0%	0%	**0.5%**	0%	0%	0%	0%	**0%**	0.3%
Buses and Single-Unit Trucks	0	1	0	0	**1**	0	0	0	0	**0**	0	4	0	0	**4**	0	1	0	0	**1**	6
% Buses and Single-Unit Trucks	0%	100%	0%	0%	**100%**	0%	0%	0%	0%	**-**	0%	1.9%	0%	0%	**1.8%**	0%	0.6%	0%	0%	**0.6%**	1.6%

*L: Left, R: Right, T: Thru, U: U-Turn

Hemphill Road and CR 1 - TMC
Tue Feb 17, 2026
PM Peak (4:30 PM - 5:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377674, Location: 39.058454, -95.093442

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



US 40 and CR 1 - TMC

Tue Feb 17, 2026
Full Length (6 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377670, Location: 39.079583, -95.100871

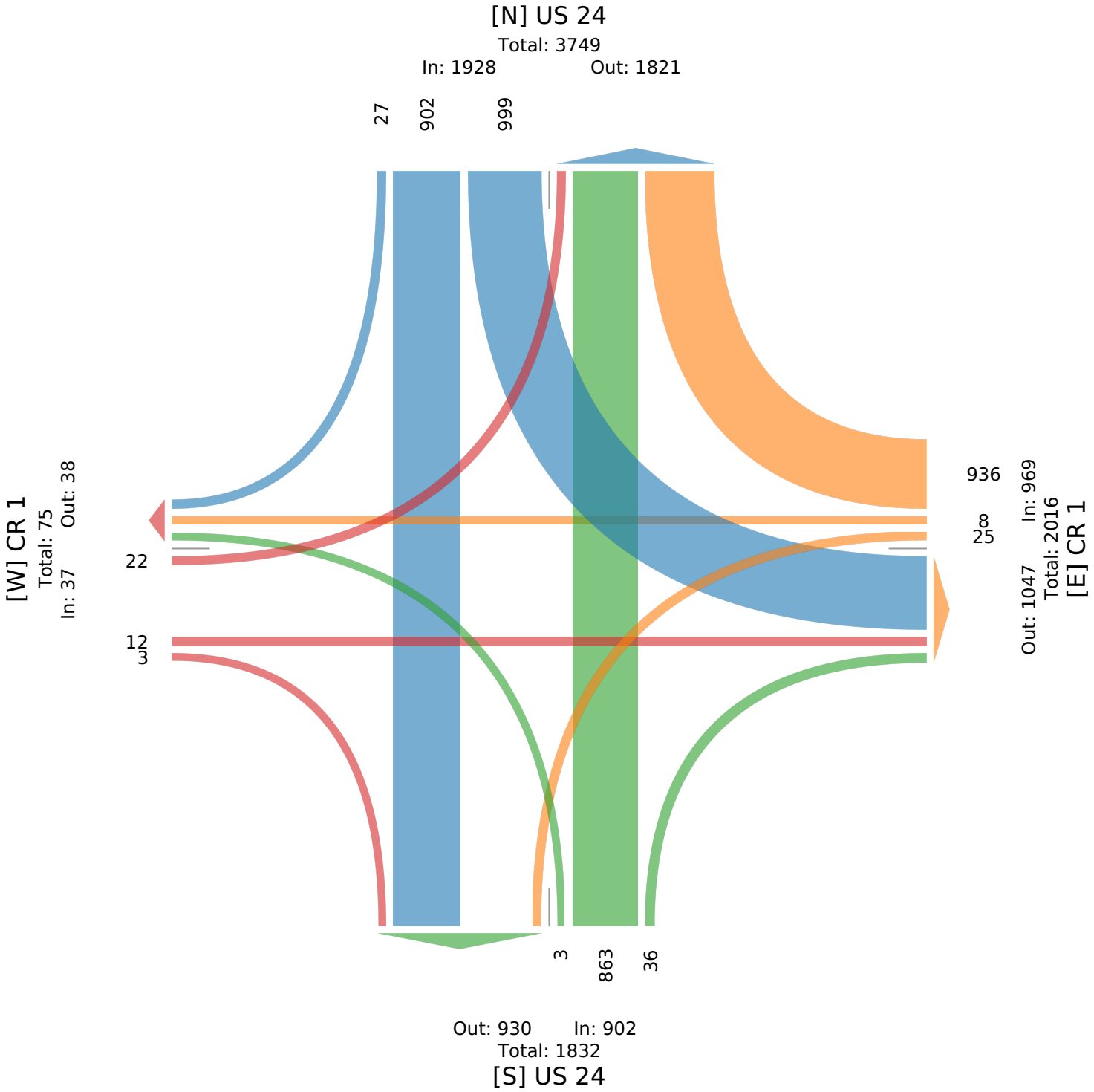
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	CR 1					CR 1					US 24					US 24					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2026-02-17 6:00AM	0	0	0	0	**0**	0	0	8	0	**8**	0	14	0	0	**14**	30	19	0	0	**49**	**71**
6:15AM	1	0	0	0	**1**	0	0	15	0	**15**	0	19	1	0	**20**	36	22	0	0	**58**	**94**
6:30AM	0	1	0	0	**1**	0	0	20	0	**20**	0	13	1	0	**14**	53	22	0	0	**75**	**110**
6:45AM	1	0	0	0	**1**	0	0	23	0	**23**	0	16	5	0	**21**	39	17	0	0	**56**	**101**
Hourly Total	2	1	0	0	**3**	0	0	66	0	**66**	0	62	7	0	**69**	158	80	0	0	**238**	**376**
7:00AM	0	0	0	0	**0**	0	0	37	0	**37**	0	28	1	0	**29**	78	42	0	0	**120**	**186**
7:15AM	2	0	0	0	**2**	1	1	41	0	**43**	0	47	0	0	**47**	55	29	0	0	**84**	**176**
7:30AM	1	2	0	0	**3**	4	1	36	0	**41**	0	23	0	0	**23**	57	51	0	0	**108**	**175**
7:45AM	1	0	0	0	**1**	0	0	25	0	**25**	0	19	0	0	**19**	58	45	1	0	**104**	**149**
Hourly Total	4	2	0	0	**6**	5	2	139	0	**146**	0	117	1	0	**118**	248	167	1	0	**416**	**686**
8:00AM	0	1	0	0	**1**	0	0	23	0	**23**	0	24	1	0	**25**	30	44	1	0	**75**	**124**
8:15AM	0	0	0	0	**0**	0	0	23	0	**23**	0	25	2	0	**27**	36	33	0	0	**69**	**119**
8:30AM	0	0	0	0	**0**	0	0	15	0	**15**	0	17	2	0	**19**	26	37	0	0	**63**	**97**
8:45AM	0	1	1	0	**2**	0	0	18	0	**18**	0	17	3	0	**20**	19	31	0	0	**50**	**90**
Hourly Total	0	2	1	0	**3**	0	0	79	0	**79**	0	83	8	0	**91**	111	145	1	0	**257**	**430**
2:00PM	1	0	0	0	**1**	0	0	24	0	**24**	0	39	1	0	**40**	23	22	2	0	**47**	**112**
2:15PM	0	0	0	0	**0**	0	0	21	0	**21**	0	33	1	0	**34**	27	18	3	0	**48**	**103**
2:30PM	0	0	0	0	**0**	0	0	27	0	**27**	0	39	1	0	**40**	24	27	2	0	**53**	**120**
2:45PM	2	0	0	0	**2**	2	1	36	0	**39**	0	36	3	0	**39**	18	24	0	0	**42**	**122**
Hourly Total	3	0	0	0	**3**	2	1	108	0	**111**	0	147	6	0	**153**	92	91	7	0	**190**	**457**
3:00PM	1	1	0	0	**2**	0	0	29	0	**29**	0	33	1	0	**34**	32	30	2	0	**64**	**129**
3:15PM	4	0	0	0	**4**	1	0	30	0	**31**	1	41	1	0	**43**	35	40	1	0	**76**	**154**
3:30PM	1	2	0	0	**3**	0	1	46	0	**47**	0	35	1	0	**36**	41	42	3	0	**86**	**172**
3:45PM	0	1	0	0	**1**	3	0	41	0	**44**	0	39	1	0	**40**	28	42	0	0	**70**	**155**
Hourly Total	6	4	0	0	**10**	4	1	146	0	**151**	1	148	4	0	**153**	136	154	6	0	**296**	**610**
4:00PM	0	2	1	0	**3**	1	0	44	0	**45**	1	29	1	0	**31**	31	31	0	0	**62**	**141**
4:15PM	0	0	0	0	**0**	0	0	47	0	**47**	0	36	1	0	**37**	26	27	0	0	**53**	**137**
4:30PM	2	0	0	0	**2**	1	0	63	0	**64**	1	38	2	0	**41**	35	36	1	0	**72**	**179**
4:45PM	2	1	0	0	**3**	2	1	55	0	**58**	0	54	2	0	**56**	37	32	4	0	**73**	**190**
Hourly Total	4	3	1	0	**8**	4	1	209	0	**214**	2	157	6	0	**165**	129	126	5	0	**260**	**647**
5:00PM	1	0	1	0	**2**	4	0	50	0	**54**	0	28	0	0	**28**	42	37	1	0	**80**	**164**
5:15PM	1	0	0	0	**1**	3	1	53	0	**57**	0	55	0	0	**55**	28	43	1	0	**72**	**185**
5:30PM	1	0	0	0	**1**	2	2	50	0	**54**	0	32	2	0	**34**	24	29	2	0	**55**	**144**
5:45PM	0	0	0	0	**0**	1	0	36	0	**37**	0	34	2	0	**36**	31	30	3	0	**64**	**137**
Hourly Total	3	0	1	0	**4**	10	3	189	0	**202**	0	149	4	0	**153**	125	139	7	0	**271**	**630**
Total	22	12	3	0	**37**	25	8	936	0	**969**	3	863	36	0	**902**	999	902	27	0	**1928**	**3836**
% Approach	59.5%	32.4%	8.1%	0%	**-**	2.6%	0.8%	96.6%	0%	**-**	0.3%	95.7%	4.0%	0%	**-**	51.8%	46.8%	1.4%	0%	**-**	-
% Total	0.6%	0.3%	0.1%	0%	**1.0%**	0.7%	0.2%	24.4%	0%	**25.3%**	0.1%	22.5%	0.9%	0%	**23.5%**	26.0%	23.5%	0.7%	0%	**50.3%**	-
Lights	22	10	3	0	**35**	22	7	909	0	**938**	3	830	27	0	**860**	971	884	27	0	**1882**	3715
% Lights	100%	83.3%	100%	0%	**94.6%**	88.0%	87.5%	97.1%	0%	**96.8%**	100%	96.2%	75.0%	0%	**95.3%**	97.2%	98.0%	100%	0%	**97.6%**	96.8%
Articulated Trucks	0	0	0	0	**0**	3	0	14	0	**17**	0	15	6	0	**21**	6	8	0	0	**14**	52
% Articulated Trucks	0%	0%	0%	0%	**0%**	12.0%	0%	1.5%	0%	**1.8%**	0%	1.7%	16.7%	0%	**2.3%**	0.6%	0.9%	0%	0%	**0.7%**	1.4%
Buses and Single-Unit Trucks	0	2	0	0	**2**	0	1	13	0	**14**	0	18	3	0	**21**	22	10	0	0	**32**	69
% Buses and Single-Unit Trucks	0%	16.7%	0%	0%	**5.4%**	0%	12.5%	1.4%	0%	**1.4%**	0%	2.1%	8.3%	0%	**2.3%**	2.2%	1.1%	0%	0%	**1.7%**	1.8%

*L: Left, R: Right, T: Thru, U: U-Turn

US 40 and CR 1 - TMC
Tue Feb 17, 2026
Full Length (6 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377670, Location: 39.079583, -95.100871

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



US 40 and CR 1 - TMC

Tue Feb 17, 2026
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377670, Location: 39.079583, -95.100871

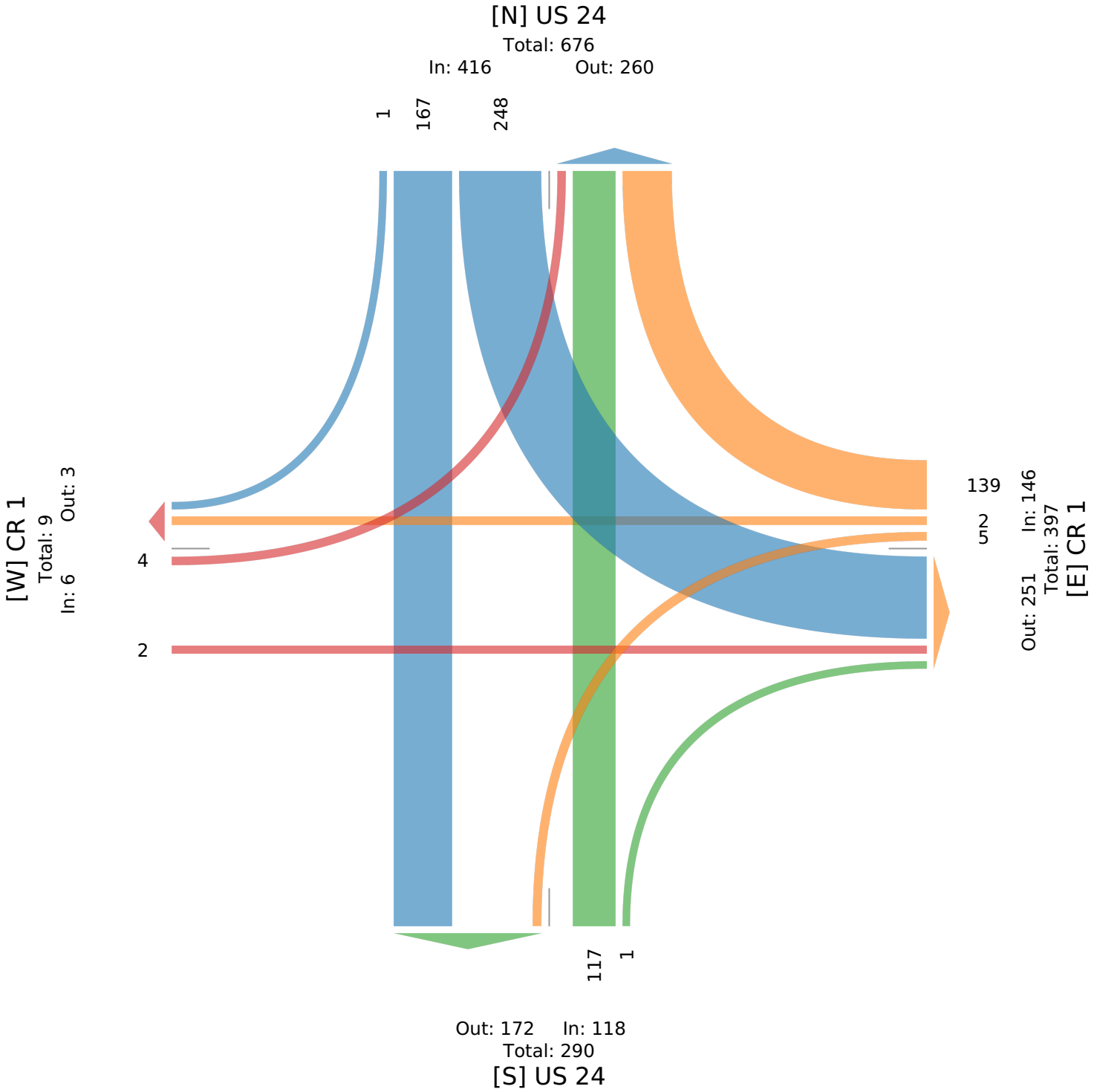
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	CR 1					CR 1					US 24					US 24					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2026-02-17 7:00AM	0	0	0	0	**0**	0	0	37	0	**37**	0	28	1	0	**29**	78	42	0	0	**120**	**186**
7:15AM	2	0	0	0	**2**	1	1	41	0	**43**	0	47	0	0	**47**	55	29	0	0	**84**	**176**
7:30AM	1	2	0	0	**3**	4	1	36	0	**41**	0	23	0	0	**23**	57	51	0	0	**108**	**175**
7:45AM	1	0	0	0	**1**	0	0	25	0	**25**	0	19	0	0	**19**	58	45	1	0	**104**	**149**
Total	4	2	0	0	**6**	5	2	139	0	**146**	0	117	1	0	**118**	248	167	1	0	**416**	**686**
% Approach	66.7%	33.3%	0%	0%	**-**	3.4%	1.4%	95.2%	0%	**-**	0%	99.2%	0.8%	0%	**-**	59.6%	40.1%	0.2%	0%	**-**	-
% Total	0.6%	0.3%	0%	0%	**0.9%**	0.7%	0.3%	20.3%	0%	**21.3%**	0%	17.1%	0.1%	0%	**17.2%**	36.2%	24.3%	0.1%	0%	**60.6%**	-
PHF	0.500	0.250	-	-	**0.500**	0.313	0.500	0.848	-	**0.849**	-	0.622	0.250	-	**0.628**	0.795	0.819	0.250	-	**0.867**	0.922
Lights	4	2	0	0	**6**	5	2	134	0	**141**	0	109	0	0	**109**	237	159	1	0	**397**	653
% Lights	100%	100%	0%	0%	**100%**	100%	100%	96.4%	0%	**96.6%**	0%	93.2%	0%	0%	**92.4%**	95.6%	95.2%	100%	0%	**95.4%**	95.2%
Articulated Trucks	0	0	0	0	**0**	0	0	1	0	**1**	0	3	0	0	**3**	2	2	0	0	**4**	8
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0.7%	0%	**0.7%**	0%	2.6%	0%	0%	**2.5%**	0.8%	1.2%	0%	0%	**1.0%**	1.2%
Buses and Single-Unit Trucks	0	0	0	0	**0**	0	0	4	0	**4**	0	5	1	0	**6**	9	6	0	0	**15**	25
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	0%	0%	2.9%	0%	**2.7%**	0%	4.3%	100%	0%	**5.1%**	3.6%	3.6%	0%	0%	**3.6%**	3.6%

*L: Left, R: Right, T: Thru, U: U-Turn

US 40 and CR 1 - TMC
Tue Feb 17, 2026
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377670, Location: 39.079583, -95.100871

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



US 40 and CR 1 - TMC

Tue Feb 17, 2026
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377670, Location: 39.079583, -95.100871

