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MEMORANDUM

TO: Christian Peterson, Business Development Director, Cedar Falls Building Systems, Inc.

FROM: Josh Woller, PE (Lic. WI, IL, IN, MI)

DATE: February 7, 2023

RE: Highway T Property, LLC Traffic Impact Analysis
SEH No. 169074 14.00

Highway T Property, LLC is proposing to develop an approximately 145-acre site located in the SW quadrant of the CTH T & 20th Avenue intersection. This land has been recently annexed into the City of Eau Claire.

No specific end users have been identified for lots 1-6 and no timeline has been identified for full build. For the purpose of this study, it is assumed that all lots will be built out in 2023. The following is a summary of land uses:

- Lot 1 (3.63 acres) – Gas Station / Convenience Store
- Lot 2 (3.72 acres) – High Turnover (Sit-Down) Restaurant
- Lot 3 (3.95 acres) – Hotel assumed to have 100 rooms
- Lot 4 (3.18 acres) – Building Materials / Lumber Store
- Lot 5 (3.01 acres) – Hardware / Paint Store
- Lot 6 (3.03 acres) – Automobile Parts Sales
- Lot 7 (9.51 acres) – Event Center
- Lot 8 (91.68 acres) – Entertainment Venue / Secondary Event Center
- Lot 9 (23.64 acres) – Utilized as bus loading zone

The proposed development will have six (6) access points along 20th Avenue. The eastern most access will be a future public street that will provide access to Lots 1 through 6 and the eastern portion of Lot 8. The remaining access points will be driveways that service Lots 7 through 9. In addition, an emergency ingress/egress will be created between Lots 3 and 4 that will connect the proposed public street to CTH T. This access will only be used for large scale events that are outside of the scope of this study. The City of Eau Claire has developed plans to connect the future public street to 10th Street. Construction of this connection is expected to occur within the next two years. See Figure 1 – 'Site Plan' for an overview of the proposed development.

As part of the development and permitting process, the City of Eau Claire has requested a traffic impact analysis to be conducted to determine the impacts the new development will have on the adjacent roadway network. Short Elliott Hendrickson, Inc (SEH) conducted a traffic impact analysis to identify existing traffic volumes on the adjacent street system, the traffic expected to be generated by the proposed development, and the operational impacts on the local roadway network.

This memorandum documents the procedures, findings, and conclusions of the traffic impact analysis.

Study Area / Data Collection
The traffic study area is along CTH T, 10th Avenue, and 20th Avenue. SEH completed AM and PM peak hour turning movement traffic counts, utilizing video camera equipment, at the following stop-controlled intersections that are located adjacent to the proposed development:

- CTH T & 10th Avenue
- CTH T & 20th Avenue

The overall study analyzes six (6) intersections:

- Node #1 – CTH T & 10th Avenue
- Node #2 – CTH T & 20th Avenue
- Node #3 – 10th Avenue & Future Road
- Node #4 – 20th Avenue & Future Road
- Node #5 – 20th Avenue & Eastern Driveway
- Node #6 – 20th Avenue & Western Driveway

The study area intersections were analyzed for the AM and PM peak traffic periods. Based on traffic counts conducted by SEH on Thursday, August 18, 2022, the weekday AM peak hour was identified as 7:00am to 8:00am and the weekday PM peak traffic hour was identified as 4:30 pm to 5:30 pm. The existing traffic volumes for the study area are included with Attachment A.

There is currently no pedestrian facilities or public transportation facilities within the vicinity of the project.

Evaluation of Existing Conditions
The study area intersections were analyzed using procedures set forth in the *Highway Capacity Manual 6th Edition (HCM)*. Level of service (LOS) is the metric by which roadway operations are defined based on the delay/congestion experienced by users of the facility. LOS ranges from LOS A, little to no delay/congestion, to LOS F, significant delay/congestion. The City of Eau Claire intends to maintain LOS C or better, where practical, during peak hour operations. Descriptions of the various levels of service are as follows:

- *LOS A* is the highest level of service that can be achieved. Under this condition, intersection approaches appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation. At signalized and unsignalized intersections, average delays are less than 10 seconds.
- *LOS B* represents stable operation. At signalized intersections, average vehicle delays are 10 to 20 seconds. At unsignalized intersections, average delays are 10 to 15 seconds.
- *LOS C* still represents stable operation, but periodic backups of a few vehicles may develop behind turning vehicles. Most drivers begin to feel restricted, but not objectionably so. At signalized intersections, average vehicle delays are 20 to 35 seconds. At unsignalized intersections, average delays are 15 to 25 seconds.
- *LOS D* represents increasing traffic restrictions as the intersection approaches instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but periodic clearance of long lines occurs, thus preventing excessive backups. At signalized intersections, average vehicle delays are 35 to 55 seconds. At unsignalized intersections, average delays are 25 to 35 seconds.
- *LOS E* represents the capacity of the intersection. At signalized intersections, average vehicle delays are 55 to 80 seconds. At unsignalized intersections, average delays are 35 to 50 seconds.

- *LOS F* represents jammed conditions where the intersection is over capacity and acceptable gaps for unsignalized intersections in the mainline traffic flow are minimal. At signalized intersections, average vehicle delays exceed 80 seconds. At unsignalized intersections, average delays exceed 50 seconds.

The existing traffic operations capacity analysis is based on the existing geometrics and existing traffic control. Table 1 summarizes the weekday AM and PM peak hour traffic operating conditions for the existing background traffic. Table 2 summarizes the weekday AM and PM peak hour 95th percentile queues for the existing background traffic. Synchro Version 11, HCM outputs are included in Attachment B.

Table 1
Existing Conditions LOS, by Movement

Intersection	Traffic Control	Peak Hour	Level of Service											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH T & 10th Avenue	Two-way Strop Control	AM	C			C			A	A		A	B	
		PM	D			D			A	A		A	A	
CTH T & 20th Avenue	Two-way Strop Control	AM	B			C			A	A		A	A	
		PM	C			C			A	A		A	A	

All the intersection movements at the CTH T & 20th Avenue intersection operate acceptably with LOS C or better during the AM and PM peak hours. However, the EB and WB approaches of CTH T & 10th Avenue intersection operate at LOS D during the PM peak under existing traffic volumes.

Table 2
Existing Conditions 95th Percentile Queues, by Movement

Intersection	Traffic Control	Peak Hour	95th Percentile Queues (Feet)											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH T & 10th Avenue	Two-way Strop Control	AM	15			20			0	0	0	0	0	0
		PM	30			35			0	0	0	5	0	0
CTH T & 20th Avenue	Two-way Strop Control	AM	5			5			0	0	0	0	0	0
		PM	5			5			0	0	0	0	0	0

No existing queues extend beyond 35 feet. No blocking of intersections or driveways is shown.

Site Traffic Forecasting
To address any potential future traffic impacts at the study area intersections, it is necessary to identify the hourly volume of traffic generated by the anticipated development. The traffic volumes expected to be generated are based on the size and type of the proposed use and on trip rates as published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition*.