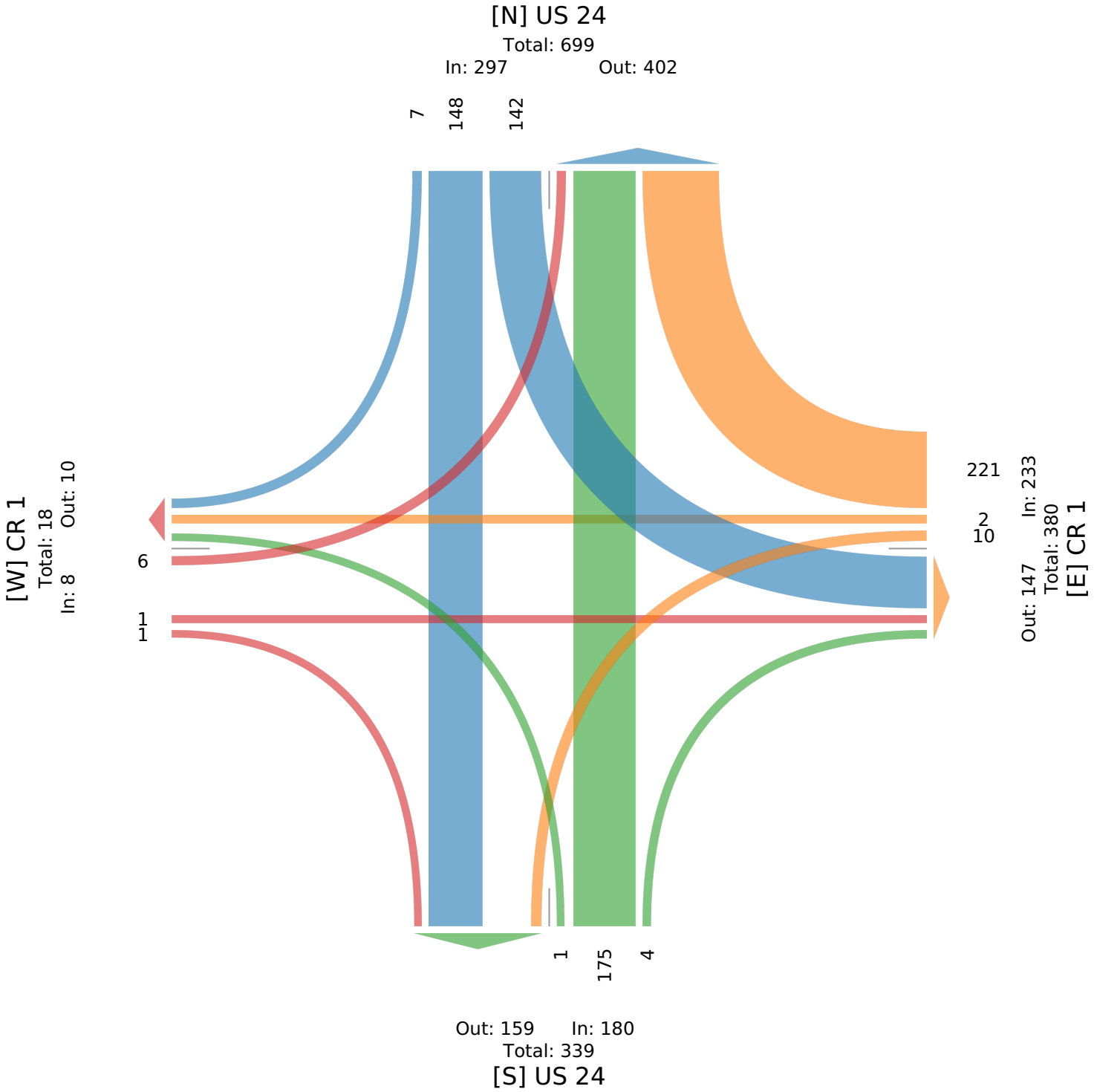
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	CR 1					CR 1					US 24					US 24					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2026-02-17 4:30PM	2	0	0	0	**2**	1	0	63	0	**64**	1	38	2	0	**41**	35	36	1	0	**72**	**179**
4:45PM	2	1	0	0	**3**	2	1	55	0	**58**	0	54	2	0	**56**	37	32	4	0	**73**	**190**
5:00PM	1	0	1	0	**2**	4	0	50	0	**54**	0	28	0	0	**28**	42	37	1	0	**80**	**164**
5:15PM	1	0	0	0	**1**	3	1	53	0	**57**	0	55	0	0	**55**	28	43	1	0	**72**	**185**
Total	6	1	1	0	**8**	10	2	221	0	**233**	1	175	4	0	**180**	142	148	7	0	**297**	**718**
% Approach	75.0%	12.5%	12.5%	0%	**-**	4.3%	0.9%	94.8%	0%	**-**	0.6%	97.2%	2.2%	0%	**-**	47.8%	49.8%	2.4%	0%	**-**	-
% Total	0.8%	0.1%	0.1%	0%	**1.1%**	1.4%	0.3%	30.8%	0%	**32.5%**	0.1%	24.4%	0.6%	0%	**25.1%**	19.8%	20.6%	1.0%	0%	**41.4%**	-
PHF	0.750	0.250	0.250	-	**0.667**	0.625	0.500	0.877	-	**0.910**	0.250	0.795	0.500	-	**0.804**	0.845	0.860	0.438	-	**0.928**	0.945
Lights	6	1	1	0	**8**	10	2	219	0	**231**	1	171	4	0	**176**	142	147	7	0	**296**	711
% Lights	100%	100%	100%	0%	**100%**	100%	100%	99.1%	0%	**99.1%**	100%	97.7%	100%	0%	**97.8%**	100%	99.3%	100%	0%	**99.7%**	99.0%
Articulated Trucks	0	0	0	0	**0**	0	0	1	0	**1**	0	3	0	0	**3**	0	1	0	0	**1**	5
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0.5%	0%	**0.4%**	0%	1.7%	0%	0%	**1.7%**	0%	0.7%	0%	0%	**0.3%**	0.7%
Buses and Single-Unit Trucks	0	0	0	0	**0**	0	0	1	0	**1**	0	1	0	0	**1**	0	0	0	0	**0**	2
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	0%	0%	0.5%	0%	**0.4%**	0%	0.6%	0%	0%	**0.6%**	0%	0%	0%	0%	**0%**	0.3%

*L: Left, R: Right, T: Thru, U: U-Turn

US 40 and CR 1 - TMC
Tue Feb 17, 2026
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377670, Location: 39.079583, -95.100871

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



WB I-70 Ramps and CR 1 - TMC

Tue Feb 17, 2026
Full Length (6 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377672, Location: 39.045013, -95.093445

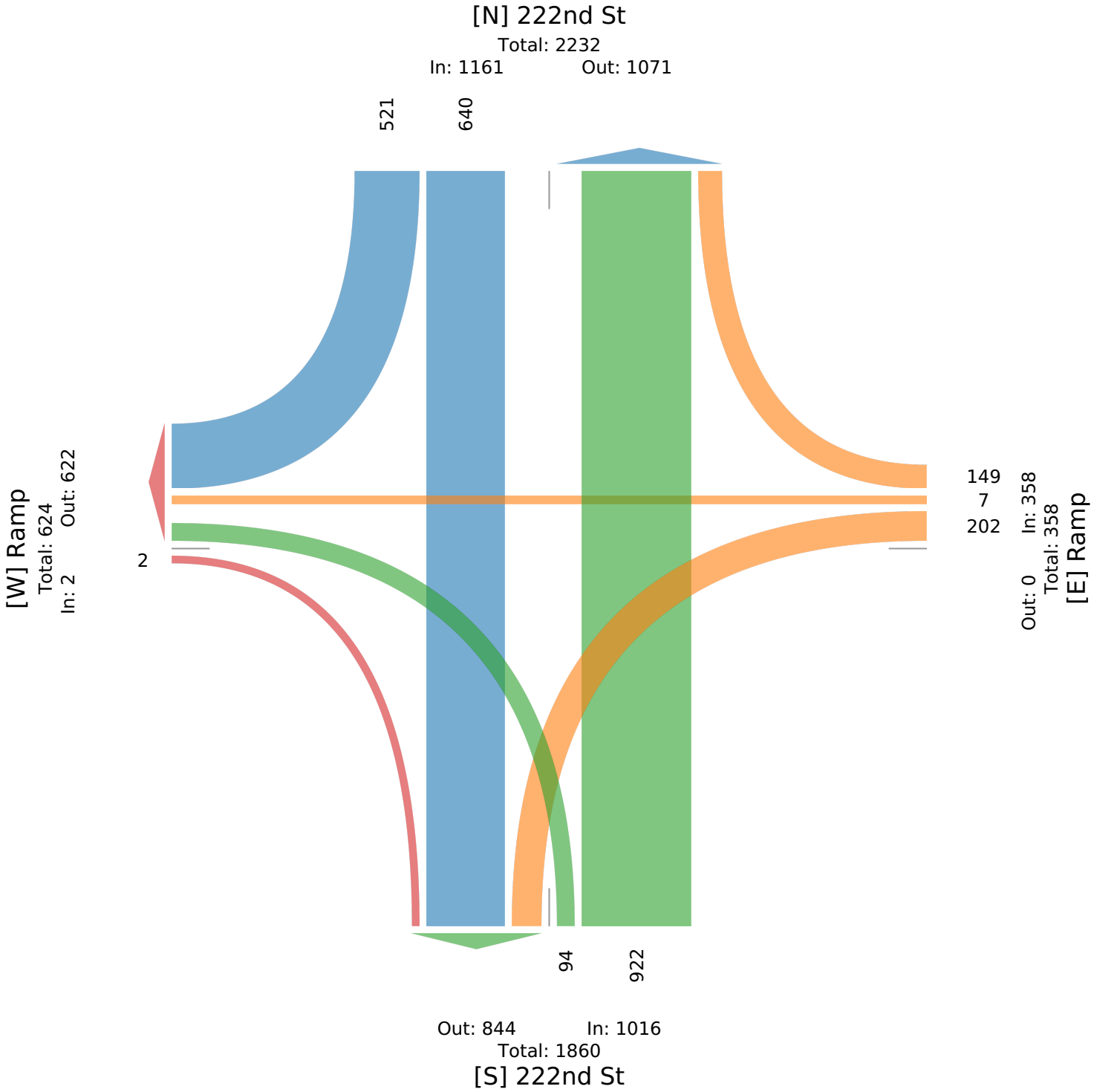
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Ramp					Ramp					222nd St					222nd St					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2026-02-17 6:00AM	0	0	0	0	**0**	0	0	1	0	**1**	2	16	0	0	**18**	0	24	14	0	**38**	**57**
6:15AM	0	0	0	0	**0**	2	0	1	0	**3**	3	16	0	0	**19**	0	33	13	0	**46**	**68**
6:30AM	0	0	0	0	**0**	4	0	4	0	**8**	8	28	0	0	**36**	0	34	28	0	**62**	**106**
6:45AM	0	0	0	0	**0**	2	0	4	0	**6**	5	33	0	0	**38**	0	19	16	0	**35**	**79**
Hourly Total	0	0	0	0	**0**	8	0	10	0	**18**	18	93	0	0	**111**	0	110	71	0	**181**	**310**
7:00AM	0	0	0	0	**0**	2	0	3	0	**5**	7	37	0	0	**44**	0	39	37	0	**76**	**125**
7:15AM	0	0	0	0	**0**	3	0	3	0	**6**	3	44	0	0	**47**	0	44	36	0	**80**	**133**
7:30AM	0	0	1	0	**1**	3	0	2	0	**5**	5	27	0	0	**32**	0	41	28	0	**69**	**107**
7:45AM	0	0	0	0	**0**	10	0	4	0	**14**	4	35	0	0	**39**	0	34	28	0	**62**	**115**
Hourly Total	0	0	1	0	**1**	18	0	12	0	**30**	19	143	0	0	**162**	0	158	129	0	**287**	**480**
8:00AM	0	0	0	0	**0**	5	0	4	0	**9**	2	22	0	0	**24**	0	23	19	0	**42**	**75**
8:15AM	0	0	0	0	**0**	1	0	3	0	**4**	5	22	0	0	**27**	0	15	26	0	**41**	**72**
8:30AM	0	0	0	0	**0**	2	1	4	0	**7**	5	15	0	0	**20**	0	11	18	0	**29**	**56**
8:45AM	0	0	0	0	**0**	2	0	5	0	**7**	6	17	0	0	**23**	0	9	17	0	**26**	**56**
Hourly Total	0	0	0	0	**0**	10	1	16	0	**27**	18	76	0	0	**94**	0	58	80	0	**138**	**259**
2:00PM	0	0	0	0	**0**	4	2	2	0	**8**	0	24	0	0	**24**	0	13	9	0	**22**	**54**
2:15PM	0	0	0	0	**0**	5	0	7	0	**12**	4	15	0	0	**19**	0	11	13	0	**24**	**55**
2:30PM	0	0	0	0	**0**	8	0	3	0	**11**	2	27	0	0	**29**	0	11	11	0	**22**	**62**
2:45PM	0	0	0	0	**0**	6	0	9	0	**15**	3	33	0	0	**36**	0	17	10	0	**27**	**78**
Hourly Total	0	0	0	0	**0**	23	2	21	0	**46**	9	99	0	0	**108**	0	52	43	0	**95**	**249**
3:00PM	0	0	0	0	**0**	10	0	3	0	**13**	1	29	0	0	**30**	0	17	16	0	**33**	**76**
3:15PM	0	0	0	0	**0**	7	0	6	0	**13**	4	30	0	0	**34**	0	21	11	0	**32**	**79**
3:30PM	0	0	0	0	**0**	11	0	5	0	**16**	2	39	0	0	**41**	0	28	31	0	**59**	**116**
3:45PM	0	0	0	0	**0**	14	0	6	0	**20**	0	45	0	0	**45**	0	22	20	0	**42**	**107**
Hourly Total	0	0	0	0	**0**	42	0	20	0	**62**	7	143	0	0	**150**	0	88	78	0	**166**	**378**
4:00PM	0	0	0	0	**0**	12	0	6	0	**18**	3	41	0	0	**44**	0	18	17	0	**35**	**97**
4:15PM	0	0	1	0	**1**	10	0	12	0	**22**	2	51	0	0	**53**	0	18	15	0	**33**	**109**
4:30PM	0	0	0	0	**0**	15	0	13	0	**28**	2	59	0	0	**61**	0	23	16	0	**39**	**128**
4:45PM	0	0	0	0	**0**	7	0	8	0	**15**	4	43	0	0	**47**	0	31	16	0	**47**	**109**
Hourly Total	0	0	1	0	**1**	44	0	39	0	**83**	11	194	0	0	**205**	0	90	64	0	**154**	**443**
5:00PM	0	0	0	0	**0**	16	3	7	0	**26**	5	52	0	0	**57**	0	23	18	0	**41**	**124**
5:15PM	0	0	0	0	**0**	14	0	13	0	**27**	4	54	0	0	**58**	0	26	10	0	**36**	**121**
5:30PM	0	0	0	0	**0**	13	0	9	0	**22**	1	40	0	0	**41**	0	19	10	0	**29**	**92**
5:45PM	0	0	0	0	**0**	14	1	2	0	**17**	2	28	0	0	**30**	0	16	18	0	**34**	**81**
Hourly Total	0	0	0	0	**0**	57	4	31	0	**92**	12	174	0	0	**186**	0	84	56	0	**140**	**418**
Total	0	0	2	0	**2**	202	7	149	0	**358**	94	922	0	0	**1016**	0	640	521	0	**1161**	**2537**
% Approach	0%	0%	100%	0%	-	56.4%	2.0%	41.6%	0%	-	9.3%	90.7%	0%	0%	-	0%	55.1%	44.9%	0%	-	-
% Total	0%	0%	0.1%	0%	**0.1%**	8.0%	0.3%	5.9%	0%	**14.1%**	3.7%	36.3%	0%	0%	**40.0%**	0%	25.2%	20.5%	0%	**45.8%**	-
Lights	0	0	2	0	**2**	193	6	133	0	**332**	90	893	0	0	**983**	0	611	506	0	**1117**	2434
% Lights	0%	0%	100%	0%	**100%**	95.5%	85.7%	89.3%	0%	**92.7%**	95.7%	96.9%	0%	0%	**96.8%**	0%	95.5%	97.1%	0%	**96.2%**	95.9%
Articulated Trucks	0	0	0	0	**0**	5	1	14	0	**20**	2	13	0	0	**15**	0	13	6	0	**19**	54
% Articulated Trucks	0%	0%	0%	0%	**0%**	2.5%	14.3%	9.4%	0%	**5.6%**	2.1%	1.4%	0%	0%	**1.5%**	0%	2.0%	1.2%	0%	**1.6%**	2.1%
Buses and Single-Unit Trucks	0	0	0	0	**0**	4	0	2	0	**6**	2	16	0	0	**18**	0	16	9	0	**25**	49
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	2.0%	0%	1.3%	0%	**1.7%**	2.1%	1.7%	0%	0%	**1.8%**	0%	2.5%	1.7%	0%	**2.2%**	1.9%

*L: Left, R: Right, T: Thru, U: U-Turn

WB I-70 Ramps and CR 1 - TMC
Tue Feb 17, 2026
Full Length (6 AM-9 AM, 2 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377672, Location: 39.045013, -95.093445

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



WB I-70 Ramps and CR 1 - TMC

Tue Feb 17, 2026
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377672, Location: 39.045013, -95.093445

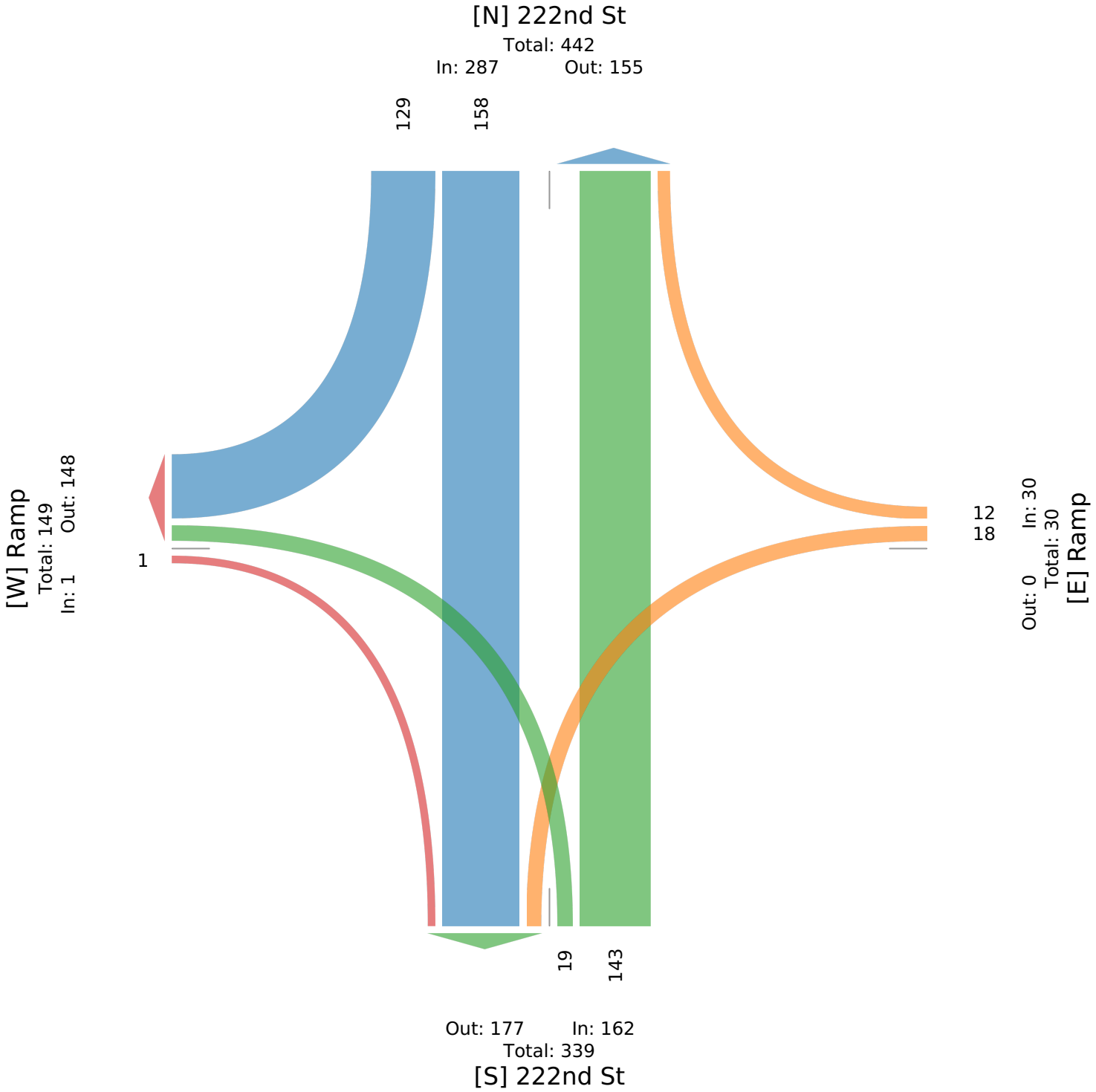
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Ramp					Ramp					222nd St					222nd St					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2026-02-17 7:00AM	0	0	0	0	**0**	2	0	3	0	**5**	7	37	0	0	**44**	0	39	37	0	**76**	**125**
7:15AM	0	0	0	0	**0**	3	0	3	0	**6**	3	44	0	0	**47**	0	44	36	0	**80**	**133**
7:30AM	0	0	1	0	**1**	3	0	2	0	**5**	5	27	0	0	**32**	0	41	28	0	**69**	**107**
7:45AM	0	0	0	0	**0**	10	0	4	0	**14**	4	35	0	0	**39**	0	34	28	0	**62**	**115**
Total	0	0	1	0	**1**	18	0	12	0	**30**	19	143	0	0	**162**	0	158	129	0	**287**	**480**
% Approach	0%	0%	100%	0%	**-**	60.0%	0%	40.0%	0%	**-**	11.7%	88.3%	0%	0%	**-**	0%	55.1%	44.9%	0%	**-**	-
% Total	0%	0%	0.2%	0%	**0.2%**	3.8%	0%	2.5%	0%	**6.3%**	4.0%	29.8%	0%	0%	**33.8%**	0%	32.9%	26.9%	0%	**59.8%**	-
PHF	-	-	0.250	-	**0.250**	0.450	-	0.750	-	**0.536**	0.679	0.813	-	-	**0.862**	-	0.898	0.872	-	**0.897**	0.902
Lights	0	0	1	0	**1**	16	0	10	0	**26**	19	138	0	0	**157**	0	156	125	0	**281**	465
% Lights	0%	0%	100%	0%	**100%**	88.9%	0%	83.3%	0%	**86.7%**	100%	96.5%	0%	0%	**96.9%**	0%	98.7%	96.9%	0%	**97.9%**	96.9%
Articulated Trucks	0	0	0	0	**0**	2	0	1	0	**3**	0	2	0	0	**2**	0	1	2	0	**3**	8
% Articulated Trucks	0%	0%	0%	0%	**0%**	11.1%	0%	8.3%	0%	**10.0%**	0%	1.4%	0%	0%	**1.2%**	0%	0.6%	1.6%	0%	**1.0%**	1.7%
Buses and Single-Unit Trucks	0	0	0	0	**0**	0	0	1	0	**1**	0	3	0	0	**3**	0	1	2	0	**3**	7
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	0%	0%	8.3%	0%	**3.3%**	0%	2.1%	0%	0%	**1.9%**	0%	0.6%	1.6%	0%	**1.0%**	1.5%

*L: Left, R: Right, T: Thru, U: U-Turn

WB I-70 Ramps and CR 1 - TMC
Tue Feb 17, 2026
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377672, Location: 39.045013, -95.093445

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



WB I-70 Ramps and CR 1 - TMC

Tue Feb 17, 2026
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377672, Location: 39.045013, -95.093445

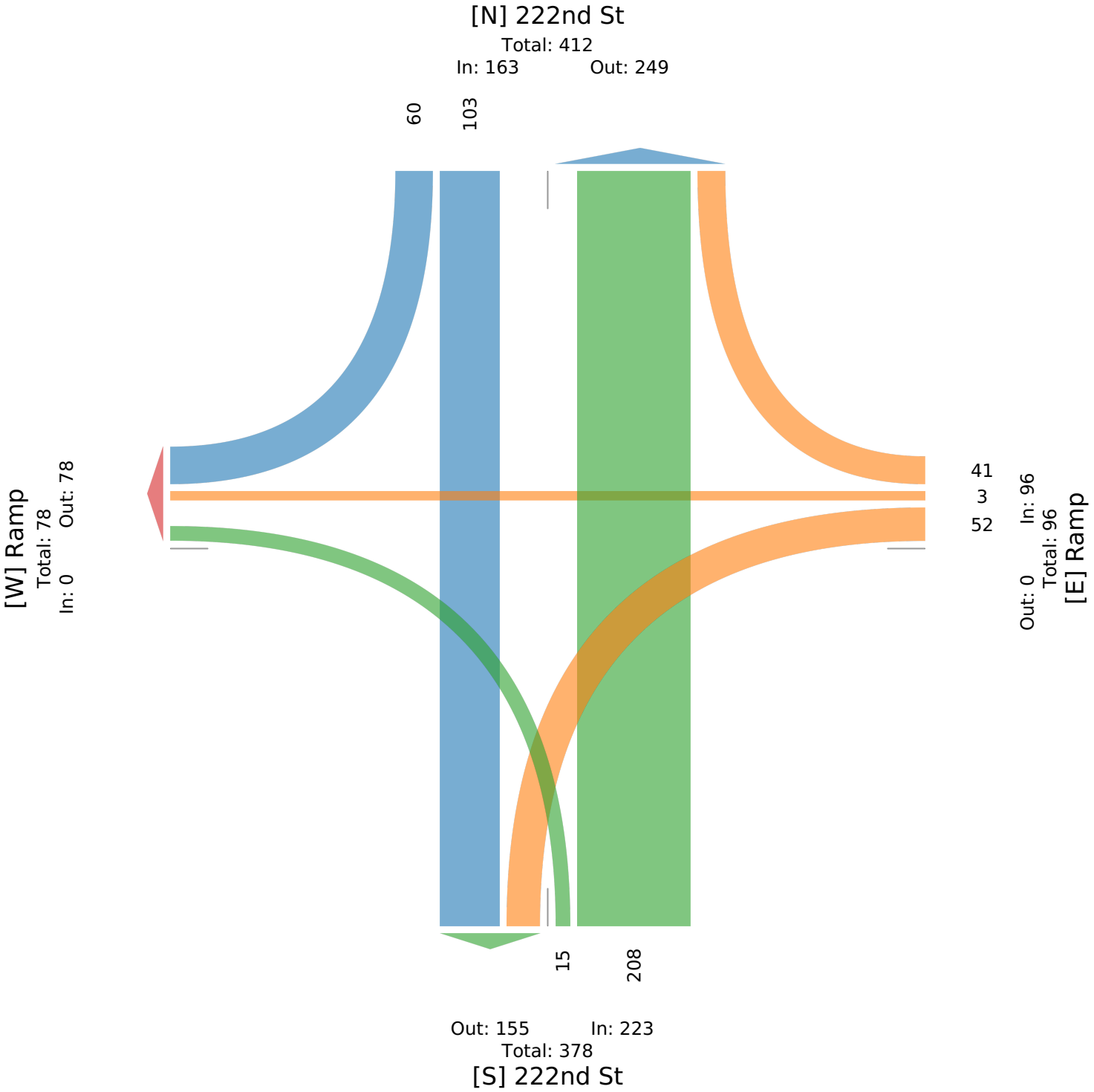
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Ramp					Ramp					222nd St					222nd St					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2026-02-17 4:30PM	0	0	0	0	**0**	15	0	13	0	**28**	2	59	0	0	**61**	0	23	16	0	**39**	**128**
4:45PM	0	0	0	0	**0**	7	0	8	0	**15**	4	43	0	0	**47**	0	31	16	0	**47**	**109**
5:00PM	0	0	0	0	**0**	16	3	7	0	**26**	5	52	0	0	**57**	0	23	18	0	**41**	**124**
5:15PM	0	0	0	0	**0**	14	0	13	0	**27**	4	54	0	0	**58**	0	26	10	0	**36**	**121**
Total	0	0	0	0	**0**	52	3	41	0	**96**	15	208	0	0	**223**	0	103	60	0	**163**	**482**
% Approach	0%	0%	0%	0%	**-**	54.2%	3.1%	42.7%	0%	**-**	6.7%	93.3%	0%	0%	**-**	0%	63.2%	36.8%	0%	**-**	-
% Total	0%	0%	0%	0%	**0%**	10.8%	0.6%	8.5%	0%	**19.9%**	3.1%	43.2%	0%	0%	**46.3%**	0%	21.4%	12.4%	0%	**33.8%**	-
PHF	-	-	-	-	**-**	0.813	0.250	0.788	-	**0.857**	0.750	0.881	-	-	**0.914**	-	0.831	0.833	-	**0.867**	0.941
Lights	0	0	0	0	**0**	51	2	41	0	**94**	15	205	0	0	**220**	0	103	59	0	**162**	476
% Lights	0%	0%	0%	0%	**-**	98.1%	66.7%	100%	0%	**97.9%**	100%	98.6%	0%	0%	**98.7%**	0%	100%	98.3%	0%	**99.4%**	98.8%
Articulated Trucks	0	0	0	0	**0**	0	1	0	0	**1**	0	1	0	0	**1**	0	0	0	0	**0**	2
% Articulated Trucks	0%	0%	0%	0%	**-**	0%	33.3%	0%	0%	**1.0%**	0%	0.5%	0%	0%	**0.4%**	0%	0%	0%	0%	**0%**	0.4%
Buses and Single-Unit Trucks	0	0	0	0	**0**	1	0	0	0	**1**	0	2	0	0	**2**	0	0	1	0	**1**	4
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**-**	1.9%	0%	0%	0%	**1.0%**	0%	1.0%	0%	0%	**0.9%**	0%	0%	1.7%	0%	**0.6%**	0.8%

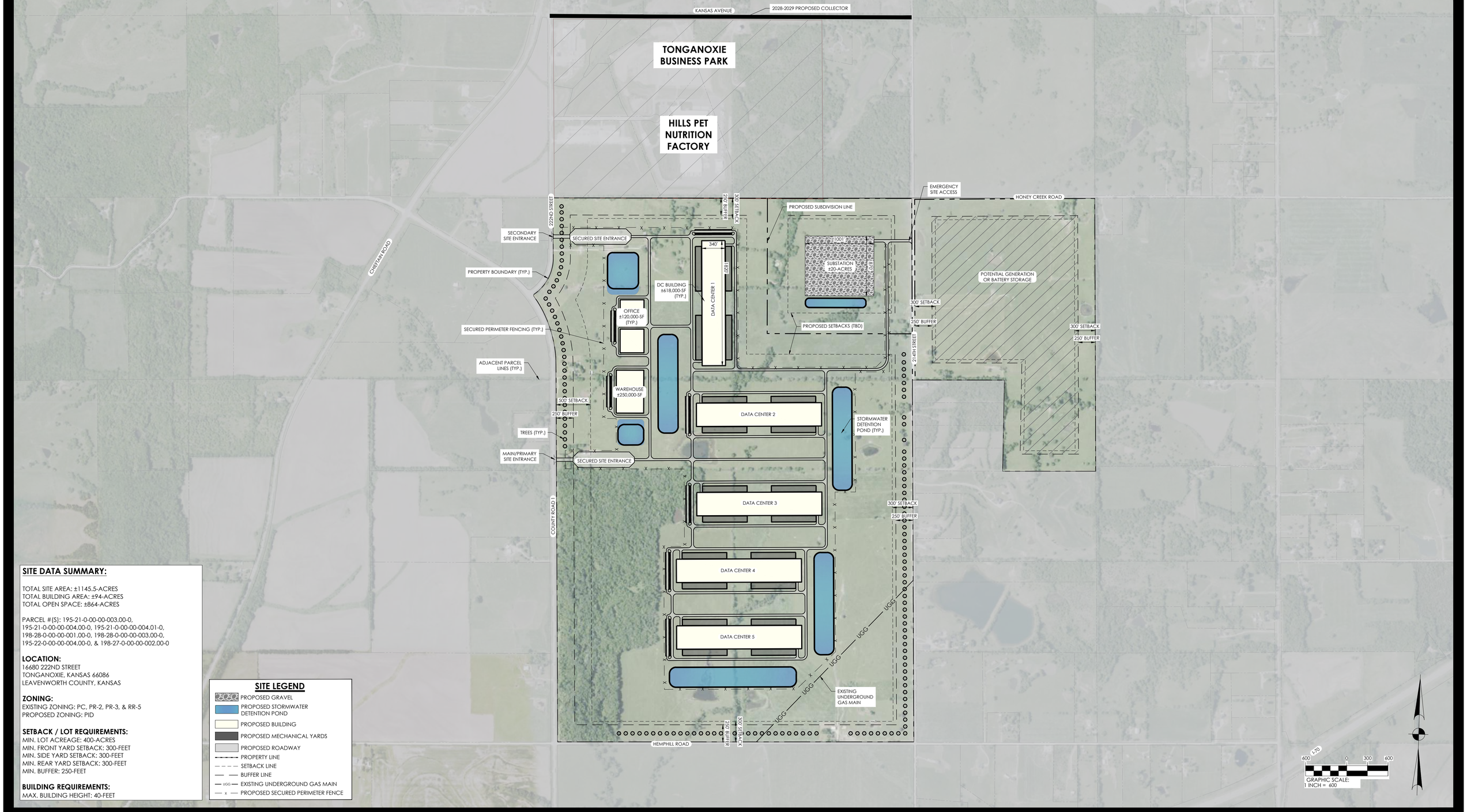
*L: Left, R: Right, T: Thru, U: U-Turn

WB I-70 Ramps and CR 1 - TMC
Tue Feb 17, 2026
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1377672, Location: 39.045013, -95.093445

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



Appendix C: Site Plan



SITE DATA SUMMARY:

TOTAL SITE AREA: ±1145.5-ACRES
TOTAL BUILDING AREA: ±94-ACRES
TOTAL OPEN SPACE: ±864-ACRES

PARCEL #(S): 195-21-0-00-00-003.00-0, 195-21-0-00-00-004.00-0, 195-21-0-00-00-004.01-0, 198-28-0-00-00-001.00-0, 198-28-0-00-00-003.00-0, 195-22-0-00-00-004.00-0, & 198-27-0-00-00-002.00-0

LOCATION:
16680 222ND STREET
TONGANOXIE, KANSAS 66086
LEAVENWORTH COUNTY, KANSAS

ZONING:
EXISTING ZONING: PC, PR-2, PR-3, & RR-5
PROPOSED ZONING: PID

SETBACK / LOT REQUIREMENTS:
MIN. LOT ACREAGE: 400-ACRES
MIN. FRONT YARD SETBACK: 300-FEET
MIN. SIDE YARD SETBACK: 300-FEET
MIN. REAR YARD SETBACK: 300-FEET
MIN. BUFFER: 250-FEET

BUILDING REQUIREMENTS:
MAX. BUILDING HEIGHT: 40-FEET

SITE LEGEND

- PROPOSED GRAVEL
- PROPOSED STORMWATER DETENTION POND
- PROPOSED BUILDING
- PROPOSED MECHANICAL YARDS
- PROPOSED ROADWAY
- PROPERTY LINE
- SETBACK LINE
- BUFFER LINE
- UGG — EXISTING UNDERGROUND GAS MAIN
- x — PROPOSED SECURED PERIMETER FENCE

CONCEPTUAL SITE LAYOUT
PROPOSED BLUESTEM DATA CENTER

LEAVENWORTH COUNTY, KANSAS

JUNE 5, 2026

THOMAS & HUTTON

3633 Wheeler Road • Suite 385
Augusta, GA 30909 • 762.212.4870

www.thomasandhutton.com

This map illustrates a general plan of the development which is for discussion purposes only, does not limit or bind the owner/developer, and is subject to change and revision without prior written notice to the holder. Dimensions, boundaries and position locations are for illustrative purposes only and are subject to an accurate survey and property description.

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Appendix D: ITE Trip Generation

Land Use: 160
Data Center

Description

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

Additional Data

Based on the surveyed sites, the following are the typical peak periods of the generator:

- Weekday AM (18 sites): one hour between 5:30 and 8:00 a.m.
- Weekday PM (18 sites): one hour between 1:00 and 3:00 p.m.

The sites were surveyed in the 2010s and the 2020s in Illinois and Virginia.