Trip Generation
Expected peak hour trips were determined by using the *ITE Trip Generation Manual 11th Edition*. Based on the proposed development.

During a typical weekday morning peak hour, the development is anticipated to generate 695 trips (490 entering / 205 exiting). Of those trips, 50 are expected to be pass-by trips (discussed below), resulting in 645 new trips during the weekday AM peak. During a typical weekday PM peak hour, the development is anticipated to generate 840 (300 entering / 540 exiting). Of those trips, 50 are expected to be pass-by trips, resulting in 790 new trips during the weekday PM peak. A complete summary of trip generation data can be found in Attachment 1.

Mode Split
The development area currently has no pedestrian accommodations and is in a rural area. Given this, no reduction in the number of vehicle trips to include walking and bicycle trips was applied.

Linked and Pass-by Trip Traffic
The proposed development will have linked (internal) trips because of the varying site uses. Based on ITE and WisDOT guidance a 20 percent linked trip reduction was applied to the hotel land use and 5 percent was applied to each of the Building Materials, Hardware/Paint Store, and Automobile Parts Sales.

In addition, the proposed site will include pass-by trips due to the site's proximity to CTH T. Pass-by trips occur when motorists already on the highway system stop at the development site prior to continuing their intended route. Based on the surrounding roadway network, it is assumed that approximately 10 percent of restaurant trips and 15 percent of Gasoline/Service Station trips are considered pass-by trips. This value corresponds to approximately 10 percent of the existing daily traffic for the adjacent roadway network. Furthermore, this value corresponds with the current ITE and WisDOT recommended practice of pass-by trips not exceeding 10 percent of adjacent roadway volumes.

Trip Distribution
Trip distribution was based on the existing traffic patterns, the proposed land use, and the location of population centers. Trips were assigned to the study area roadways in accordance with the following trip distribution:

- 3% to/from west on 20th Avenue
- 2% to/from east on 20th Avenue
- 45% to/from north on CTH T
- 40% to/from south on CTH T
    - 30% via 20th Avenue
    - 10% via 10th Avenue
- 10% to/from west on 10th Avenue

Trip Assignment
Traffic generated by the Highway T Property, LLC development was assigned to the existing roadway system based on the trip generation and distribution above. New development trips linked trips, and pass-by trips were assigned and reflect the above directional distributions accordingly by alternative. The new development trips, linked trips, and pass-by trips are shown in Figures 3 through 6. The existing traffic volumes, site generated traffic, and pass-by traffic were added together to generate the build total traffic volumes, which is shown in Figure 7.

Evaluation of Proposed Conditions

Existing Geometry

The total build traffic (Highway T Property, LLC) peak hour operating, and queuing conditions based on the existing transportation system are summarized in Tables 4 and 5 below. The total traffic analysis was completed using existing intersection configurations and traffic control. All future roadway and driveway connections were modeled with a single shared lane for each direction of travel with the minor approaches yielding to the main roadway.

As can been seen in Table 4 with full build out the side street operations or CTH T & 10th Avenue and CTH T & 20th Avenue fall to LOS F during certain times of the day. The mainline (CTH T) approaches continue to operate at LOS B or better. All proposed intersection connections operate acceptably with single lanes in each direction of travel. Synchro operational output reports are included in Attachment B.

Table 3
Existing Conditions (Build Traffic) LOS, by Movement – Alternative 1

Intersection	Traffic Control	Peak Hour	Level of Service											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH T & 10th Avenue	Two-way Strop Control	AM	C			E			A	A		A	A	
		PM	F			F			A	A		A	A	
CTH T & 20th Avenue	Two-way Strop Control	AM	F			E			B	A		A	A	
		PM	F			F			A	A		A	A	
10th Avenue & Future Roadway	One-way Strop Control	AM	A	A		A			--			A		
		PM	A	A		A			''			A		
20th Avenue & Future Roadway	One-way Strop Control	AM	A			A	A		A			--		
		PM	A			A	A		B			--		
20th Avenue & East Driveway	One-way Strop Control	AM	A			A	A		A			--		
		PM	A			A	A		A			--		
20th Avenue & West Driveway	One-way Strop Control	AM	A			A	A		A			--		
		PM	A			A	A		A			--		

Table 4
Existing Conditions (Build Traffic) 95th Percentile Queues – Alternative 1

Intersection	Traffic Control	Peak Hour	95th Percentile Queues (Feet)											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH T & 10th Avenue	Two-way Strop Control	AM		25			45		5	0		0	0	
		PM		120			100		5	0		5	0	
CTH T & 20th Avenue	Two-way Strop Control	AM		220			30		20	0		0	0	
		PM		>500			25		15	0		0	0	
10th Avenue & Future Roadway	One-way Strop Control	AM		5			0			--			5	
		PM		5			0			--			15	
20th Avenue & Future Roadway	One-way Strop Control	AM		0			10			15			--	
		PM		0			20			30			--	
20th Avenue & East Driveway	One-way Strop Control	AM		0			10			0			--	
		PM		0			15			0			--	
20th Avenue & West Driveway	One-way Strop Control	AM		0			10			0			--	
		PM		0			15			0			--	

A queuing analysis was completed to determine if any potential blocking conditions would occur during the peak hour periods. It is anticipated the NEB queues at CTH T & 20th Avenue will extend back and block the future roadway connection. All other queues are anticipated to be less than 150 feet.

Proposed Geometry

Due to unacceptable operations at the CTH T & 10th Avenue and CTH T & 20th Avenue intersections an improvement analysis was completed to determine needed mitigation efforts. In order to achieve acceptable operations changes in geometry and traffic control were needed at both intersections. Each intersection was modeled under traffic signal control and roundabout control. Following is a description of the geometry needed under each traffic control type.

CTH T & 10th Avenue (these improvements will also improve the existing traffic operations to acceptable LOS)

- Traffic Signal Control
  - EB – Shared left/through/right lane
  - WB – Shared left/through/right lane
  - NB – Designated left turn lane and a shared through/right lane
  - SB – Designated left turn lane and a shared through/right lane
- Roundabout
  - Single lane approach on each approach

CTH T & 20th Avenue

- Traffic Signal Control
  - EB – Designated left turn lane, designated through lane, designated right turn lane
  - WB – Shared left/through/right lane
  - NB – Designated left turn lane and a shared through/right lane
  - SB – Designated left turn lane, designated through lane, designated right turn lane
- Roundabout
  - Single lane approach on each approach

A capacity analysis was also performed for at both intersections for each traffic control alternative. Under traffic signal control all movements operate at LOS C or higher. Under roundabout control all approaches operate at LOS B or higher. Synchro operational output reports are included in Attachment C.