Source Numbers

660, 958, 1206, 1220

Data Center
(160)

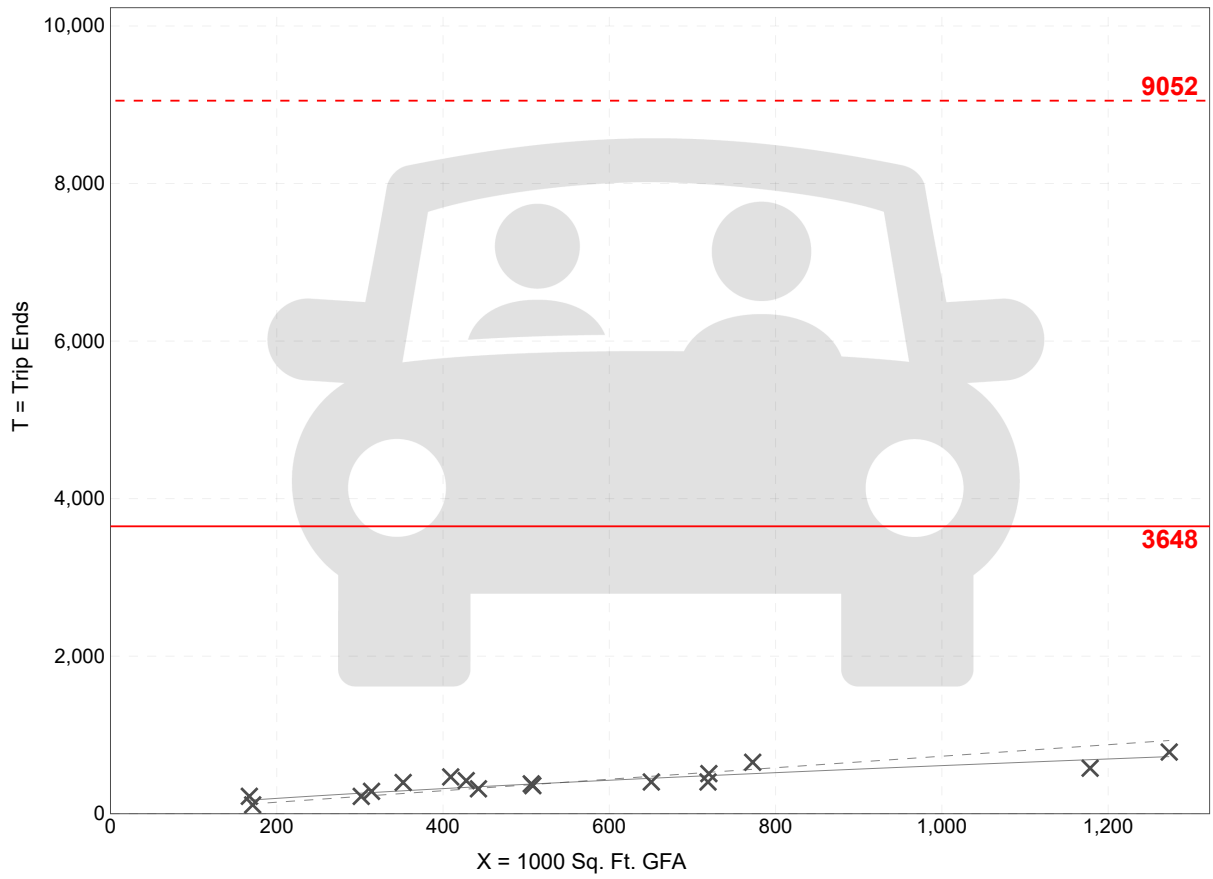
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 16
Avg. 1000 Sq. Ft. GFA: 557
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.73	0.49 - 1.32	0.20

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.71 Ln(X) + 1.51

R^2= 0.78

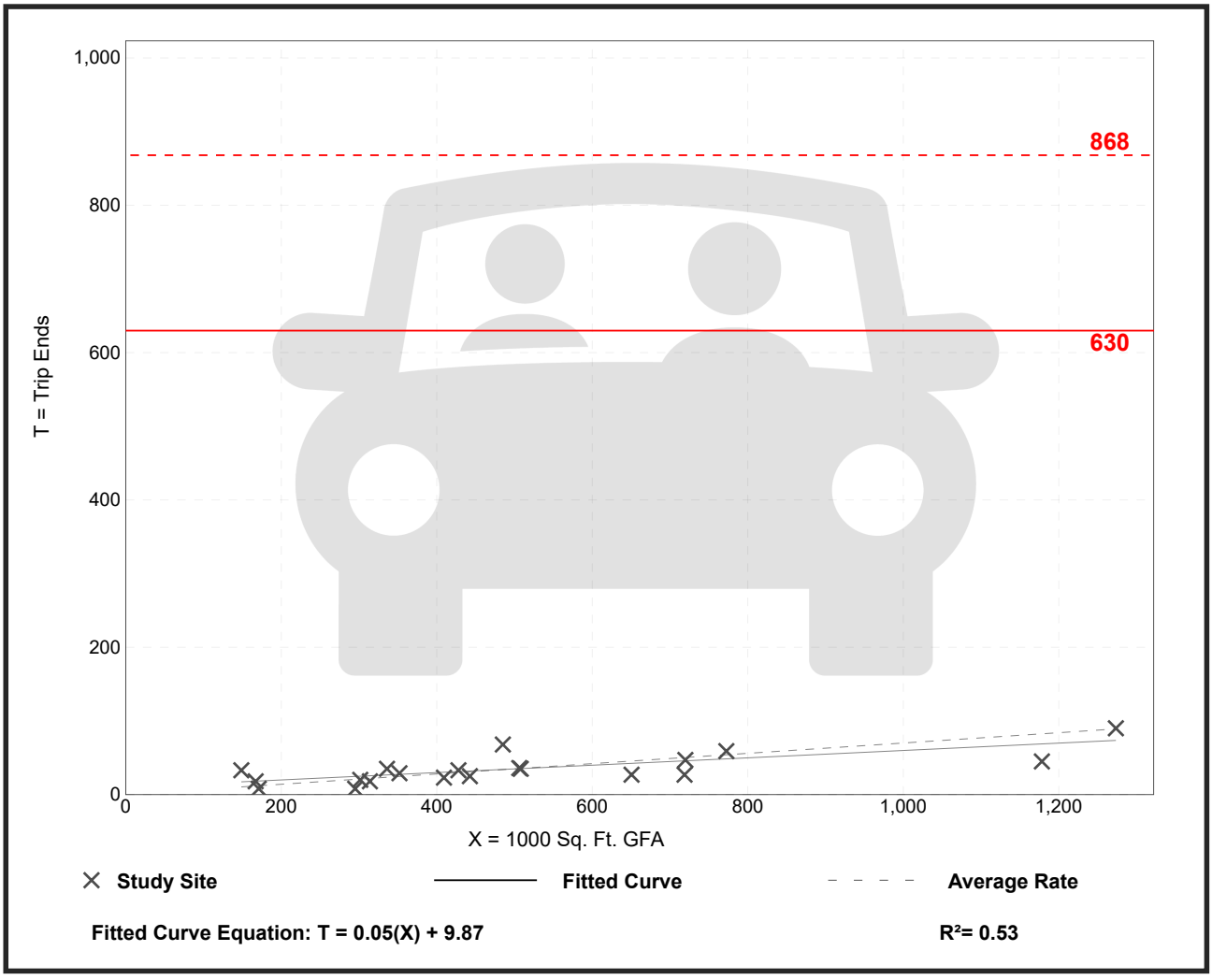
Data Center
(160)

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: 20
Avg. 1000 Sq. Ft. GFA: 509
Directional Distribution: 71% entering, 29% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.07	0.03 - 0.22	0.03

Data Plot and Equation



Fitted Curve Equation: T = 0.05(X) + 9.87

R^2= 0.53

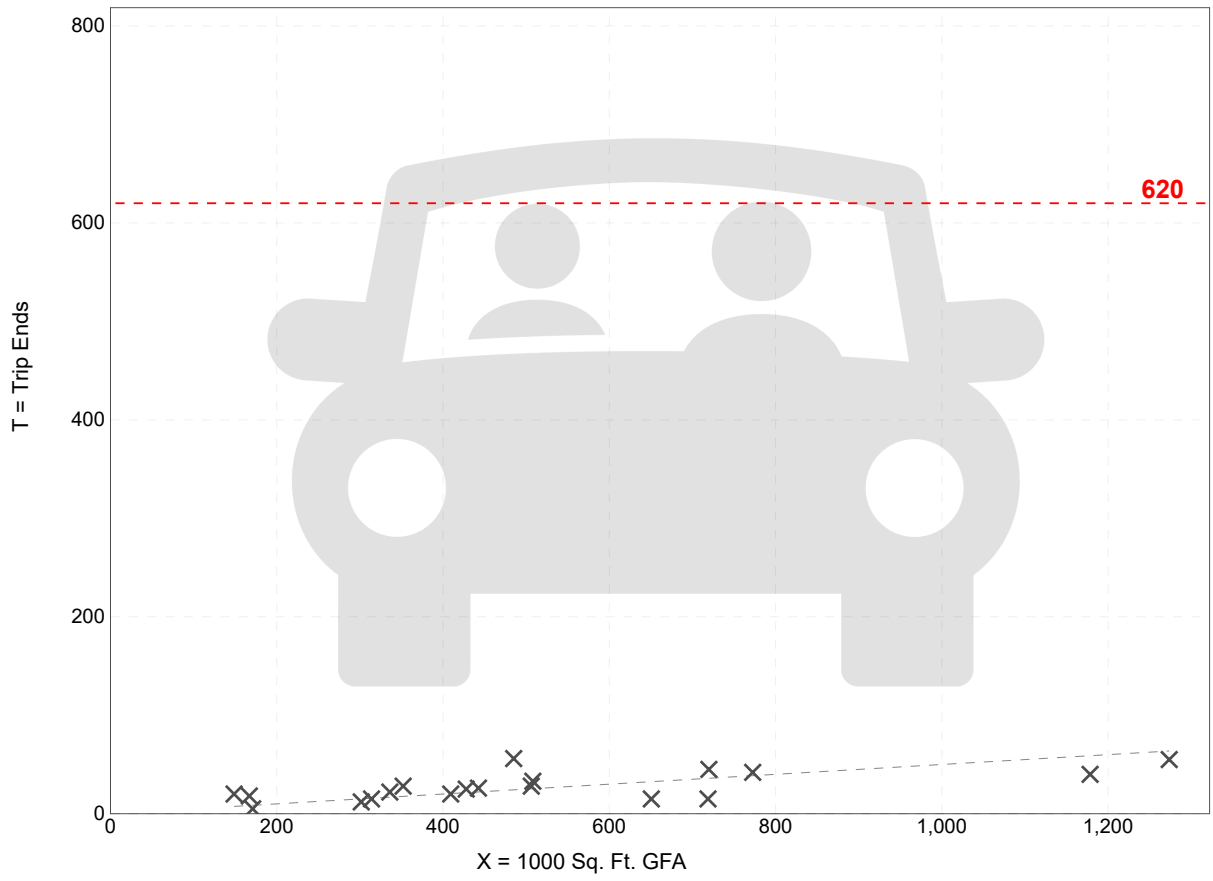
Data Center
(160)

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:	19
Avg. 1000 Sq. Ft. GFA:	520
Directional Distribution:	19% entering, 81% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.05	0.02 - 0.13	0.03

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ****

Appendix E: Turn Lane Analysis

KDOT Left-Turn Lane Warrant Analyses

Bluestem Data Center TIS
Tonganoxie, Kansas

Intersection: 222nd Street and Access A
Posted Speed: 55 MPH
Peak Hour: AM

Scenario	SB LT volume	Opposing Volume	% Left-Turns	Advancing Volume	Warrant Threshold	Warrant Met
Opening Year Build	2	327	4%	47	213	NO

Intersection: 222nd Street and Access A
Posted Speed: 55 MPH
Peak Hour: PM

Scenario	SB LT volume	Opposing Volume	% Left-Turns	Advancing Volume	Warrant Threshold	Warrant Met
Opening Year Build	2	72	4%	52	301	NO

Intersection: 222nd Street and Access B
Posted Speed: 55 MPH
Peak Hour: AM

Scenario	SB LT volume	Opposing Volume	% Left-Turns	Advancing Volume	Warrant Threshold	Warrant Met
Opening Year Build	31	714	8%	407	82	YES

Intersection: 222nd Street and Access B
Posted Speed: 55 MPH
Peak Hour: PM

Scenario	SB LT volume	Opposing Volume	% Left-Turns	Advancing Volume	Warrant Threshold	Warrant Met
Opening Year Build	6	342	2%	382	213	YES

Intersection: 222nd Street and Access A
Posted Speed: 55 MPH
Peak Hour: AM

Scenario	SB LT volume	Opposing Volume	% Left-Turns	Advancing Volume	Warrant Threshold	Warrant Met
Future Year Build	2	344	3%	60	213	NO

Intersection: 222nd Street and Access A
Posted Speed: 55 MPH
Peak Hour: PM

Scenario	SB LT volume	Opposing Volume	% Left-Turns	Advancing Volume	Warrant Threshold	Warrant Met
Future Year Build	2	76	3%	66	301	NO

KDOT Left-Turn Lane Warrant Analyses

Bluestem Data Center TIS
Tonganoxie, Kansas

Intersection: 222nd Street and Access B
Posted Speed: 55 MPH
Peak Hour: AM

Scenario	SB LT volume	Opposing Volume	% Left-Turns	Advancing Volume	Warrant Threshold	Warrant Met
Future Year Build	31	768	6%	498	96	YES

Intersection: 222nd Street and Access B
Posted Speed: 55 MPH
Peak Hour: PM

Scenario	SB LT volume	Opposing Volume	% Left-Turns	Advancing Volume	Warrant Threshold	Warrant Met
Future Year Build	6	421	1%	439	181	YES

KDOT Right-Turn Lane Warrant Analyses
Bluestem Data Center TIS
Tonganoxie, Kansas

Intersection: 222nd Street & Access A
Posted Speed: 55 MPH
Peak Hour: AM

Scenario	NB RT Volume	DDHV	Warrant Threshold	Warrant Met
Opening Year Build	277	327	24	YES

Intersection: 222nd Street & Access A
Posted Speed: 55 MPH
Peak Hour: PM

Scenario	NB RT Volume	DDHV	Warrant Threshold	Warrant Met
Opening Year Build	52	72	N/A	NO

Intersection: 222nd Street & Access B
Posted Speed: 55 MPH
Peak Hour: AM

Scenario	NB Right-Turn Volume	DDHV	Warrant Threshold	Warrant Met
Opening Year Build	308	714	11	YES

Intersection: 222nd Street & Access B
Posted Speed: 55 MPH
Peak Hour: PM

Scenario	NB Right-Turn Volume	DDHV	Warrant Threshold	Warrant Met
Opening Year Build	60	342	24	YES

Intersection: 222nd Street & Access A
Posted Speed: 55 MPH
Peak Hour: AM

Scenario	NB RT Volume	DDHV	Warrant Threshold	Warrant Met
Future Build	277	344	24	YES

Intersection: 222nd Street & Access A
Posted Speed: 55 MPH
Peak Hour: PM

Scenario	NB RT Volume	DDHV	Warrant Threshold	Warrant Met
Future Build	52	76	N/A	NO

KDOT Right-Turn Lane Warrant Analyses
Bluestem Data Center TIS
Tonganoxie, Kansas

Intersection: 222nd Street & Access B
Posted Speed: 55 MPH
Peak Hour: AM

Scenario	NB Right-Turn Volume	DDHV	Warrant Threshold	Warrant Met
Future Build	308	768	11	YES

Intersection: 222nd Street & Access B
Posted Speed: 55 MPH
Peak Hour: PM

Scenario	NB Right-Turn Volume	DDHV	Warrant Threshold	Warrant Met
Future Build	60	411	19	YES

Appendix F: Synchro Reports

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	2	1	5	2	139	1	117	1	248	167	1
Future Vol, veh/h	4	2	1	5	2	139	1	117	1	248	167	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	-	-	-	110	-	-	600	-	600	750	-	530
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	4	2	7	10	4	5	2
Mvmt Flow	4	2	1	5	2	151	1	127	1	270	182	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	851	851	182	851	851	127	183	0	0	128	0	0
Stage 1	721	721	-	129	129	-	-	-	-	-	-	-
Stage 2	130	130	-	722	722	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.24	4.12	-	-	4.14	-	-
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	3.336	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	280	297	861	280	297	918	1392	-	-	1445	-	-
Stage 1	419	432	-	874	789	-	-	-	-	-	-	-
Stage 2	873	788	-	418	431	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	189	242	861	226	242	918	1392	-	-	1445	-	-
Mov Cap-2 Maneuver	189	242	-	226	242	-	-	-	-	-	-	-
Stage 1	341	351	-	874	788	-	-	-	-	-	-	-
Stage 2	727	788	-	338	351	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	21.3	10.32	0.06	4.81
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1392	-	-	228	226	883	1445	-	-
HCM Lane V/C Ratio	0.001	-	-	0.033	0.024	0.174	0.187	-	-
HCM Ctrl Dly (s/v)	7.6	-	-	21.3	21.3	9.9	8.1	-	-
HCM Lane LOS	A	-	-	C	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.6	0.7	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	22	124	26	19	228
Future Vol, veh/h	17	22	124	26	19	228
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	250	630	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	12	2	3	4	21	2
Mvmt Flow	18	24	135	28	21	248

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	424	135	0	0	163	0
Stage 1	135	-	-	-	-	-
Stage 2	289	-	-	-	-	-
Critical Hdwy	6.52	6.22	-	-	4.31	-
Critical Hdwy Stg 1	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.52	-	-	-	-	-
Follow-up Hdwy	3.608	3.318	-	-	2.389	-
Pot Cap-1 Maneuver	568	914	-	-	1308	-
Stage 1	868	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	559	914	-	-	1308	-
Mov Cap-2 Maneuver	559	-	-	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	726	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.34	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	716	1308	-
HCM Lane V/C Ratio	-	-	0.059	0.016	-
HCM Ctrl Dly (s/v)	-	-	10.3	7.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

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	2	2	2	2	1	2	2	142	1	2	246	2
Future Vol, veh/h	2	2	2	2	1	2	2	142	1	2	246	2
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	10	2	2	5	2	2	3	2
Mvmt Flow	2	2	2	2	1	2	2	154	1	2	267	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	432	433	268	432	433	155	270	0	0	155	0	0
Stage 1	273	273	-	159	159	-	-	-	-	-	-	-
Stage 2	159	160	-	273	274	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	534	516	770	534	504	891	1294	-	-	1425	-	-
Stage 1	733	684	-	843	751	-	-	-	-	-	-	-
Stage 2	843	766	-	733	669	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	529	514	770	528	502	891	1294	-	-	1425	-	-
Mov Cap-2 Maneuver	529	514	-	528	502	-	-	-	-	-	-	-
Stage 1	732	683	-	841	750	-	-	-	-	-	-	-
Stage 2	838	764	-	727	668	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.23	10.83	0.11	0.06
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	25	-	-	585	623	14	-	-
HCM Lane V/C Ratio	0.002	-	-	0.011	0.009	0.002	-	-
HCM Ctrl Dly (s/v)	7.8	0	-	11.2	10.8	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	18	2	12	19	143	0	0	158	129
Future Vol, veh/h	0	0	0	18	2	12	19	143	0	0	158	129
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	8	2	2	2	2	2	3	2
Mvmt Flow	0	0	0	20	2	13	21	155	0	0	172	140

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	368	509	155	312	0	-	-	-	0
Stage 1	197	197	-	-	-	-	-	-	-
Stage 2	172	312	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.58	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.58	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.58	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.072	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	632	459	890	1248	-	0	0	-	-
Stage 1	836	727	-	-	-	0	0	-	-
Stage 2	858	647	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	621	0	890	1248	-	-	-	-	-
Mov Cap-2 Maneuver	621	0	-	-	-	-	-	-	-
Stage 1	823	0	-	-	-	-	-	-	-
Stage 2	858	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	8.8	0.93	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1248	-	982	-	-
HCM Lane V/C Ratio	0.017	-	0.035	-	-
HCM Ctrl Dly (s/v)	7.9	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

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	69	1	14	0	0	0	0	90	50	68	108	0
Future Vol, veh/h	69	1	14	0	0	0	0	90	50	68	108	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	14	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	75	1	15	0	0	0	0	98	54	74	117	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	363	417	117	-	0	0	152	0	0
Stage 1	265	265	-	-	-	-	-	-	-
Stage 2	98	152	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.64	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.126	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	636	508	935	0	-	-	1429	-	0
Stage 1	779	668	-	0	-	-	-	-	0
Stage 2	926	749	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	603	0	935	-	-	-	1429	-	-
Mov Cap-2 Maneuver	603	0	-	-	-	-	-	-	-
Stage 1	779	0	-	-	-	-	-	-	-
Stage 2	878	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.69	0	2.96
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	724	1429	-
HCM Lane V/C Ratio	-	-	0.126	0.052	-
HCM Ctrl Dly (s/v)	-	-	10.7	7.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.2	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	1	1	10	2	221	1	175	4	142	148	7
Future Vol, veh/h	6	1	1	10	2	221	1	175	4	142	148	7
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	-	-	-	110	-	-	600	-	600	750	-	530
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	1	1	11	2	240	1	190	4	154	161	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	663	666	161	662	670	190	168	0	0	195	0	0
Stage 1	470	470	-	192	192	-	-	-	-	-	-	-
Stage 2	193	197	-	470	477	-	-	-	-	-	-	-
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	375	380	884	375	378	852	1409	-	-	1379	-	-
Stage 1	574	560	-	809	741	-	-	-	-	-	-	-
Stage 2	808	738	-	574	556	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	237	337	884	331	336	852	1409	-	-	1379	-	-
Mov Cap-2 Maneuver	237	337	-	331	336	-	-	-	-	-	-	-
Stage 1	510	498	-	809	741	-	-	-	-	-	-	-
Stage 2	578	737	-	508	494	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	18.66	11.24	0.04	3.8
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1409	-	-	272	331	840	1379	-	-
HCM Lane V/C Ratio	0.001	-	-	0.032	0.033	0.289	0.112	-	-
HCM Ctrl Dly (s/v)	7.6	-	-	18.7	16.2	11	7.9	-	-
HCM Lane LOS	A	-	-	C	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	1.2	0.4	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	23	208	7	9	136
Future Vol, veh/h	20	23	208	7	9	136
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	250	630	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	14	2	2
Mvmt Flow	22	25	226	8	10	148

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	393	226	0	0	234	0
Stage 1	226	-	-	-	-	-
Stage 2	167	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	611	813	-	-	1334	-
Stage 1	811	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	607	813	-	-	1334	-
Mov Cap-2 Maneuver	607	-	-	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	856	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.49	0	0.48
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	702	1334	-
HCM Lane V/C Ratio	-	-	0.067	0.007	-
HCM Ctrl Dly (s/v)	-	-	10.5	7.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

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	2	1	2	2	2	2	3	211	5	2	154	1
Future Vol, veh/h	2	1	2	2	2	2	3	211	5	2	154	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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	10	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	1	2	2	2	2	3	229	5	2	167	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	409	414	168	411	411	232	168	0	0	235	0	0
Stage 1	172	172	-	239	239	-	-	-	-	-	-	-
Stage 2	237	241	-	172	173	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.6	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.6	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.6	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.09	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	553	517	876	551	530	807	1409	-	-	1333	-	-
Stage 1	830	741	-	765	708	-	-	-	-	-	-	-
Stage 2	766	691	-	830	756	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	546	514	876	546	528	807	1409	-	-	1333	-	-
Mov Cap-2 Maneuver	546	514	-	546	528	-	-	-	-	-	-	-
Stage 1	828	740	-	763	706	-	-	-	-	-	-	-
Stage 2	760	690	-	825	754	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.73	11.02	0.1	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	25	-	-	634	604	23	-	-
HCM Lane V/C Ratio	0.002	-	-	0.009	0.011	0.002	-	-
HCM Ctrl Dly (s/v)	7.6	0	-	10.7	11	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	52	3	41	15	208	0	0	103	60
Future Vol, veh/h	0	0	0	52	3	41	15	208	0	0	103	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	57	3	45	16	226	0	0	112	65

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	371	436	226	177	0	-	-	-	0
Stage 1	259	259	-	-	-	-	-	-	-
Stage 2	112	177	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	630	514	813	1399	-	0	0	-	-
Stage 1	785	694	-	-	-	0	0	-	-
Stage 2	913	753	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	622	0	813	1399	-	-	-	-	-
Mov Cap-2 Maneuver	622	0	-	-	-	-	-	-	-
Stage 1	775	0	-	-	-	-	-	-	-
Stage 2	913	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	8.97	0.51	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1399	-	1011	-	-
HCM Lane V/C Ratio	0.012	-	0.103	-	-
HCM Ctrl Dly (s/v)	7.6	-	9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	104	1	23	0	0	0	0	118	40	21	135	0
Future Vol, veh/h	104	1	23	0	0	0	0	118	40	21	135	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	7	2	10	2	2
Mvmt Flow	113	1	25	0	0	0	0	128	43	23	147	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	321	364	147	-	0	0	172	0	0
Stage 1	192	192	-	-	-	-	-	-	-
Stage 2	128	172	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.2	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.29	-	-
Pot Cap-1 Maneuver	673	564	900	0	-	-	1358	-	0
Stage 1	840	741	-	0	-	-	-	-	0
Stage 2	898	757	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	662	0	900	-	-	-	1358	-	-
Mov Cap-2 Maneuver	662	0	-	-	-	-	-	-	-
Stage 1	840	0	-	-	-	-	-	-	-
Stage 2	882	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.41	0	1.04
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	805	1358	-
HCM Lane V/C Ratio	-	-	0.173	0.017	-
HCM Ctrl Dly (s/v)	-	-	10.4	7.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	2	9	2	75	2	62	16	167	80	2
Future Vol, veh/h	1	1	2	9	2	75	2	62	16	167	80	2
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	-	-	-	110	-	-	600	-	600	750	-	530
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	10	10	4	2	7	10	10	5	2
Mvmt Flow	1	1	2	10	2	82	2	67	17	182	87	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	523	539	87	522	524	67	89	0	0	85	0	0
Stage 1	450	450	-	72	72	-	-	-	-	-	-	-
Stage 2	73	89	-	451	452	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.2	6.6	6.24	4.12	-	-	4.2	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.59	4.09	3.336	2.218	-	-	2.29	-	-
Pot Cap-1 Maneuver	465	449	972	453	447	990	1506	-	-	1463	-	-
Stage 1	589	572	-	918	820	-	-	-	-	-	-	-
Stage 2	937	821	-	573	557	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	371	393	972	394	391	990	1506	-	-	1463	-	-
Mov Cap-2 Maneuver	371	393	-	394	391	-	-	-	-	-	-	-
Stage 1	515	501	-	917	819	-	-	-	-	-	-	-
Stage 2	856	820	-	500	488	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.62	9.69	0.18	5.24
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1506	-	-	548	394	953	1463	-	-
HCM Lane V/C Ratio	0.001	-	-	0.008	0.025	0.088	0.124	-	-
HCM Ctrl Dly (s/v)	7.4	-	-	11.6	14.4	9.1	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.3	0.4	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	16	71	92	33	154
Future Vol, veh/h	65	16	71	92	33	154
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	250	630	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	30	2	3	30	30	5
Mvmt Flow	71	17	77	100	36	167

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	316	77	0	0	177	0
Stage 1	77	-	-	-	-	-
Stage 2	239	-	-	-	-	-
Critical Hdwy	6.7	6.22	-	-	4.4	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	3.77	3.318	-	-	2.47	-
Pot Cap-1 Maneuver	623	984	-	-	1246	-
Stage 1	880	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	605	984	-	-	1246	-
Mov Cap-2 Maneuver	605	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	718	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.35	0	1.41
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	655	1246	-
HCM Lane V/C Ratio	-	-	0.135	0.029	-
HCM Ctrl Dly (s/v)	-	-	11.4	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	2	2	43	2	2	2	234	38	2	285	2
Future Vol, veh/h	2	2	2	43	2	2	2	234	38	2	285	2
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	10	2	2	30	2	2	30	2
Mvmt Flow	2	2	2	47	2	2	2	254	41	2	310	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	575	615	311	595	596	275	312	0	0	296	0	0
Stage 1	315	315	-	279	279	-	-	-	-	-	-	-
Stage 2	260	300	-	315	316	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	429	406	729	416	406	764	1248	-	-	1266	-	-
Stage 1	696	655	-	727	665	-	-	-	-	-	-	-
Stage 2	745	666	-	696	641	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	424	405	729	411	405	764	1248	-	-	1266	-	-
Mov Cap-2 Maneuver	424	405	-	411	405	-	-	-	-	-	-	-
Stage 1	694	654	-	726	664	-	-	-	-	-	-	-
Stage 2	739	664	-	690	639	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	12.54	14.78	0.06	0.05
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	13	-	-	484	419	12	-	-
HCM Lane V/C Ratio	0.002	-	-	0.013	0.122	0.002	-	-
HCM Ctrl Dly (s/v)	7.9	0	-	12.5	14.8	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	8	2	104	18	168	0	0	213	137
Future Vol, veh/h	0	0	0	8	2	104	18	168	0	0	213	137
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	30	2	2	30	2	2	30	2
Mvmt Flow	0	0	0	9	2	113	20	183	0	0	232	149

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	453	602	183	380	0	-	-	-	0
Stage 1	222	222	-	-	-	-	-	-	-
Stage 2	232	380	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.8	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.8	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.8	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.27	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	564	378	860	1178	-	0	0	-	-
Stage 1	815	671	-	-	-	0	0	-	-
Stage 2	807	568	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	555	0	860	1178	-	-	-	-	-
Mov Cap-2 Maneuver	555	0	-	-	-	-	-	-	-
Stage 1	802	0	-	-	-	-	-	-	-
Stage 2	807	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.5	0.78	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1178	-	924	-	-
HCM Lane V/C Ratio	0.017	-	0.134	-	-
HCM Ctrl Dly (s/v)	8.1	-	9.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	123	2	5	0	0	0	0	65	45	136	85	0
Future Vol, veh/h	123	2	5	0	0	0	0	65	45	136	85	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	30	2	2	2	2	2	30	2	30	2	2
Mvmt Flow	134	2	5	0	0	0	0	71	49	148	92	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	459	508	92	-	0	0	120	0	0
Stage 1	388	388	-	-	-	-	-	-	-
Stage 2	71	120	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.8	6.22	-	-	-	4.4	-	-
Critical Hdwy Stg 1	5.42	5.8	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.8	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.27	3.318	-	-	-	2.47	-	-
Pot Cap-1 Maneuver	560	430	965	0	-	-	1312	-	0
Stage 1	686	563	-	0	-	-	-	-	0
Stage 2	952	746	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	497	0	965	-	-	-	1312	-	-
Mov Cap-2 Maneuver	497	0	-	-	-	-	-	-	-
Stage 1	686	0	-	-	-	-	-	-	-
Stage 2	845	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	14.55	0	4.98
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	517	1312	-
HCM Lane V/C Ratio	-	-	0.273	0.113	-
HCM Ctrl Dly (s/v)	-	-	14.6	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.1	0.4	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	66	2	60	66	2	14
Future Vol, veh/h	66	2	60	66	2	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	30	2	30	2	2	2
Mvmt Flow	72	2	65	72	2	15

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	121	101	0	0	137	0
Stage 1	101	-	-	-	-	-
Stage 2	20	-	-	-	-	-
Critical Hdwy	6.7	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	3.77	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	812	954	-	-	1447	-
Stage 1	858	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	811	954	-	-	1447	-
Mov Cap-2 Maneuver	811	-	-	-	-	-
Stage 1	858	-	-	-	-	-
Stage 2	934	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.86	0	0.94
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	814	225	-
HCM Lane V/C Ratio	-	-	0.091	0.002	-
HCM Ctrl Dly (s/v)	-	-	9.9	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	75	9	158	75	9	237
Future Vol, veh/h	75	9	158	75	9	237
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	30	2	30	2	2	30
Mvmt Flow	82	10	172	82	10	258

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	490	213	0	0	253	0
Stage 1	213	-	-	-	-	-
Stage 2	277	-	-	-	-	-
Critical Hdwy	6.7	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	3.77	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	491	828	-	-	1312	-
Stage 1	761	-	-	-	-	-
Stage 2	709	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	486	828	-	-	1312	-
Mov Cap-2 Maneuver	486	-	-	-	-	-
Stage 1	761	-	-	-	-	-
Stage 2	703	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.62	0	0.28
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	509	66	-
HCM Lane V/C Ratio	-	-	0.179	0.007	-
HCM Ctrl Dly (s/v)	-	-	13.6	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0	-

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	2	2	38	2	5
Future Vol, veh/h	38	2	2	38	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	2	2	41	2	5

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	33	23	0	0	43	0
Stage 1	23	-	-	-	-	-
Stage 2	10	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	981	1054	-	-	1565	-
Stage 1	1000	-	-	-	-	-
Stage 2	1013	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	980	1054	-	-	1565	-
Mov Cap-2 Maneuver	980	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	1012	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	8.83	0	2.09
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	983	514	-
HCM Lane V/C Ratio	-	-	0.044	0.001	-
HCM Ctrl Dly (s/v)	-	-	8.8	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	4	2	13	1	155	1	148	13	145	154	6
Future Vol, veh/h	6	4	2	13	1	155	1	148	13	145	154	6
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	-	-	-	110	-	-	600	-	600	750	-	530
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	10	10	4	2	7	10	10	5	2
Mvmt Flow	7	4	2	14	1	168	1	161	14	158	167	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	646	660	167	648	652	161	174	0	0	175	0	0
Stage 1	483	483	-	163	163	-	-	-	-	-	-	-
Stage 2	164	177	-	485	489	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.2	6.6	6.24	4.12	-	-	4.2	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.59	4.09	3.336	2.218	-	-	2.29	-	-
Pot Cap-1 Maneuver	384	383	877	373	377	879	1403	-	-	1354	-	-
Stage 1	565	553	-	821	748	-	-	-	-	-	-	-
Stage 2	838	753	-	549	536	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	274	338	877	324	333	879	1403	-	-	1354	-	-
Mov Cap-2 Maneuver	274	338	-	324	333	-	-	-	-	-	-	-
Stage 1	499	489	-	820	748	-	-	-	-	-	-	-
Stage 2	676	752	-	479	474	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	16.25	10.64	0.05	3.81
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1403	-	-	333	324	870	1354	-	-
HCM Lane V/C Ratio	0.001	-	-	0.039	0.044	0.195	0.116	-	-
HCM Ctrl Dly (s/v)	7.6	-	-	16.2	16.6	10.1	8	-	-
HCM Lane LOS	A	-	-	C	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.7	0.4	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	88	27	143	64	26	132
Future Vol, veh/h	88	27	143	64	26	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	250	630	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	30	2	3	30	30	5
Mvmt Flow	96	29	155	70	28	143

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	355	155	0	0	225	0
Stage 1	155	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.7	6.22	-	-	4.4	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	3.77	3.318	-	-	2.47	-
Pot Cap-1 Maneuver	590	890	-	-	1195	-
Stage 1	809	-	-	-	-	-
Stage 2	771	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	576	890	-	-	1195	-
Mov Cap-2 Maneuver	576	-	-	-	-	-
Stage 1	809	-	-	-	-	-
Stage 2	753	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.15	0	1.33
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	628	1195	-
HCM Lane V/C Ratio	-	-	0.199	0.024	-
HCM Ctrl Dly (s/v)	-	-	12.1	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	2	2	44	2	2	1	274	41	2	285	2
Future Vol, veh/h	2	2	2	44	2	2	1	274	41	2	285	2
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	10	2	2	30	2	2	30	2
Mvmt Flow	2	2	2	48	2	2	1	298	45	2	310	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	616	660	311	638	639	320	312	0	0	342	0	0
Stage 1	315	315	-	322	322	-	-	-	-	-	-	-
Stage 2	301	345	-	315	316	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	403	383	729	390	384	721	1248	-	-	1217	-	-
Stage 1	696	655	-	690	637	-	-	-	-	-	-	-
Stage 2	708	636	-	696	641	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	398	382	729	385	383	721	1248	-	-	1217	-	-
Mov Cap-2 Maneuver	398	382	-	385	383	-	-	-	-	-	-	-
Stage 1	694	654	-	689	636	-	-	-	-	-	-	-
Stage 2	703	636	-	690	639	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	12.92	15.57	0.02	0.06
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	6	-	-	461	393	12	-	-
HCM Lane V/C Ratio	0.001	-	-	0.014	0.133	0.002	-	-
HCM Ctrl Dly (s/v)	7.9	0	-	12.9	15.6	8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	0	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	42	2	114	7	218	0	0	191	144
Future Vol, veh/h	0	0	0	42	2	114	7	218	0	0	191	144
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	30	2	2	30	2	2	30	2
Mvmt Flow	0	0	0	46	2	124	8	237	0	0	208	157