Table 5
Proposed Conditions (Build Traffic) LOS, by Movement

Intersection	Traffic Control	Peak Hour	Level of Service											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH T & 10th Avenue	Traffic Signal Control	AM	B			B			A	B		A	B	
		PM	C			B			B	B		A	B	
CTH T & 10th Avenue	Roundabout	AM	A			A			A			A		
		PM	A			A			A			A		
CTH T & 20th Avenue	Traffic Signal Control	AM	C	C	C	C			A	A		A	B	B
		PM	C	C	C	C			B	B		B	B	B
CTH T & 20th Avenue	Roundabout	AM	A			A			A			B		
		PM	B			A			B			A		

Table 6
Proposed Conditions (Build Traffic) 95th Percentile Queues, by Movement

Intersection	Traffic Control	Peak Hour	95th Percentile Queues (Feet)											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH T & 10th Avenue	Traffic Signal Control	AM	15			15			10	45		5	105	
		PM	35			15			5	105		5	115	
CTH T & 10th Avenue	Roundabout	AM	10			10			40			65		
		PM	20			15			80			75		
CTH T & 20th Avenue	Traffic Signal Control	AM	40	5	25	15			20	15		0	100	50
		PM	135	10	90	10			25	150		0	110	45
CTH T & 20th Avenue	Roundabout	AM	25			5			35			125		
		PM	95			5			135			65		

A queuing analysis was completed to determine if any potential blocking conditions would occur during the peak hour periods. No queues are anticipated to extend past 150 feet in either the traffic signal or roundabout alternative.

Evaluation of Proposed Conditions with 2023 Improvements (2033 Volumes)

Traffic Forecasting
In order to forecast existing volumes to 2033 volumes a 2 percent growth rate was applied to all traffic on CTH T. All traffic on 10th Avenue and 20th Avenue had a 0.5 percent growth rate applied. A summary of 2033 volumes can be seen in Figure 8.

Offsite Development Traffic
As part of the Initial Review the City of Eau Claire identified industrial and residential developments are planned on 10th Avenue west of Future Street connection. Trip generation and distribution data for these developments were provided by the City of Eau Claire. The summary table provided by the City of Eau Claire can be found in Attachment A. In addition, Figure 9 provides a visual summary of trips that will pass through the study intersections.

A complete summary of 2033 background traffic can be found in Figure 10. Figure 11 is a summary of 2033 Build traffic which is 2033 background traffic plus Highway T Property, LLC trips. Since all Highway T Property, LLC lots are anticipated to be developed prior to 2033 all analysis scenarios evaluate 2033 build traffic.

As can be seen in Table 7 the CTH T &10th Avenue intersection does not function acceptably as a traffic signal under 2033 build conditions with the 2023 geometric improvements. Additional turn lanes would be required on the southbound and eastbound approaches. The intersection operates at LOS D or better for all movements under roundabout control. The CTH T & 20th Avenue intersection operates at LOS D or better under traffic signal control, however, does not function acceptably as a single lane roundabout. All proposed connection continues to operate acceptably as single lane approaches.

Table 7
2023 Improved Geometry (2033 Build Traffic) LOS, by Movement

Intersection	Traffic Control	Peak Hour	Level of Service											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH T & 10th Avenue	Two-way Strop Control	AM	D			C			D	B		A	F	
		PM	F			C			C	C		B	F	
CTH T & 20th Avenue	Two-way Strop Control	AM	C	C	C	C			B	A		A	C	B
		PM	C	C	C	C			B	D		B	C	B
10th Avenue & Future Roadway	One-way Strop Control	AM	A	A		A			--			C		
		PM	A	A		A			''			C		
20th Avenue & Future Roadway	One-way Strop Control	AM	A			A	A		B			--		
		PM	A			A	A		A			--		
20th Avenue & East Driveway	One-way Strop Control	AM	A			A	A		A			--		
		PM	A			A	A		A			--		
20th Avenue & West Driveway	One-way Strop Control	AM	A			A	A		A			--		
		PM	A			A	A		A			--		
CTH T & 10th Avenue	Roundabout	AM	B			A			B			D		
		PM	A			B			D			C		
CTH T & 20th Avenue	Roundabout	AM	C			B			F			B		
		PM	A			A			A			D		

Table 8
2023 Improved Geometry (2033 Build Traffic) 95th Percentile Queues

Intersection	Traffic Control	Peak Hour	95th Percentile Queues (Feet)											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH T & 10th Avenue	Two-way Strop Control	AM	135			30			80	90		5	670	
		PM	>500			30			50	310		5	>500	
CTH T & 20th Avenue	Two-way Strop Control	AM	40	5	25	15			25	30		0	250	50
		PM	135	10	90	10			25	450		0	220	45
10th Avenue & Future Roadway	One-way Strop Control	AM	5			0			--			15		
		PM	5			0			--			25		
20th Avenue & Future Roadway	One-way Strop Control	AM	0			10			15			--		
		PM	0			20			30			--		
20th Avenue & East Driveway	One-way Strop Control	AM	0			15			0			--		
		PM	0			0			15			--		
20th Avenue & West Driveway	One-way Strop Control	AM	0			10			0			--		
		PM	0			0			15			--		
CTH T & 10th Avenue	Roundabout	AM	50			15			100			325		
		PM	55			15			360			205		
CTH T & 20th Avenue	Roundabout	AM	35			5			60			390		
		PM	155			5			555			135		

Similar to the operation's above queues for the CTH T & 10th Avenue intersection exceed 500 fee on certain approaches under traffic signal control. Similarly, the CTH T & 20th Avenue intersection exceeds 500 feet as roundabout control.

CTH T Expansion
Chippewa County and Eau Claire County are currently evaluating the expansion of CTH T. This is anticipated to be constructed in approximately 2033, if not sooner. Due to unacceptable operations on certain movements at the intersections of CTH T & 10th Avenue and CTH T & 20th Avenue were evaluated with this potential capacity expansion.

In addition to the extra through lane on CTH T the following additional improvements are needed at the intersection of CTH T & 10th Avenue:

- Traffic Signal Control
  - EB – Add designated left turn lane
  - WB – No change
  - NB – Add additional through lane
  - SB – Add designated right turn lane and additional through lane
- Roundabout
  - EB – Add right turn bypass lane

Based on the expansion of CTH T and the additional improvements noted above both CTH T & 10th Avenue and CTH T & 20th Avenue will operate acceptably as either a roundabout or a traffic signal. All movements operate at LOS C or higher.

Table 9
CTH T Expansion (2033 Build Traffic) LOS, by Movement

Intersection	Traffic Control	Peak Hour	Level of Service											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH T & 10th Avenue	Traffic Signal Control	AM	B	B		C			B	B		A	B	B
		PM	B	C		C			B	B		B	B	B
CTH T & 10th Avenue	Roundabout	AM	B		A	A			A			A		
		PM	C		A	B			A			A		
CTH T & 20th Avenue	Traffic Signal Control	AM	C	C	C	C			A	A		A	B	B
		PM	C	C	C	C			B	B		A	B	B
CTH T & 20th Avenue	Roundabout	AM	B			A			A			A		
		PM	C			B			A			A		

Table 10
CTH T Expansion (2033 Build Traffic) 95th Percentile Queues, by Movement

Intersection	Traffic Control	Peak Hour	95th Percentile Queues (Feet)											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH T & 10th Avenue	Traffic Signal Control	AM	25	30		20			30	25		5	60	50
		PM	65	90		25			10	70		5	75	35
CTH T & 10th Avenue	Roundabout	AM	50		0	15			35			65		
		PM	105		0	15			65			50		
CTH T & 20th Avenue	Traffic Signal Control	AM	40	5	25	15			20	15		0	75	50
		PM	135	10	90	10			25	120		0	80	45
CTH T & 20th Avenue	Roundabout	AM	35			5			25			65		
		PM	160			5			80			40		

Minimal queuing is anticipated with either alternative. No queues are expected to extend past 200 feet.

Conclusion
Based on the analysis conducted above improvements to the existing roadway facilities are needed to accommodate existing traffic:

2023 Existing
CTH T & 10th Avenue (It should be noted that existing volumes are unlikely to meet traffic signal warrants)

- Traffic Signal Control
  - EB – Shared left/through/right lane
  - WB – Shared left/through/right lane
  - NB – Designated left turn lane and a shared through/right lane
  - SB – Designated left turn lane and a shared through/right lane

OR

- Roundabout
  - Single lane approach on each approach

The following improvements are needed to accommodate full build traffic typical daily operating conditions. It should be noted that the event center was included in the typical daily operating analysis however it is unlikely to be utilized daily, and due the anticipated use it is unlikely that the peak periods for the Event Center will correspond with the typical daily AM and PM peaks. The following improvements are needed to provide acceptable traffic operations for normal daily operating conditions:

2023 Build
CTH T & 10th Avenue
No additional improvements needed beyond those identified for Existing Conditions.

CTH T & 20th Avenue

- Traffic Signal Control
  - EB – Designated left turn lane, designated through lane, designated right turn lane
  - WB – Shared left/through/right lane
  - NB – Designated left turn lane and a shared through/right lane
  - SB – Designated left turn lane, designated through lane, designated right turn lane

OR

- Roundabout
  - Single lane approach on each approach

All future driveway and street connections will operate acceptably as single shared lane approaches. The future connections should be stop controlled.

2033 Build
The following additional improvements are needed to provide acceptable operations under 2033 Build traffic conditions:
CTH T

- Expand CTH T to 4-lanes

CTH T & 10th Avenue

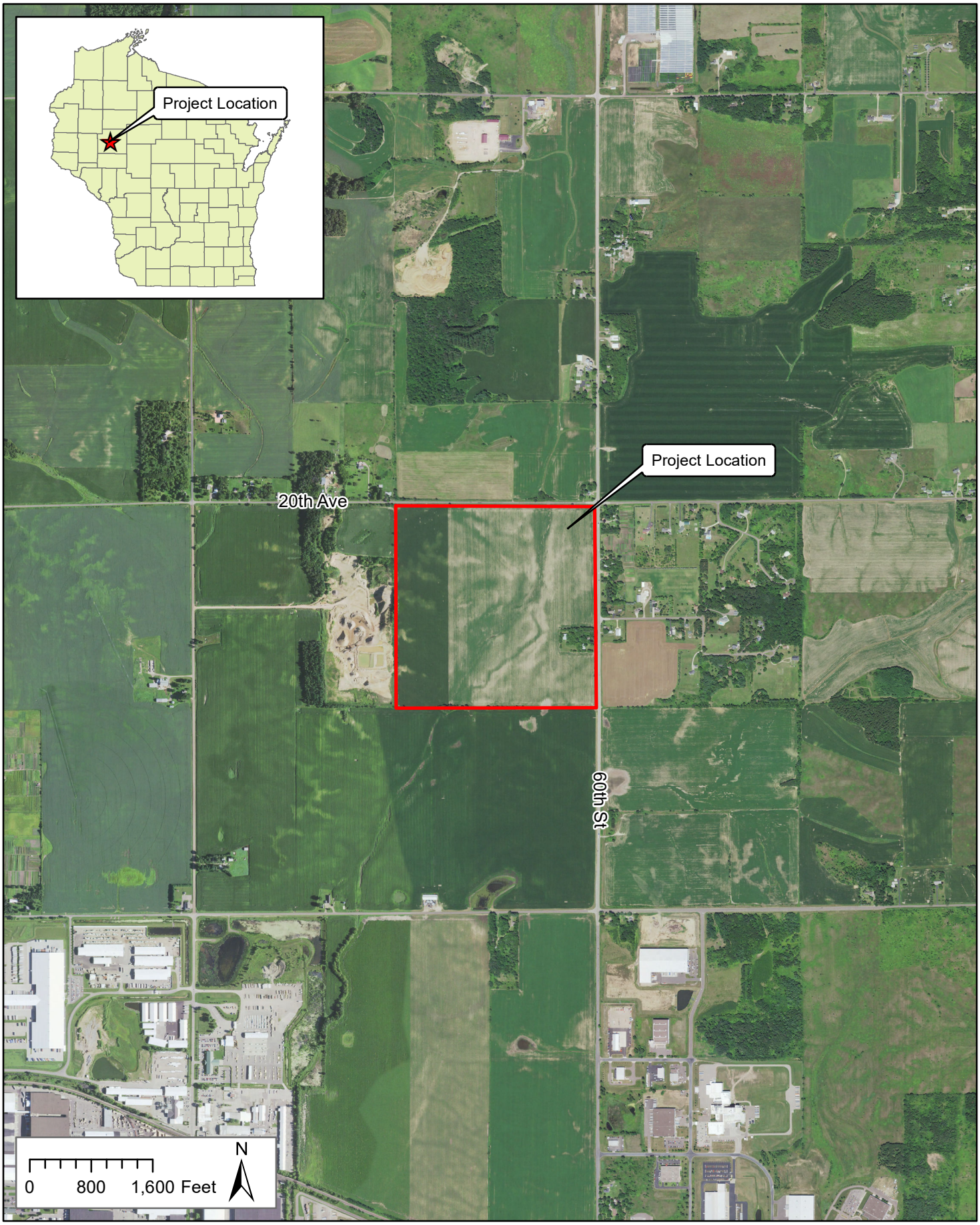
- Traffic Signal Control
  - EB – Add designated left turn lane
  - WB – No change
  - NB – No change
  - SB – Add designated right turn lane

OR

- Roundabout
  - EB – Add right turn bypass lane

No additional turn lane improvements are anticipated to be needed at the CTH T & 20th Avenue intersection.