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	460	616	237	364	0	-	-	-	0
Stage 1	252	252	-	-	-	-	-	-	-
Stage 2	208	364	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.8	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.8	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.8	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.27	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	560	371	802	1194	-	0	0	-	-
Stage 1	790	650	-	-	-	0	0	-	-
Stage 2	827	577	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	556	0	802	1194	-	-	-	-	-
Mov Cap-2 Maneuver	556	0	-	-	-	-	-	-	-
Stage 1	785	0	-	-	-	-	-	-	-
Stage 2	827	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.23	0.25	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1194	-	1022	-	-
HCM Lane V/C Ratio	0.006	-	0.168	-	-
HCM Ctrl Dly (s/v)	8	-	9.2	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	149	1	14	0	0	0	0	76	17	112	118	0
Future Vol, veh/h	149	1	14	0	0	0	0	76	17	112	118	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	30	2	2	2	2	2	30	2	30	2	2
Mvmt Flow	162	1	15	0	0	0	0	83	18	122	128	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	454	473	128	-	0	0	101	0	0
Stage 1	372	372	-	-	-	-	-	-	-
Stage 2	83	101	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.8	6.22	-	-	-	4.4	-	-
Critical Hdwy Stg 1	5.42	5.8	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.8	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.27	3.318	-	-	-	2.47	-	-
Pot Cap-1 Maneuver	564	451	922	0	-	-	1333	-	0
Stage 1	697	573	-	0	-	-	-	-	0
Stage 2	941	760	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	512	0	922	-	-	-	1333	-	-
Mov Cap-2 Maneuver	512	0	-	-	-	-	-	-	-
Stage 1	697	0	-	-	-	-	-	-	-
Stage 2	855	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	14.4	0	3.88
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	560	1333	-
HCM Lane V/C Ratio	-	-	0.318	0.091	-
HCM Ctrl Dly (s/v)	-	-	14.4	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.3	-

Intersection	
Int Delay, s/veh	3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	66	2	25	66	2	38
Future Vol, veh/h	66	2	25	66	2	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	30	2	30	2	2	2
Mvmt Flow	72	2	27	72	2	41

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	109	63	0	0	99	0
Stage 1	63	-	-	-	-	-
Stage 2	46	-	-	-	-	-
Critical Hdwy	6.7	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	3.77	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	825	1002	-	-	1494	-
Stage 1	893	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	824	1002	-	-	1494	-
Mov Cap-2 Maneuver	824	-	-	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	908	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.77	0	0.37
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	828	90	-
HCM Lane V/C Ratio	-	-	0.089	0.001	-
HCM Ctrl Dly (s/v)	-	-	9.8	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	75	9	198	75	9	222
Future Vol, veh/h	75	9	198	75	9	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	30	2	30	2	2	30
Mvmt Flow	82	10	215	82	10	241

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	517	256	0	0	297	0
Stage 1	256	-	-	-	-	-
Stage 2	261	-	-	-	-	-
Critical Hdwy	6.7	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	3.77	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	473	783	-	-	1265	-
Stage 1	726	-	-	-	-	-
Stage 2	722	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	468	783	-	-	1265	-
Mov Cap-2 Maneuver	468	-	-	-	-	-
Stage 1	726	-	-	-	-	-
Stage 2	716	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	14.04	0	0.31
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	489	70	-
HCM Lane V/C Ratio	-	-	0.187	0.008	-
HCM Ctrl Dly (s/v)	-	-	14	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	2	2	38	2	5
Future Vol, veh/h	38	2	2	38	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	2	2	41	2	5

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	33	23	0	0	43	0
Stage 1	23	-	-	-	-	-
Stage 2	10	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	981	1054	-	-	1565	-
Stage 1	1000	-	-	-	-	-
Stage 2	1013	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	980	1054	-	-	1565	-
Mov Cap-2 Maneuver	980	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	1012	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	8.83	0	2.09
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	983	514	-
HCM Lane V/C Ratio	-	-	0.044	0.001	-
HCM Ctrl Dly (s/v)	-	-	8.8	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	5	2	23	5	168	2	130	36	306	185	5
Future Vol, veh/h	5	5	2	23	5	168	2	130	36	306	185	5
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	-	-	-	110	-	-	600	-	600	750	-	530
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	4	2	7	10	4	5	2
Mvmt Flow	5	5	2	25	5	183	2	141	39	333	201	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1015	1051	201	1015	1017	141	207	0	0	180	0	0
Stage 1	866	866	-	146	146	-	-	-	-	-	-	-
Stage 2	148	185	-	869	872	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.24	4.12	-	-	4.14	-	-
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	3.336	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	217	227	840	217	237	901	1365	-	-	1383	-	-
Stage 1	348	370	-	857	776	-	-	-	-	-	-	-
Stage 2	854	747	-	347	368	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	128	172	840	160	180	901	1365	-	-	1383	-	-
Mov Cap-2 Maneuver	128	172	-	160	180	-	-	-	-	-	-	-
Stage 1	264	281	-	856	775	-	-	-	-	-	-	-
Stage 2	675	746	-	257	280	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	27.89	13.25	0.09	5.2
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1365	-	-	170	160	808	1383	-	-
HCM Lane V/C Ratio	0.002	-	-	0.077	0.156	0.233	0.24	-	-
HCM Ctrl Dly (s/v)	7.6	-	-	27.9	31.6	10.8	8.4	-	-
HCM Lane LOS	A	-	-	D	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.5	0.9	0.9	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	121	38	153	276	56	286
Future Vol, veh/h	121	38	153	276	56	286
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	250	630	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	12	2	3	4	21	2
Mvmt Flow	132	41	166	300	61	311

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	599	166	0	0	466	0
Stage 1	166	-	-	-	-	-
Stage 2	433	-	-	-	-	-
Critical Hdwy	6.52	6.22	-	-	4.31	-
Critical Hdwy Stg 1	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.52	-	-	-	-	-
Follow-up Hdwy	3.608	3.318	-	-	2.389	-
Pot Cap-1 Maneuver	449	878	-	-	1003	-
Stage 1	839	-	-	-	-	-
Stage 2	633	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	421	878	-	-	1003	-
Mov Cap-2 Maneuver	421	-	-	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	595	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.62	0	1.44
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	481	1003	-
HCM Lane V/C Ratio	-	-	0.359	0.061	-
HCM Ctrl Dly (s/v)	-	-	16.6	8.8	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.6	0.2	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	2	2	5	5	5	2	714	5	2	502	2
Future Vol, veh/h	2	2	2	5	5	5	2	714	5	2	502	2
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	10	2	2	5	2	2	3	2
Mvmt Flow	2	2	2	5	5	5	2	776	5	2	546	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1334	1337	547	1334	1335	779	548	0	0	782	0	0
Stage 1	551	551	-	783	783	-	-	-	-	-	-	-
Stage 2	783	786	-	551	552	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	131	153	537	131	148	396	1022	-	-	836	-	-
Stage 1	519	515	-	387	393	-	-	-	-	-	-	-
Stage 2	387	403	-	519	502	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	123	152	537	128	147	396	1022	-	-	836	-	-
Mov Cap-2 Maneuver	123	152	-	128	147	-	-	-	-	-	-	-
Stage 1	517	513	-	385	392	-	-	-	-	-	-	-
Stage 2	375	402	-	512	500	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	25.59	27.73	0.02	0.04
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	5	-	-	181	175	7	-	-
HCM Lane V/C Ratio	0.002	-	-	0.036	0.093	0.003	-	-
HCM Ctrl Dly (s/v)	8.5	0	-	25.6	27.7	9.3	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	-	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	20	1	323	25	406	0	0	314	232
Future Vol, veh/h	0	0	0	20	1	323	25	406	0	0	314	232
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	8	2	2	2	2	2	3	2
Mvmt Flow	0	0	0	22	1	351	27	441	0	0	341	252

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	837	1089	441	593	0	-	-	-	0
Stage 1	496	496	-	-	-	-	-	-	-
Stage 2	341	593	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.58	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.58	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.58	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.072	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	337	210	616	983	-	0	0	-	-
Stage 1	612	536	-	-	-	0	0	-	-
Stage 2	720	484	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	327	0	616	983	-	-	-	-	-
Mov Cap-2 Maneuver	327	0	-	-	-	-	-	-	-
Stage 1	595	0	-	-	-	-	-	-	-
Stage 2	720	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	17.63	0.51	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	983	-	653	-	-
HCM Lane V/C Ratio	0.028	-	0.573	-	-
HCM Ctrl Dly (s/v)	8.8	-	17.6	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	3.6	-	-

Intersection	
Int Delay, s/veh	34.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	296	5	20	0	0	0	0	130	60	206	133	0
Future Vol, veh/h	296	5	20	0	0	0	0	130	60	206	133	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	14	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	322	5	22	0	0	0	0	141	65	224	145	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	734	799	145	-	0	0	207	0	0
Stage 1	592	592	-	-	-	-	-	-	-
Stage 2	141	207	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.64	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.126	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	387	305	903	0	-	-	1365	-	0
Stage 1	552	475	-	0	-	-	-	-	0
Stage 2	886	709	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	324	0	903	-	-	-	1365	-	-
Mov Cap-2 Maneuver	324	0	-	-	-	-	-	-	-
Stage 1	552	0	-	-	-	-	-	-	-
Stage 2	740	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	86.28	0	4.96
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	346	1365	-
HCM Lane V/C Ratio	-	-	1.009	0.164	-
HCM Ctrl Dly (s/v)	-	-	86.3	8.2	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q(veh)	-	-	11.6	0.6	-

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	113	2	50	277	2	45
Future Vol, veh/h	113	2	50	277	2	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	385	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	123	2	54	301	2	49

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	108	54	0	0	355	0
Stage 1	54	-	-	-	-	-
Stage 2	53	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	890	1013	-	-	1203	-
Stage 1	968	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	888	1013	-	-	1203	-
Mov Cap-2 Maneuver	888	-	-	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	967	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.7	0	0.34
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	890	77	-
HCM Lane V/C Ratio	-	-	0.14	0.002	-
HCM Ctrl Dly (s/v)	-	-	9.7	8	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	126	13	406	308	31	376
Future Vol, veh/h	126	13	406	308	31	376
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	375	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	137	14	441	335	34	409

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	917	441	0	0	776	0
Stage 1	441	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	302	616	-	-	840	-
Stage 1	648	-	-	-	-	-
Stage 2	625	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	290	616	-	-	840	-
Mov Cap-2 Maneuver	290	-	-	-	-	-
Stage 1	648	-	-	-	-	-
Stage 2	600	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	27.88	0	0.72
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	305	840	-
HCM Lane V/C Ratio	-	-	0.496	0.04	-
HCM Ctrl Dly (s/v)	-	-	27.9	9.5	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	2.6	0.1	-

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	5	5	40	5	270	5	195	11	166	165	10
Future Vol, veh/h	10	5	5	40	5	270	5	195	11	166	165	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	-	-	-	110	-	-	600	-	600	750	-	530
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	4	2	7	10	4	5	2
Mvmt Flow	11	5	5	43	5	293	5	212	12	180	179	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	766	775	179	766	774	212	190	0	0	224	0	0
Stage 1	540	540	-	223	223	-	-	-	-	-	-	-
Stage 2	226	235	-	543	551	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.24	4.12	-	-	4.14	-	-
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	3.336	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	320	329	863	320	329	823	1384	-	-	1333	-	-
Stage 1	526	521	-	780	719	-	-	-	-	-	-	-
Stage 2	777	711	-	524	515	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	174	283	863	269	284	823	1384	-	-	1333	-	-
Mov Cap-2 Maneuver	174	283	-	269	284	-	-	-	-	-	-	-
Stage 1	455	451	-	777	716	-	-	-	-	-	-	-
Stage 2	494	708	-	445	446	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	20.95	13.33	0.18	3.95
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1384	-	-	247	269	796	1333	-	-
HCM Lane V/C Ratio	0.004	-	-	0.088	0.162	0.376	0.135	-	-
HCM Ctrl Dly (s/v)	7.6	-	-	20.9	20.9	12.2	8.1	-	-
HCM Lane LOS	A	-	-	C	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.6	1.8	0.5	-	-

Intersection	
Int Delay, s/veh	7.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	226	55	255	57	16	161
Future Vol, veh/h	226	55	255	57	16	161
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	250	630	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	12	2	3	4	21	2
Mvmt Flow	246	60	277	62	17	175

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	487	277	0	0	339	0
Stage 1	277	-	-	-	-	-
Stage 2	210	-	-	-	-	-
Critical Hdwy	6.52	6.22	-	-	4.31	-
Critical Hdwy Stg 1	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.52	-	-	-	-	-
Follow-up Hdwy	3.608	3.318	-	-	2.389	-
Pot Cap-1 Maneuver	522	762	-	-	1121	-
Stage 1	747	-	-	-	-	-
Stage 2	802	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	514	762	-	-	1121	-
Mov Cap-2 Maneuver	514	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	790	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	19.47	0	0.75
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	549	1121	-
HCM Lane V/C Ratio	-	-	0.556	0.016	-
HCM Ctrl Dly (s/v)	-	-	19.5	8.3	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	3.4	0	-

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	2	5	2	2	2	2	5	341	10	5	627	2
Future Vol, veh/h	2	5	2	2	2	2	5	341	10	5	627	2
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	10	2	2	5	2	2	3	2
Mvmt Flow	2	5	2	2	2	2	5	371	11	5	682	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1076	1086	683	1082	1082	376	684	0	0	382	0	0
Stage 1	693	693	-	387	387	-	-	-	-	-	-	-
Stage 2	383	392	-	695	695	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	197	216	449	195	211	670	909	-	-	1177	-	-
Stage 1	433	444	-	637	596	-	-	-	-	-	-	-
Stage 2	640	606	-	433	432	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	191	213	449	186	207	670	909	-	-	1177	-	-
Mov Cap-2 Maneuver	191	213	-	186	207	-	-	-	-	-	-	-
Stage 1	430	441	-	632	591	-	-	-	-	-	-	-
Stage 2	631	602	-	422	429	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	21.01	19.38	0.13	0.06
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	25	-	-	235	257	14	-	-
HCM Lane V/C Ratio	0.006	-	-	0.042	0.025	0.005	-	-
HCM Ctrl Dly (s/v)	9	0	-	21	19.4	8.1	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	60	5	109	20	277	0	0	391	246
Future Vol, veh/h	0	0	0	60	5	109	20	277	0	0	391	246
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	8	2	2	2	2	2	3	2
Mvmt Flow	0	0	0	65	5	118	22	301	0	0	425	267

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	770	1037	301	692	0	-	-	-	0
Stage 1	345	345	-	-	-	-	-	-	-
Stage 2	425	692	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.58	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.58	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.58	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.072	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	369	226	739	903	-	0	0	-	-
Stage 1	717	626	-	-	-	0	0	-	-
Stage 2	659	436	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	360	0	739	903	-	-	-	-	-
Mov Cap-2 Maneuver	360	0	-	-	-	-	-	-	-
Stage 1	700	0	-	-	-	-	-	-	-
Stage 2	659	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.73	0.61	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	903	-	817	-	-
HCM Lane V/C Ratio	0.024	-	0.231	-	-
HCM Ctrl Dly (s/v)	9.1	-	10.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.9	-	-

Intersection	
Int Delay, s/veh	14.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	156	1	30	0	0	0	0	141	45	277	174	0
Future Vol, veh/h	156	1	30	0	0	0	0	141	45	277	174	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	14	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	170	1	33	0	0	0	0	153	49	301	189	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	945	993	189	-	0	0	202	0	0
Stage 1	791	791	-	-	-	-	-	-	-
Stage 2	153	202	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.64	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.126	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	291	234	853	0	-	-	1370	-	0
Stage 1	446	384	-	0	-	-	-	-	0
Stage 2	875	712	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	227	0	853	-	-	-	1370	-	-
Mov Cap-2 Maneuver	227	0	-	-	-	-	-	-	-
Stage 1	446	0	-	-	-	-	-	-	-
Stage 2	683	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	49.75	0	5.14
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	270	1370	-
HCM Lane V/C Ratio	-	-	0.752	0.22	-
HCM Ctrl Dly (s/v)	-	-	49.7	8.4	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q(veh)	-	-	5.5	0.8	-

Intersection	
Int Delay, s/veh	6.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	226	2	20	52	2	50
Future Vol, veh/h	226	2	20	52	2	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	385	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	246	2	22	57	2	54

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	80	22	0	0	78	0
Stage 1	22	-	-	-	-	-
Stage 2	59	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	922	1055	-	-	1520	-
Stage 1	1001	-	-	-	-	-
Stage 2	964	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	921	1055	-	-	1520	-
Mov Cap-2 Maneuver	921	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	962	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.34	0	0.28
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	922	69	-
HCM Lane V/C Ratio	-	-	0.269	0.001	-
HCM Ctrl Dly (s/v)	-	-	10.3	7.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0	-

Intersection	
Int Delay, s/veh	9.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	251	25	282	60	6	376
Future Vol, veh/h	251	25	282	60	6	376
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	375	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	273	27	307	65	7	409

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	728	307	0	0	372	0
Stage 1	307	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	390	733	-	-	1187	-
Stage 1	746	-	-	-	-	-
Stage 2	662	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	388	733	-	-	1187	-
Mov Cap-2 Maneuver	388	-	-	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	658	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	35.24	0	0.13
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	405	1187	-
HCM Lane V/C Ratio	-	-	0.74	0.005	-
HCM Ctrl Dly (s/v)	-	-	35.2	8.1	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q(veh)	-	-	5.9	0	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	3	2	8	3	207	2	174	2	369	249	2
Future Vol, veh/h	6	3	2	8	3	207	2	174	2	369	249	2
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	-	-	-	110	-	-	600	-	600	750	-	530
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	4	2	7	10	4	5	2
Mvmt Flow	7	3	2	9	3	225	2	189	2	401	271	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1268	1268	271	1268	1268	189	273	0	0	191	0	0
Stage 1	1073	1073	-	193	193	-	-	-	-	-	-	-
Stage 2	195	196	-	1074	1075	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.24	4.12	-	-	4.14	-	-
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	3.336	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	145	168	768	145	168	848	1290	-	-	1370	-	-
Stage 1	267	297	-	808	740	-	-	-	-	-	-	-
Stage 2	807	739	-	266	296	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	74	119	768	100	119	848	1290	-	-	1370	-	-
Mov Cap-2 Maneuver	74	119	-	100	119	-	-	-	-	-	-	-
Stage 1	189	210	-	807	739	-	-	-	-	-	-	-
Stage 2	589	738	-	185	209	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	45.4	12.72	0.09	5.18
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1290	-	-	101	100	779	1370	-	-
HCM Lane V/C Ratio	0.002	-	-	0.118	0.087	0.293	0.293	-	-
HCM Ctrl Dly (s/v)	7.8	-	-	45.4	44.2	11.5	8.7	-	-
HCM Lane LOS	A	-	-	E	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.3	1.2	1.2	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	33	185	39	29	339
Future Vol, veh/h	26	33	185	39	29	339
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	250	630	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	12	2	3	4	21	2
Mvmt Flow	28	36	201	42	32	368

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	633	201	0	0	243	0
Stage 1	201	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Critical Hdwy	6.52	6.22	-	-	4.31	-
Critical Hdwy Stg 1	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.52	-	-	-	-	-
Follow-up Hdwy	3.608	3.318	-	-	2.389	-
Pot Cap-1 Maneuver	428	840	-	-	1219	-
Stage 1	809	-	-	-	-	-
Stage 2	634	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	417	840	-	-	1219	-
Mov Cap-2 Maneuver	417	-	-	-	-	-
Stage 1	809	-	-	-	-	-
Stage 2	618	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.97	0	0.63
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	581	1219	-
HCM Lane V/C Ratio	-	-	0.11	0.026	-
HCM Ctrl Dly (s/v)	-	-	12	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	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	2	2	2	3	2	3	2	212	2	2	366	2
Future Vol, veh/h	2	2	2	3	2	3	2	212	2	2	366	2
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	10	2	2	5	2	2	3	2
Mvmt Flow	2	2	2	3	2	3	2	230	2	2	398	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	639	640	399	639	640	232	400	0	0	233	0	0
Stage 1	403	403	-	236	236	-	-	-	-	-	-	-
Stage 2	236	237	-	403	404	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	389	393	651	389	383	808	1159	-	-	1335	-	-
Stage 1	624	600	-	767	695	-	-	-	-	-	-	-
Stage 2	767	709	-	624	585	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	383	392	651	384	381	808	1159	-	-	1335	-	-
Mov Cap-2 Maneuver	383	392	-	384	381	-	-	-	-	-	-	-
Stage 1	622	598	-	766	694	-	-	-	-	-	-	-
Stage 2	760	707	-	618	584	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	13.16	12.69	0.08	0.04
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	17	-	-	448	477	10	-	-
HCM Lane V/C Ratio	0.002	-	-	0.015	0.018	0.002	-	-
HCM Ctrl Dly (s/v)	8.1	0	-	13.2	12.7	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	27	2	18	29	213	0	0	235	192
Future Vol, veh/h	0	0	0	27	2	18	29	213	0	0	235	192
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	8	2	2	2	2	2	3	2
Mvmt Flow	0	0	0	29	2	20	32	232	0	0	255	209

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	550	759	232	464	0	-	-	-	0
Stage 1	295	295	-	-	-	-	-	-	-
Stage 2	255	464	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.58	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.58	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.58	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.072	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	496	329	808	1097	-	0	0	-	-
Stage 1	756	658	-	-	-	0	0	-	-
Stage 2	787	553	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	482	0	808	1097	-	-	-	-	-
Mov Cap-2 Maneuver	482	0	-	-	-	-	-	-	-
Stage 1	734	0	-	-	-	-	-	-	-
Stage 2	787	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.97	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1097	-	775	-	-
HCM Lane V/C Ratio	0.029	-	0.066	-	-
HCM Ctrl Dly (s/v)	8.4	-	10	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	103	2	21	0	0	0	0	134	75	102	161	0
Future Vol, veh/h	103	2	21	0	0	0	0	134	75	102	161	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	14	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	112	2	23	0	0	0	0	146	82	111	175	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	542	624	175	-	0	0	227	0	0
Stage 1	397	397	-	-	-	-	-	-	-
Stage 2	146	227	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.64	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.126	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	501	386	868	0	-	-	1341	-	0
Stage 1	679	583	-	0	-	-	-	-	0
Stage 2	882	694	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	460	0	868	-	-	-	1341	-	-
Mov Cap-2 Maneuver	460	0	-	-	-	-	-	-	-
Stage 1	679	0	-	-	-	-	-	-	-
Stage 2	809	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.65	0	3.07
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	553	1341	-
HCM Lane V/C Ratio	-	-	0.248	0.083	-
HCM Ctrl Dly (s/v)	-	-	13.6	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.3	-

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	2	2	15	3	329	2	261	6	212	220	11
Future Vol, veh/h	9	2	2	15	3	329	2	261	6	212	220	11
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	-	-	-	110	-	-	600	-	600	750	-	530
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	2	2	16	3	358	2	284	7	230	239	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	990	995	239	989	1000	284	251	0	0	290	0	0
Stage 1	700	700	-	288	288	-	-	-	-	-	-	-
Stage 2	290	295	-	701	712	-	-	-	-	-	-	-
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	226	245	800	226	243	755	1314	-	-	1272	-	-
Stage 1	430	441	-	720	674	-	-	-	-	-	-	-
Stage 2	718	669	-	429	436	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	96	200	800	182	199	755	1314	-	-	1272	-	-
Mov Cap-2 Maneuver	96	200	-	182	199	-	-	-	-	-	-	-
Stage 1	352	361	-	718	673	-	-	-	-	-	-	-
Stage 2	376	668	-	348	357	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	38.31	15.02	0.06	4.05
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1314	-	-	122	182	737	1272	-	-
HCM Lane V/C Ratio	0.002	-	-	0.116	0.089	0.49	0.181	-	-
HCM Ctrl Dly (s/v)	7.7	-	-	38.3	26.7	14.5	8.5	-	-
HCM Lane LOS	A	-	-	E	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.3	2.7	0.7	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	35	310	11	14	203
Future Vol, veh/h	30	35	310	11	14	203
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	250	630	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	14	2	2
Mvmt Flow	33	38	337	12	15	221

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	588	337	0	0	349	0
Stage 1	337	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	471	705	-	-	1210	-
Stage 1	723	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	465	705	-	-	1210	-
Mov Cap-2 Maneuver	465	-	-	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	781	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.21	0	0.52
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	570	1210	-
HCM Lane V/C Ratio	-	-	0.124	0.013	-
HCM Ctrl Dly (s/v)	-	-	12.2	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-

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	2	2	2	2	2	2	5	314	8	3	229	2
Future Vol, veh/h	2	2	2	2	2	2	5	314	8	3	229	2
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	10	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	2	2	2	2	2	5	341	9	3	249	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	610	617	250	613	614	346	251	0	0	350	0	0
Stage 1	257	257	-	357	357	-	-	-	-	-	-	-
Stage 2	353	361	-	257	258	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.6	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.6	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.6	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.09	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	407	395	789	405	407	697	1314	-	-	1209	-	-
Stage 1	748	681	-	661	629	-	-	-	-	-	-	-
Stage 2	664	612	-	748	695	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	400	392	789	398	404	697	1314	-	-	1209	-	-
Mov Cap-2 Maneuver	400	392	-	398	404	-	-	-	-	-	-	-
Stage 1	746	679	-	658	625	-	-	-	-	-	-	-
Stage 2	656	609	-	741	692	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	12.69	12.82	0.12	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	27	-	-	475	467	23	-	-
HCM Lane V/C Ratio	0.004	-	-	0.014	0.014	0.003	-	-
HCM Ctrl Dly (s/v)	7.8	0	-	12.7	12.8	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	78	5	61	23	310	0	0	154	90
Future Vol, veh/h	0	0	0	78	5	61	23	310	0	0	154	90
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	85	5	66	25	337	0	0	167	98

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	554	652	337	265	0	-	-	-	0
Stage 1	387	387	-	-	-	-	-	-	-
Stage 2	167	265	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	493	387	705	1299	-	0	0	-	-
Stage 1	686	610	-	-	-	0	0	-	-
Stage 2	862	689	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	484	0	705	1299	-	-	-	-	-
Mov Cap-2 Maneuver	484	0	-	-	-	-	-	-	-
Stage 1	673	0	-	-	-	-	-	-	-
Stage 2	862	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.58	0.54	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1299	-	801	-	-
HCM Lane V/C Ratio	0.019	-	0.195	-	-
HCM Ctrl Dly (s/v)	7.8	-	10.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	155	0	35	0	0	0	0	176	60	32	201	0
Future Vol, veh/h	155	0	35	0	0	0	0	176	60	32	201	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	7	2	10	2	2
Mvmt Flow	168	0	38	0	0	0	0	191	65	35	218	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	479	545	218	-	0	0	257	0	0
Stage 1	288	288	-	-	-	-	-	-	-
Stage 2	191	257	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.2	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.29	-	-
Pot Cap-1 Maneuver	545	446	821	0	-	-	1263	-	0
Stage 1	761	674	-	0	-	-	-	-	0
Stage 2	841	695	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	530	0	821	-	-	-	1263	-	-
Mov Cap-2 Maneuver	530	0	-	-	-	-	-	-	-
Stage 1	761	0	-	-	-	-	-	-	-
Stage 2	818	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.13	0	1.09
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	648	1263	-
HCM Lane V/C Ratio	-	-	0.319	0.028	-
HCM Ctrl Dly (s/v)	-	-	13.1	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.1	-

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	3	2	21	3	220	2	174	33	400	249	2
Future Vol, veh/h	6	3	2	21	3	220	2	174	33	400	249	2
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	-	-	-	110	-	-	600	-	600	750	-	530
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	4	2	7	10	4	5	2
Mvmt Flow	7	3	2	23	3	239	2	189	36	435	271	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1335	1370	271	1335	1336	189	273	0	0	225	0	0
Stage 1	1140	1140	-	193	193	-	-	-	-	-	-	-
Stage 2	195	229	-	1142	1142	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.24	4.12	-	-	4.14	-	-
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	3.336	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	131	146	768	131	153	848	1290	-	-	1332	-	-
Stage 1	244	276	-	808	740	-	-	-	-	-	-	-
Stage 2	807	714	-	244	275	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	62	98	768	86	103	848	1290	-	-	1332	-	-
Mov Cap-2 Maneuver	62	98	-	86	103	-	-	-	-	-	-	-
Stage 1	165	186	-	807	739	-	-	-	-	-	-	-
Stage 2	576	713	-	161	185	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	54.57	16.07	0.07	5.53
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1290	-	-	84	86	773	1332	-	-
HCM Lane V/C Ratio	0.002	-	-	0.142	0.267	0.314	0.326	-	-
HCM Ctrl Dly (s/v)	7.8	-	-	54.6	61.7	11.8	9	-	-
HCM Lane LOS	A	-	-	F	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	1	1.3	1.4	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	127	46	198	285	60	370
Future Vol, veh/h	127	46	198	285	60	370
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	250	630	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	12	2	3	4	21	2
Mvmt Flow	138	50	215	310	65	402

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	748	215	0	0	525	0
Stage 1	215	-	-	-	-	-
Stage 2	533	-	-	-	-	-
Critical Hdwy	6.52	6.22	-	-	4.31	-
Critical Hdwy Stg 1	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.52	-	-	-	-	-
Follow-up Hdwy	3.608	3.318	-	-	2.389	-
Pot Cap-1 Maneuver	366	825	-	-	952	-
Stage 1	797	-	-	-	-	-
Stage 2	569	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	341	825	-	-	952	-
Mov Cap-2 Maneuver	341	-	-	-	-	-
Stage 1	797	-	-	-	-	-
Stage 2	530	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	21.44	0	1.26
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	404	952	-
HCM Lane V/C Ratio	-	-	0.466	0.069	-
HCM Ctrl Dly (s/v)	-	-	21.4	9.1	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	2.4	0.2	-

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	2	2	2	3	2	3	2	766	2	2	2	2
Future Vol, veh/h	2	2	2	3	2	3	2	766	2	2	2	2
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	10	2	2	5	2	2	3	2
Mvmt Flow	2	2	2	3	2	3	2	833	2	2	2	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	846	847	3	846	847	834	4	0	0	835	0	0
Stage 1	8	8	-	838	838	-	-	-	-	-	-	-
Stage 2	838	839	-	8	9	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	282	299	1081	282	290	368	1617	-	-	799	-	-
Stage 1	1014	889	-	361	371	-	-	-	-	-	-	-
Stage 2	361	381	-	1014	873	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	276	297	1081	278	289	368	1617	-	-	799	-	-
Mov Cap-2 Maneuver	276	297	-	278	289	-	-	-	-	-	-	-
Stage 1	1011	887	-	360	370	-	-	-	-	-	-	-
Stage 2	354	380	-	1007	870	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	14.66	16.97	0.02	3.17
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	5	-	-	379	309	545	-	-
HCM Lane V/C Ratio	0.001	-	-	0.017	0.028	0.003	-	-
HCM Ctrl Dly (s/v)	7.2	0	-	14.7	17	9.5	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	27	2	326	29	459	0	0	374	279
Future Vol, veh/h	0	0	0	27	2	326	29	459	0	0	374	279
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	8	2	2	2	2	2	3	2
Mvmt Flow	0	0	0	29	2	354	32	499	0	0	407	303

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	968	1272	499	710	0	-	-	-	0
Stage 1	562	562	-	-	-	-	-	-	-
Stage 2	407	710	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.58	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.58	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.58	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.072	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	281	163	572	889	-	0	0	-	-
Stage 1	571	500	-	-	-	0	0	-	-
Stage 2	672	428	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	271	0	572	889	-	-	-	-	-
Mov Cap-2 Maneuver	271	0	-	-	-	-	-	-	-
Stage 1	550	0	-	-	-	-	-	-	-
Stage 2	672	0	-	-	-	-	-	-	-

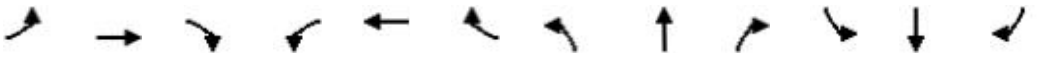
Approach	WB	NB	SB
HCM Ctrl Dly, s/v	20.12	0.55	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	889	-	616	-	-
HCM Lane V/C Ratio	0.035	-	0.626	-	-
HCM Ctrl Dly (s/v)	9.2	-	20.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	4.4	-	-



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	349	23	260	248	189
v/c Ratio	0.68	0.04	0.61	0.46	0.20
Control Delay (s/veh)	27.6	0.1	27.5	12.7	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.6	0.1	27.5	12.7	10.0
Queue Length 50th (ft)	122	0	76	48	35
Queue Length 95th (ft)	263	0	184	118	90
Internal Link Dist (ft)	1553		2322		759
Turn Bay Length (ft)				100	
Base Capacity (vph)	964	910	772	621	1436
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.36	0.03	0.34	0.40	0.13

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	319	2	21	0	0	0	0	164	75	228	174	0
Future Volume (veh/h)	319	2	21	0	0	0	0	164	75	228	174	0
Initial Q (Qb), veh	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
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1693	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	347	2	23				0	178	82	248	189	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	14	2				0	2	2	2	2	0
Cap, veh/h	454	3	449				0	244	113	476	877	0
Arrive On Green	0.28	0.28	0.28				0.00	0.20	0.20	0.14	0.47	0.00
Sat Flow, veh/h	1603	9	1585				0	1212	558	1781	1870	0
Grp Volume(v), veh/h	349	0	23				0	0	260	248	189	0
Grp Sat Flow(s),veh/h/ln	1612	0	1585				0	0	1770	1781	1870	0
Q Serve(g_s), s	9.6	0.0	0.5				0.0	0.0	6.7	4.8	2.9	0.0
Cycle Q Clear(g_c), s	9.6	0.0	0.5				0.0	0.0	6.7	4.8	2.9	0.0
Prop In Lane	0.99		1.00				0.00		0.32	1.00		0.00
Lane Grp Cap(c), veh/h	457	0	449				0	0	357	476	877	0
V/C Ratio(X)	0.76	0.00	0.05				0.00	0.00	0.73	0.52	0.22	0.00
Avail Cap(c_a), veh/h	1065	0	1047				0	0	913	772	1775	0
HCM Platoon Ratio	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				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.9	0.0	12.6				0.0	0.0	18.1	11.6	7.6	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.0				0.0	0.0	2.9	0.9	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.2				0.0	0.0	2.3	1.3	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.6	0.0	12.7				0.0	0.0	21.0	12.5	7.7	0.0
LnGrp LOS	B		B						C	B	A	
Approach Vol, veh/h		372						260			437	
Approach Delay, s/veh		18.2						21.0			10.4	
Approach LOS		B						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	13.0	15.8		19.7		28.7
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	15.0	25.0		32.0		46.0
Max Q Clear Time (g_c+I1), s	6.8	8.7		11.6		4.9
Green Ext Time (p_c), s	0.4	1.1		2.2		0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	15.7
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	113	2	67	277	2	58
Future Vol, veh/h	113	2	67	277	2	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	123	2	73	301	2	63

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	291	223	0	0	374	0
Stage 1	223	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	700	816	-	-	1185	-
Stage 1	814	-	-	-	-	-
Stage 2	955	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	699	816	-	-	1185	-
Mov Cap-2 Maneuver	699	-	-	-	-	-
Stage 1	814	-	-	-	-	-
Stage 2	954	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.25	0	0.27
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	700	60	-
HCM Lane V/C Ratio	-	-	0.178	0.002	-
HCM Ctrl Dly (s/v)	-	-	11.3	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0	-



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	151	500	335	34	508
v/c Ratio	0.39	0.44	0.30	0.07	0.44
Control Delay (s/veh)	18.4	8.5	1.9	6.5	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.4	8.5	1.9	6.5	8.6
Queue Length 50th (ft)	32	73	0	4	75
Queue Length 95th (ft)	79	159	29	16	161
Internal Link Dist (ft)	611	3473			2168
Turn Bay Length (ft)			375	450	
Base Capacity (vph)	970	1863	1583	840	1863
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.27	0.21	0.04	0.27

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	126	13	460	308	31	467
Future Volume (veh/h)	126	13	460	308	31	467
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	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	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	14	500	335	34	508
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	198	20	821	695	416	821
Arrive On Green	0.12	0.12	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1588	162	1870	1585	658	1870
Grp Volume(v), veh/h	152	0	500	335	34	508
Grp Sat Flow(s),veh/h/ln	1762	0	1870	1585	658	1870
Q Serve(g_s), s	2.3	0.0	5.6	4.1	1.1	5.8
Cycle Q Clear(g_c), s	2.3	0.0	5.6	4.1	6.8	5.8
Prop In Lane	0.90	0.09		1.00	1.00	
Lane Grp Cap(c), veh/h	220	0	821	695	416	821
V/C Ratio(X)	0.69	0.00	0.61	0.48	0.08	0.62
Avail Cap(c_a), veh/h	1474	0	3741	3170	1443	3741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	0.0	5.9	5.5	8.5	5.9
Incr Delay (d2), s/veh	3.8	0.0	0.7	0.5	0.1	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.4	0.2	0.1	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.4	0.0	6.6	6.0	8.6	6.7
LnGrp LOS	B		A	A	A	A
Approach Vol, veh/h	152		835			542
Approach Delay, s/veh	15.4		6.4			6.8
Approach LOS	B		A			A