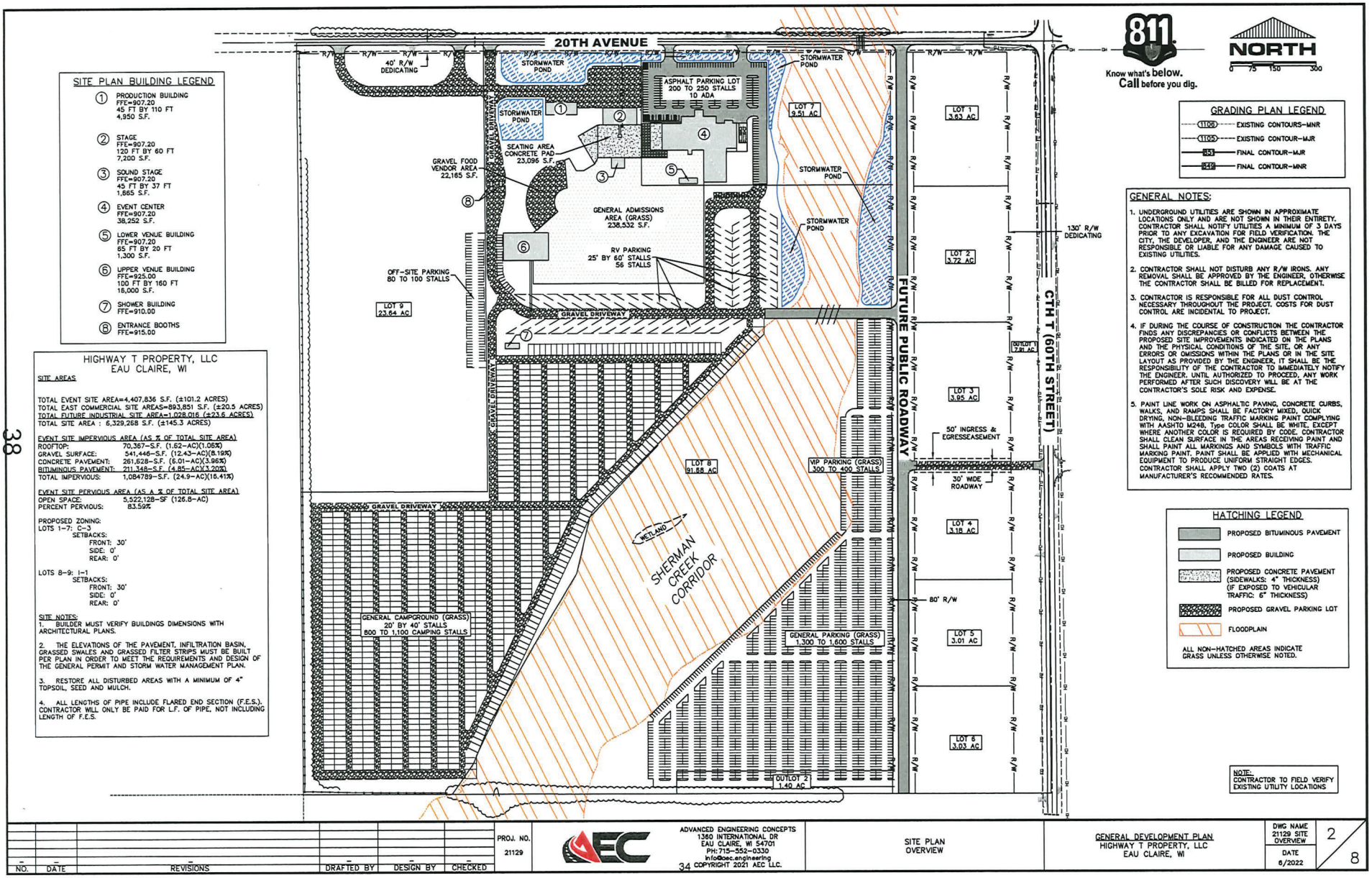
jmw
Attachments
Figure 1 – Project Location Map / Site Plan
Figure 2 – Existing Traffic Counts
Figure 3 – Total Driveway Trips
Figure 4 – Linked Trips
Figure 5 – Pass-by Trips
Figure 6 – Total New Trips
Figure 7 – 2023 Build Traffic
Figure 8 – 2033 Volumes
Figure 9 – Offsite Trips
Figure 10 – 2033 Background Traffic
Figure 11 – 2033 Build Traffic
Attachment A – Traffic Volume Exhibits
Attachment B – Synchro/SimTraffic Outputs



SEH
6808 Odana Road
Suite 200
Madison, WI 53719
(608) 620-6199

Project: CEDAR 169074
Print Date: 8/18/2022
Map by: Jgreen
Projection: WISCRS, Chippewa County (ft)
Source: WDNR, Chippewa Co.
Aerial Photo Year: 2020

Project Location Map
City of Eau Claire, Chippewa County, WI



SITE PLAN BUILDING LEGEND

1. PRODUCTION BUILDING
   FFE=907.20
   45 FT BY 110 FT
   4,950 S.F.
2. STAGE
   FFE=907.20
   120 FT BY 60 FT
   7,200 S.F.
3. SOUND STAGE
   FFE=907.20
   45 FT BY 37 FT
   1,665 S.F.
4. EVENT CENTER
   FFE=907.20
   38,252 S.F.
5. LOWER VENUE BUILDING
   FFE=907.20
   65 FT BY 20 FT
   1,300 S.F.
6. UPPER VENUE BUILDING
   FFE=925.00
   100 FT BY 160 FT
   16,000 S.F.
7. SHOWER BUILDING
   FFE=910.00
8. ENTRANCE BOOTHS
   FFE=915.00

HIGHWAY T PROPERTY, LLC
EAU CLAIRE, WI

SITE AREAS

TOTAL EVENT SITE AREA=4,407,836 S.F. (±101.2 ACRES)
TOTAL EAST COMMERCIAL SITE AREAS=893,851 S.F. (±20.5 ACRES)
TOTAL FUTURE INDUSTRIAL SITE AREA=1,028,016 (±23.6 ACRES)
TOTAL SITE AREA : 6,329,268 S.F. (±145.3 ACRES)

EVENT SITE IMPERVIOUS AREA (AS % OF TOTAL SITE AREA)

ROOFTOP:	70,367-S.F. (1.62-AC)	(1.06%)
GRAVEL SURFACE:	541,446-S.F. (12.43-AC)	(8.19%)
CONCRETE PAVEMENT:	261,628-S.F. (6.01-AC)	(3.96%)
BITUMINOUS PAVEMENT:	211,348-S.F. (4.85-AC)	(3.20%)
TOTAL IMPERVIOUS:	1,084789-S.F. (24.9-AC)	(16.41%)

EVENT SITE PERVIOUS AREA (AS A % OF TOTAL SITE AREA)

OPEN SPACE:	5,522,128-SF (126.8-AC)
PERCENT PERVIOUS:	83.59%

PROPOSED ZONING:
LOTS 1-7: C-3
SETBACKS:
FRONT: 30'
SIDE: 0'
REAR: 0'

LOTS 8-9: I-1
SETBACKS:
FRONT: 30'
SIDE: 0'
REAR: 0'

SITE NOTES:
1. BUILDER MUST VERIFY BUILDINGS DIMENSIONS WITH ARCHITECTURAL PLANS.
2. THE ELEVATIONS OF THE PAVEMENT, INFILTRATION BASIN, GRASSED SWALES AND GRASSED FILTER STRIPS MUST BE BUILT PER PLAN IN ORDER TO MEET THE REQUIREMENTS AND DESIGN OF THE GENERAL PERMIT AND STORM WATER MANAGEMENT PLAN.
3. RESTORE ALL DISTURBED AREAS WITH A MINIMUM OF 4" TOPSOIL, SEED AND MULCH.
4. ALL LENGTHS OF PIPE INCLUDE FLARED END SECTION (F.E.S.). CONTRACTOR WILL ONLY BE PAID FOR L.F. OF PIPE, NOT INCLUDING LENGTH OF F.E.S.