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	18.1			18.1	9.4
Change Period (Y+Rc), s	6.0			6.0	6.0
Max Green Setting (Gmax), s	55.0			55.0	23.0
Max Q Clear Time (g_c+I1), s	7.6			8.8	4.3
Green Ext Time (p_c), s	4.1			3.3	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	7.4
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	2	2	40	3	354	2	261	12	218	220	11
Future Vol, veh/h	9	2	2	40	3	354	2	261	12	218	220	11
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	-	-	-	110	-	-	600	-	600	750	-	530
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	4	2	7	10	4	5	2
Mvmt Flow	10	2	2	43	3	385	2	284	13	237	239	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1003	1014	239	1002	1013	284	251	0	0	297	0	0
Stage 1	713	713	-	288	288	-	-	-	-	-	-	-
Stage 2	290	301	-	714	725	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.24	4.12	-	-	4.14	-	-
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	3.336	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	221	238	800	221	239	751	1314	-	-	1253	-	-
Stage 1	423	435	-	720	674	-	-	-	-	-	-	-
Stage 2	718	665	-	422	430	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	86	193	800	177	193	751	1314	-	-	1253	-	-
Mov Cap-2 Maneuver	86	193	-	177	193	-	-	-	-	-	-	-
Stage 1	343	353	-	718	673	-	-	-	-	-	-	-
Stage 2	348	664	-	339	349	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	42.26	16.97	0.06	4.15
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1314	-	-	111	177	733	1253	-	-
HCM Lane V/C Ratio	0.002	-	-	0.128	0.246	0.53	0.189	-	-
HCM Ctrl Dly (s/v)	7.7	-	-	42.3	31.9	15.3	8.5	-	-
HCM Lane LOS	A	-	-	E	D	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.9	3.1	0.7	-	-

Intersection	
Int Delay, s/veh	9.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	231	60	335	58	20	209
Future Vol, veh/h	231	60	335	58	20	209
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	250	630	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	12	2	3	4	21	2
Mvmt Flow	251	65	364	63	22	227

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	635	364	0	0	427	0
Stage 1	364	-	-	-	-	-
Stage 2	271	-	-	-	-	-
Critical Hdwy	6.52	6.22	-	-	4.31	-
Critical Hdwy Stg 1	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.52	-	-	-	-	-
Follow-up Hdwy	3.608	3.318	-	-	2.389	-
Pot Cap-1 Maneuver	427	681	-	-	1038	-
Stage 1	681	-	-	-	-	-
Stage 2	752	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	418	681	-	-	1038	-
Mov Cap-2 Maneuver	418	-	-	-	-	-
Stage 1	681	-	-	-	-	-
Stage 2	737	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	29.15	0	0.75
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	454	1038	-
HCM Lane V/C Ratio	-	-	0.696	0.021	-
HCM Ctrl Dly (s/v)	-	-	29.2	8.5	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	5.3	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	2	2	2	2	2	2	5	420	8	3	681	2
Future Vol, veh/h	2	2	2	2	2	2	5	420	8	3	681	2
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	10	2	2	5	2	2	3	2
Mvmt Flow	2	2	2	2	2	2	5	457	9	3	740	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1216	1224	741	1220	1221	461	742	0	0	465	0	0
Stage 1	748	748	-	472	472	-	-	-	-	-	-	-
Stage 2	468	476	-	748	749	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.6	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.09	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	158	179	416	157	174	601	865	-	-	1096	-	-
Stage 1	405	420	-	573	546	-	-	-	-	-	-	-
Stage 2	575	557	-	405	408	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	153	177	416	152	171	601	865	-	-	1096	-	-
Mov Cap-2 Maneuver	153	177	-	152	171	-	-	-	-	-	-	-
Stage 1	402	418	-	568	541	-	-	-	-	-	-	-
Stage 2	566	552	-	398	406	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	23.09	22.42	0.11	0.04
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	21	-	-	206	213	8	-	-
HCM Lane V/C Ratio	0.006	-	-	0.032	0.031	0.003	-	-
HCM Ctrl Dly (s/v)	9.2	0	-	23.1	22.4	8.3	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	78	5	120	23	357	0	0	430	266
Future Vol, veh/h	0	0	0	78	5	120	23	357	0	0	430	266
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	8	2	2	2	2	2	3	2
Mvmt Flow	0	0	0	85	5	130	25	388	0	0	467	289

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	905	1195	388	757	0	-	-	-	0
Stage 1	438	438	-	-	-	-	-	-	-
Stage 2	467	757	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.58	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.58	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.58	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.072	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	307	182	660	854	-	0	0	-	-
Stage 1	650	569	-	-	-	0	0	-	-
Stage 2	631	407	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	298	0	660	854	-	-	-	-	-
Mov Cap-2 Maneuver	298	0	-	-	-	-	-	-	-
Stage 1	631	0	-	-	-	-	-	-	-
Stage 2	631	0	-	-	-	-	-	-	-

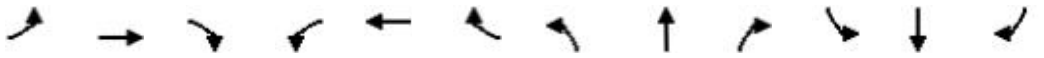
Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.11	0.57	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	854	-	663	-	-
HCM Lane V/C Ratio	0.029	-	0.333	-	-
HCM Ctrl Dly (s/v)	9.3	-	13.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1.5	-	-



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	214	38	263	309	245
v/c Ratio	0.54	0.09	0.59	0.51	0.24
Control Delay (s/veh)	26.5	0.4	24.7	10.2	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.5	0.4	24.7	10.2	7.4
Queue Length 50th (ft)	68	0	71	48	36
Queue Length 95th (ft)	164	0	167	111	86
Internal Link Dist (ft)	1553		2322		759
Turn Bay Length (ft)				100	
Base Capacity (vph)	755	736	942	805	1719
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.28	0.05	0.28	0.38	0.14

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	1	35	0	0	0	0	182	60	284	225	0
Future Volume (veh/h)	196	1	35	0	0	0	0	182	60	284	225	0
Initial Q (Qb), veh	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
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1693	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	213	1	38				0	198	65	309	245	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	14	2				0	2	2	2	2	0
Cap, veh/h	303	1	299				0	285	93	569	990	0
Arrive On Green	0.19	0.19	0.19				0.00	0.21	0.21	0.18	0.53	0.00
Sat Flow, veh/h	1605	8	1585				0	1348	443	1781	1870	0
Grp Volume(v), veh/h	214	0	38				0	0	263	309	245	0
Grp Sat Flow(s),veh/h/ln	1612	0	1585				0	0	1791	1781	1870	0
Q Serve(g_s), s	5.3	0.0	0.8				0.0	0.0	5.8	5.0	3.0	0.0
Cycle Q Clear(g_c), s	5.3	0.0	0.8				0.0	0.0	5.8	5.0	3.0	0.0
Prop In Lane	1.00		1.00				0.00		0.25	1.00		0.00
Lane Grp Cap(c), veh/h	304	0	299				0	0	378	569	990	0
V/C Ratio(X)	0.70	0.00	0.13				0.00	0.00	0.70	0.54	0.25	0.00
Avail Cap(c_a), veh/h	871	0	856				0	0	1177	1131	2415	0
HCM Platoon Ratio	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				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.2	0.0	14.4				0.0	0.0	15.5	9.2	5.4	0.0
Incr Delay (d2), s/veh	3.0	0.0	0.2				0.0	0.0	2.3	0.8	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.3				0.0	0.0	1.9	1.1	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.1	0.0	14.5				0.0	0.0	17.8	10.0	5.6	0.0
LnGrp LOS	B		B						B	B	A	
Approach Vol, veh/h		252						263			554	
Approach Delay, s/veh		18.4						17.8			8.0	
Approach LOS		B						B			A	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	13.6	15.0		14.0		28.6						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	21.0	28.0		23.0		55.0						
Max Q Clear Time (g_c+I1), s	7.0	7.8		7.3		5.0						
Green Ext Time (p_c), s	0.7	1.2		1.2		1.2						

Intersection Summary												
HCM 7th Control Delay, s/veh			12.9									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	6.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	226	2	24	52	2	64
Future Vol, veh/h	226	2	24	52	2	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	385	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	246	2	26	57	2	70

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	100	26	0	0	83	0
Stage 1	26	-	-	-	-	-
Stage 2	74	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	899	1050	-	-	1515	-
Stage 1	996	-	-	-	-	-
Stage 2	949	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	897	1050	-	-	1515	-
Mov Cap-2 Maneuver	897	-	-	-	-	-
Stage 1	996	-	-	-	-	-
Stage 2	948	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.53	0	0.22
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	898	55	-
HCM Lane V/C Ratio	-	-	0.276	0.001	-
HCM Ctrl Dly (s/v)	-	-	10.5	7.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0	-



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	300	392	65	7	471
v/c Ratio	0.56	0.51	0.09	0.02	0.61
Control Delay (s/veh)	18.0	12.7	3.3	8.5	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.0	12.7	3.3	8.5	14.5
Queue Length 50th (ft)	56	65	0	1	83
Queue Length 95th (ft)	150	157	17	7	195
Internal Link Dist (ft)	611	3473			2168
Turn Bay Length (ft)			375	450	
Base Capacity (vph)	1295	1780	1515	891	1780
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.23	0.22	0.04	0.01	0.26

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	251	25	361	60	6	433
Future Volume (veh/h)	251	25	361	60	6	433
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	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	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	273	27	392	65	7	471
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	373	37	689	584	426	689
Arrive On Green	0.23	0.23	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1598	158	1870	1585	934	1870
Grp Volume(v), veh/h	301	0	392	65	7	471
Grp Sat Flow(s),veh/h/ln	1762	0	1870	1585	934	1870
Q Serve(g_s), s	4.8	0.0	5.0	0.8	0.2	6.4
Cycle Q Clear(g_c), s	4.8	0.0	5.0	0.8	5.2	6.4
Prop In Lane	0.91	0.09		1.00	1.00	
Lane Grp Cap(c), veh/h	412	0	689	584	426	689
V/C Ratio(X)	0.73	0.00	0.57	0.11	0.02	0.68
Avail Cap(c_a), veh/h	1812	0	2917	2472	1540	2917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.7	0.0	7.6	6.3	9.7	8.0
Incr Delay (d2), s/veh	2.5	0.0	0.7	0.1	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.8	0.1	0.0	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.2	0.0	8.4	6.4	9.7	9.3
LnGrp LOS	B		A	A	A	A
Approach Vol, veh/h	301		457			478
Approach Delay, s/veh	13.2		8.1			9.3
Approach LOS	B		A			A

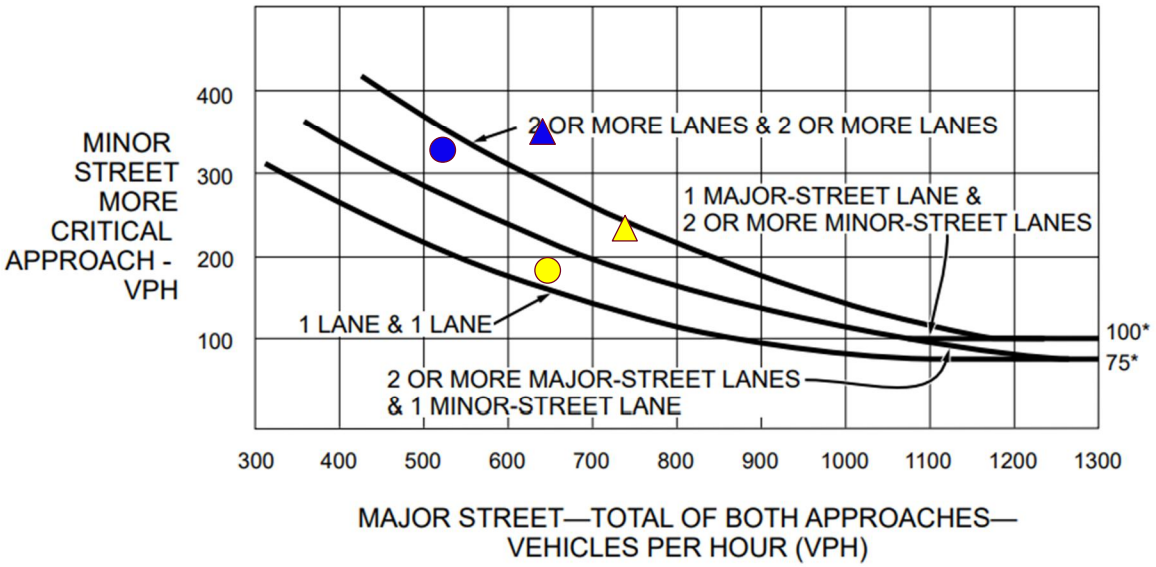
Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	17.1				17.1	13.0
Change Period (Y+Rc), s	6.0				6.0	6.0
Max Green Setting (Gmax), s	47.0				47.0	31.0
Max Q Clear Time (g_c+I1), s	7.0				8.4	6.8
Green Ext Time (p_c), s	2.3				2.7	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	9.8
HCM 7th LOS	A

Appendix G: Signal Warrant Analysis

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

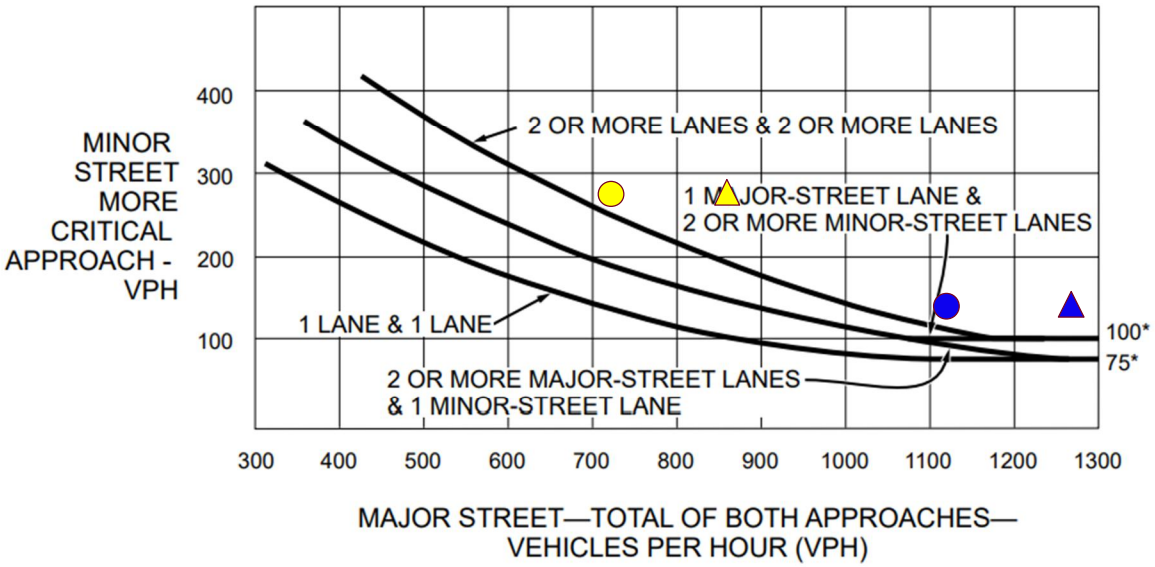
Signal Warrant Analysis – 222nd Street & I-70 EB Ramps

Previous Site Plan

Peak Hour	Major Street Volume	Minor Street Higher Volume Approach	Signal Warranted
● Opening Year Build Conditions			
● AM	529	321	YES
PM	637	187	NO
▲ Future Year Build Conditions			
▲ AM	641	342	YES
PM	751	232	YES

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

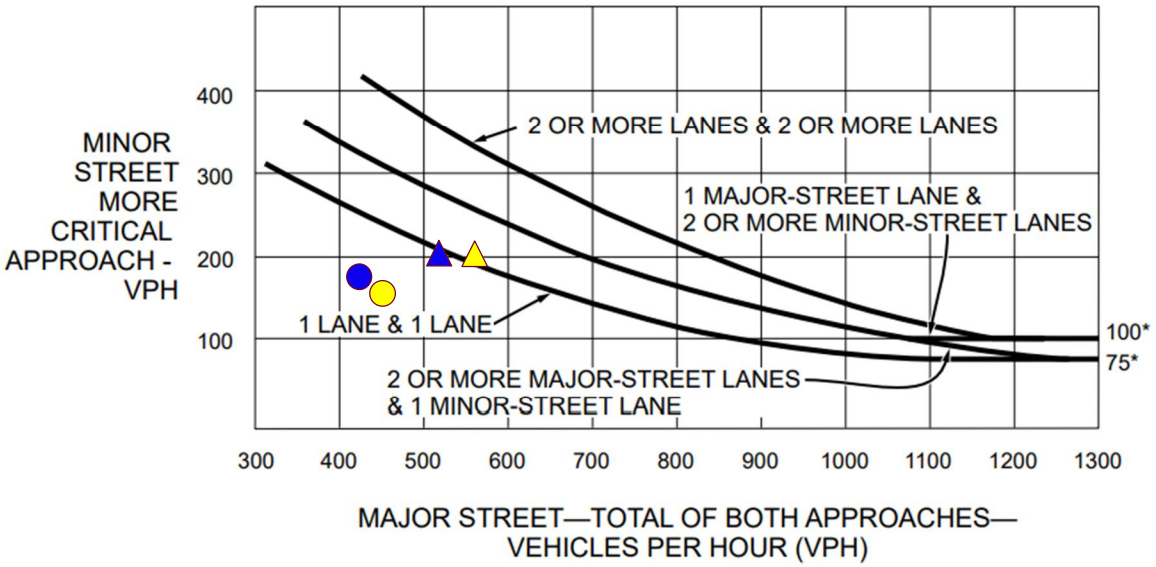
Signal Warrant Analysis – 222nd Street & Access B

Previous Site Plan

Peak Hour	Major Street Volume	Minor Street Higher Volume Approach	Signal Warranted
● Opening Year Build Conditions			
● AM	1121	139	YES
PM	724	276	YES
▲ Future Year Build Conditions			
△ AM	1266	139	YES
PM	860	276	YES

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

Signal Warrant Analysis – 222nd Street & I-70 EB Ramps

Current Site Plan

Peak Hour	Major Street Volume	Minor Street Higher Volume Approach	Signal Warranted
Opening Year Build Conditions			
● AM	418	180	NO
● PM	454	159	NO
Future Year Build Conditions			
▲ AM	530	201	NO
△ PM	568	204	NO

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

Signal Warrant Analysis – 222nd Street & Access B

Current Site Plan

Peak Hour	Major Street Volume	Minor Street Higher Volume Approach	Signal Warranted
Opening Year Build Conditions			
● AM	675	44	NO
● PM	520	88	NO
Future Year Build Conditions			
▲ AM	820	44	NO
△ PM	656	88	NO