GRADING PLAN LEGEND

- (1106) EXISTING CONTOURS-MNR
- (1105) EXISTING CONTOUR-MJR
- 851 FINAL CONTOUR-MJR
- 842 FINAL CONTOUR-MNR

GENERAL NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY AND ARE NOT SHOWN IN THEIR ENTIRETY. CONTRACTOR SHALL NOTIFY UTILITIES A MINIMUM OF 3 DAYS PRIOR TO ANY EXCAVATION FOR FIELD VERIFICATION. THE CITY, THE DEVELOPER, AND THE ENGINEER ARE NOT RESPONSIBLE OR LIABLE FOR ANY DAMAGE CAUSED TO EXISTING UTILITIES.
2. CONTRACTOR SHALL NOT DISTURB ANY R/W IRONS. ANY REMOVAL SHALL BE APPROVED BY THE ENGINEER, OTHERWISE THE CONTRACTOR SHALL BE BILLED FOR REPLACEMENT.
3. CONTRACTOR IS RESPONSIBLE FOR ALL DUST CONTROL NECESSARY THROUGHOUT THE PROJECT. COSTS FOR DUST CONTROL ARE INCIDENTAL TO PROJECT.
4. IF DURING THE COURSE OF CONSTRUCTION THE CONTRACTOR FINDS ANY DISCREPANCIES OR CONFLICTS BETWEEN THE PROPOSED SITE IMPROVEMENTS INDICATED ON THE PLANS AND THE PHYSICAL CONDITIONS OF THE SITE, OR ANY ERRORS OR OMISSIONS WITHIN THE PLANS OR IN THE SITE LAYOUT AS PROVIDED BY THE ENGINEER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMMEDIATELY NOTIFY THE ENGINEER. UNTIL AUTHORIZED TO PROCEED, ANY WORK PERFORMED AFTER SUCH DISCOVERY WILL BE AT THE CONTRACTOR'S SOLE RISK AND EXPENSE.
5. PAINT LINE WORK ON ASPHALTIC PAVING, CONCRETE CURBS, WALKS, AND RAMPS SHALL BE FACTORY MIXED, QUICK DRYING, NON-BLEEDING TRAFFIC MARKING PAINT COMPLYING WITH AASHTO M248, Type COLOR SHALL BE WHITE, EXCEPT WHERE ANOTHER COLOR IS REQUIRED BY CODE. CONTRACTOR SHALL CLEAN SURFACE IN THE AREAS RECEIVING PAINT AND SHALL PAINT ALL MARKINGS AND SYMBOLS WITH TRAFFIC MARKING PAINT. PAINT SHALL BE APPLIED WITH MECHANICAL EQUIPMENT TO PRODUCE UNIFORM STRAIGHT EDGES. CONTRACTOR SHALL APPLY TWO (2) COATS AT MANUFACTURER'S RECOMMENDED RATES.

HATCHING LEGEND

- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED BUILDING
- PROPOSED CONCRETE PAVEMENT (SIDEWALKS: 4" THICKNESS) (IF EXPOSED TO VEHICULAR TRAFFIC: 6" THICKNESS)
- PROPOSED GRAVEL PARKING LOT
- FLOODPLAIN

ALL NON-HATCHED AREAS INDICATE GRASS UNLESS OTHERWISE NOTED.

NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS

NO.	DATE	REVISIONS	DRAFTED BY	DESIGN BY	CHECKED

PROJ. NO. 21129

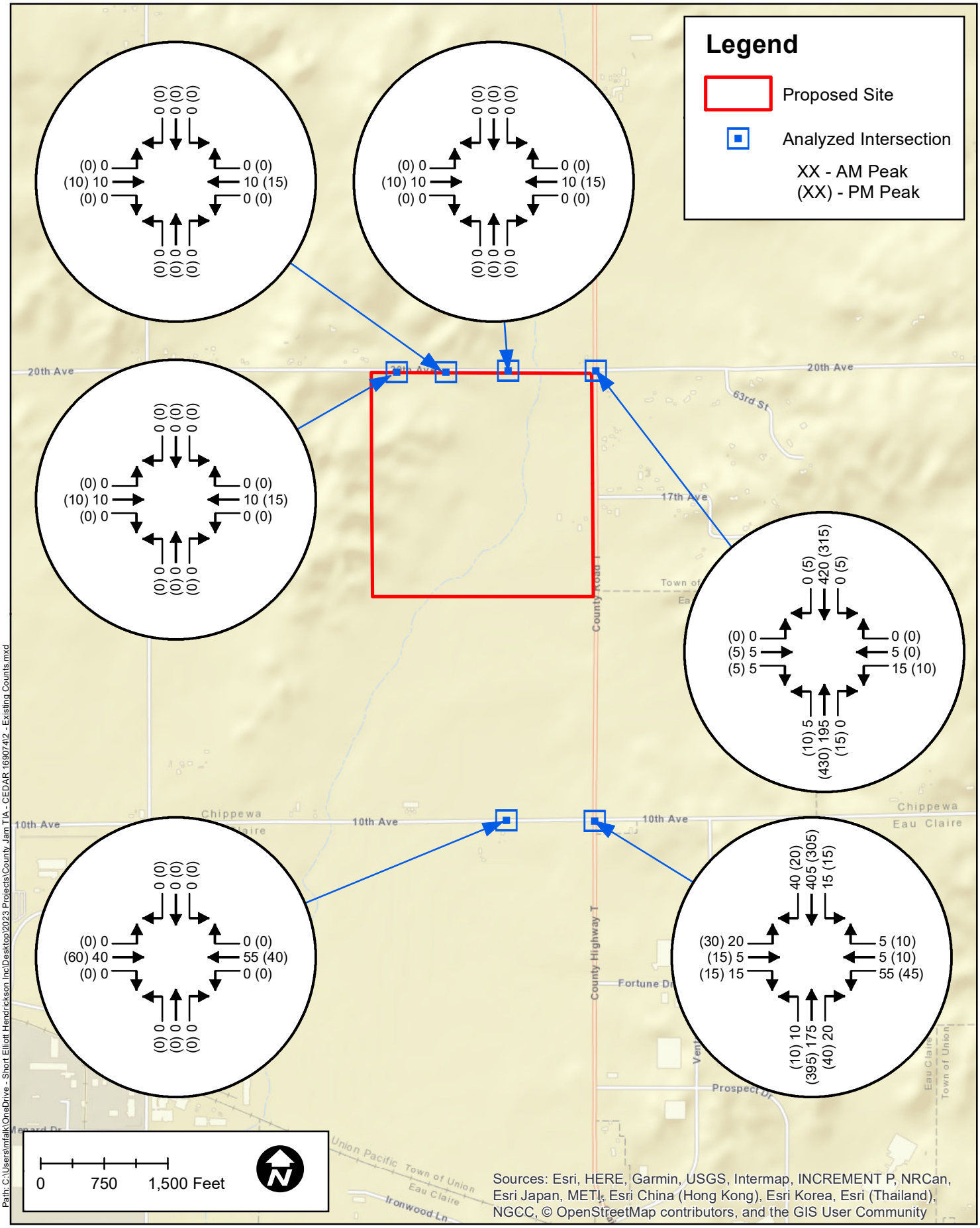
ADVANCED ENGINEERING CONCEPTS
1360 INTERNATIONAL DR
EAU CLAIRE, WI 54701
PH:715-552-0330
info@aec.engineering

SITE PLAN OVERVIEW

GENERAL DEVELOPMENT PLAN
HIGHWAY T PROPERTY, LLC
EAU CLAIRE, WI

DWG NAME 21129 SITE OVERVIEW
DATE 6/2022

2/8

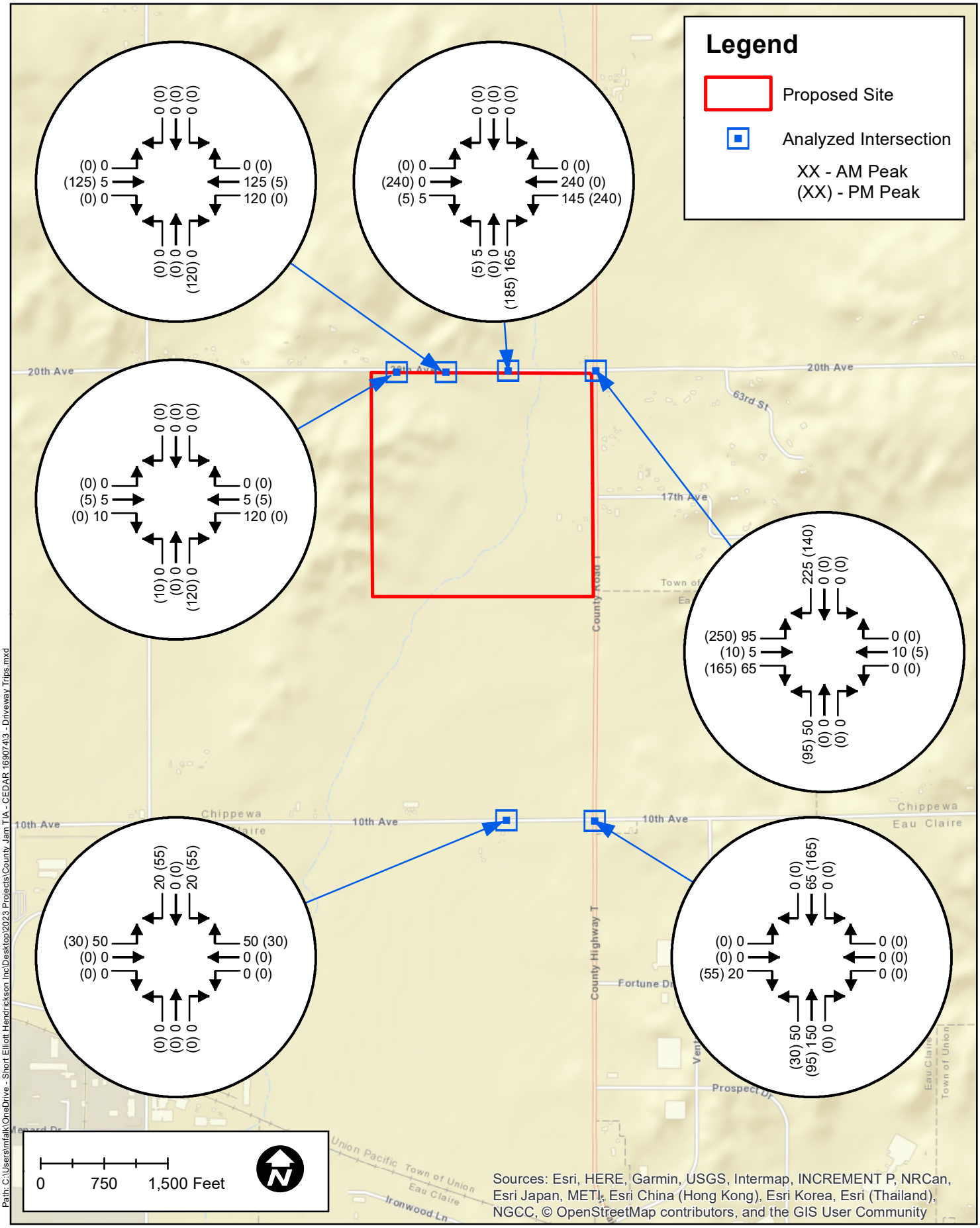


Path: C:\Users\mfalk\OneDrive - Short Elliott Hendrickson Inc\Desktop\2023 Projects\County Jam TIA - CEDAR 169074\2 - Existing Counts.mxd

SEH
6808 Odana Road
Suite 200
Madison, WI 53719
(608) 620-6199

Project: CEDAR 169074
Print Date: 1/30/2023
Map by: mfalk
Projection: WISCRS Chippewa County (ft)

Figure 2 - Existing Traffic Counts
Highway T Property, LLC. TIA
City of Eau Claire, Chippewa County, WI



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

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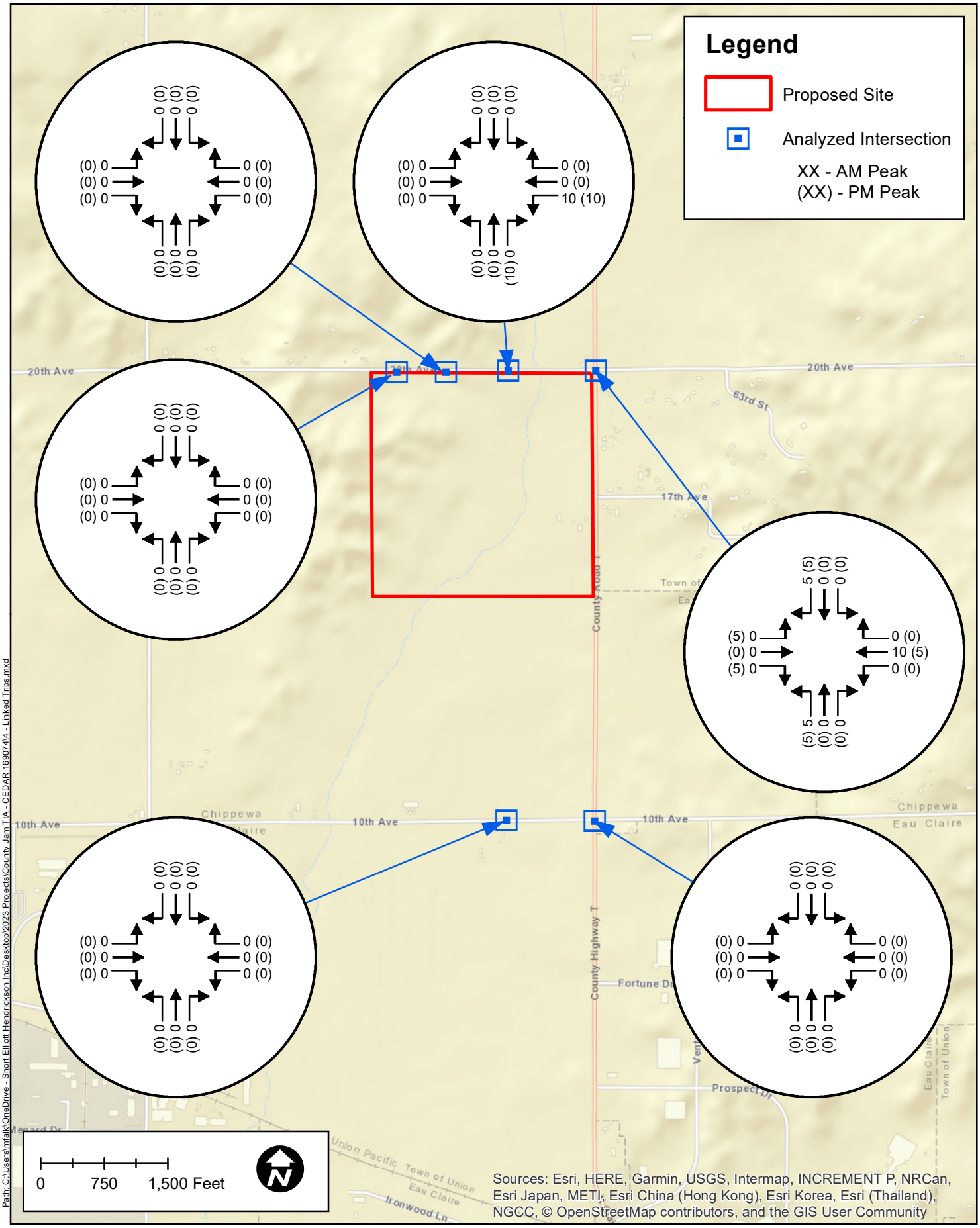
(608) 620-6199

Project: CEDAR 169074
Print Date: 1/30/2023
Map by: mfalk
Projection: WISCRS Chippewa County (ft)

Figure 3 - Total Driveway Trips
Highway T Property, LLC TIA
City of Eau Claire, Chippewa County, WI



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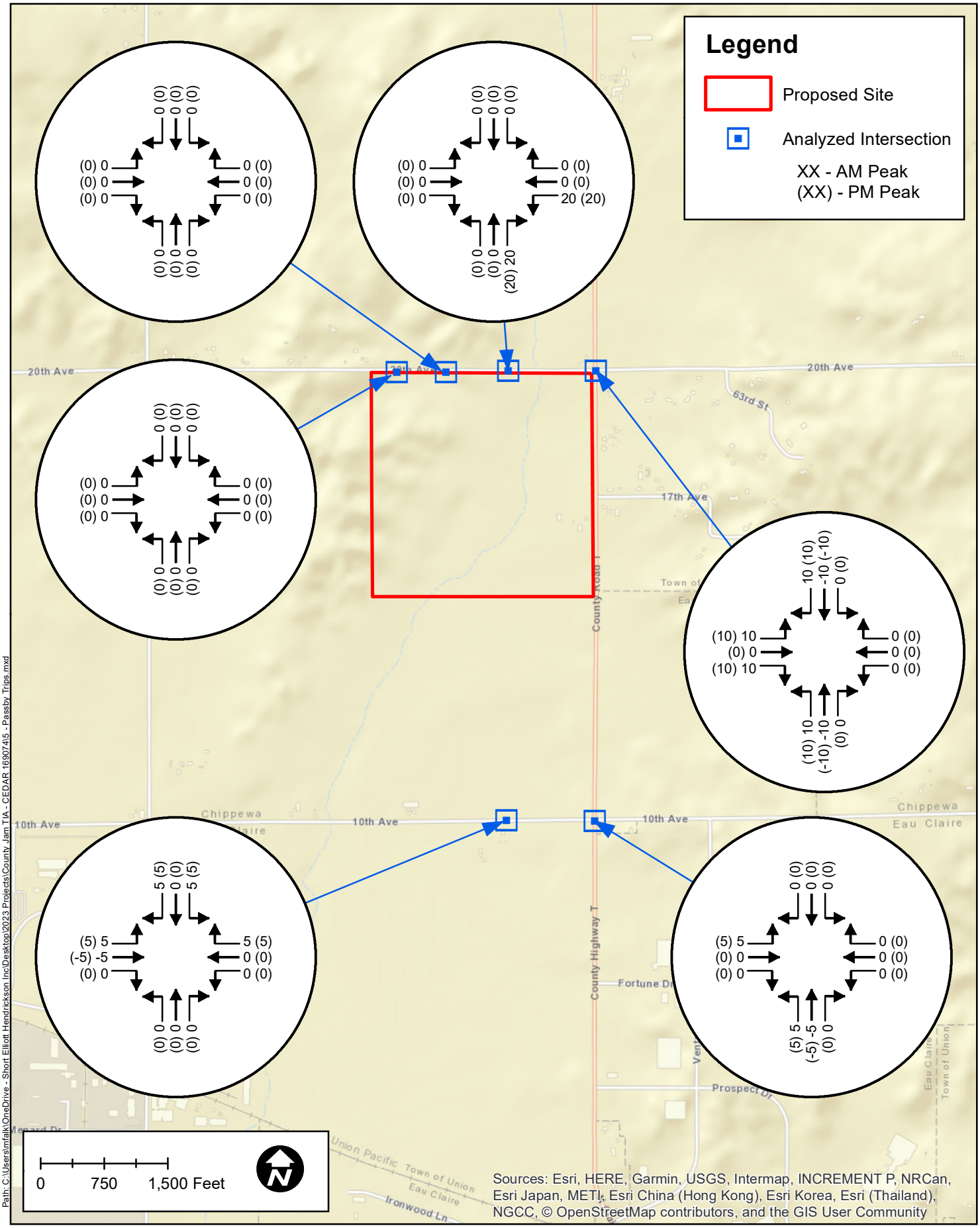
Print Date: 1/30/2023
Map by: mfalk
Projection: WISCRS Chippewa County (ft)

Figure 4 - Linked Trips
Highway T Property, LLC TIA
City of Eau Claire, Chippewa County, WI



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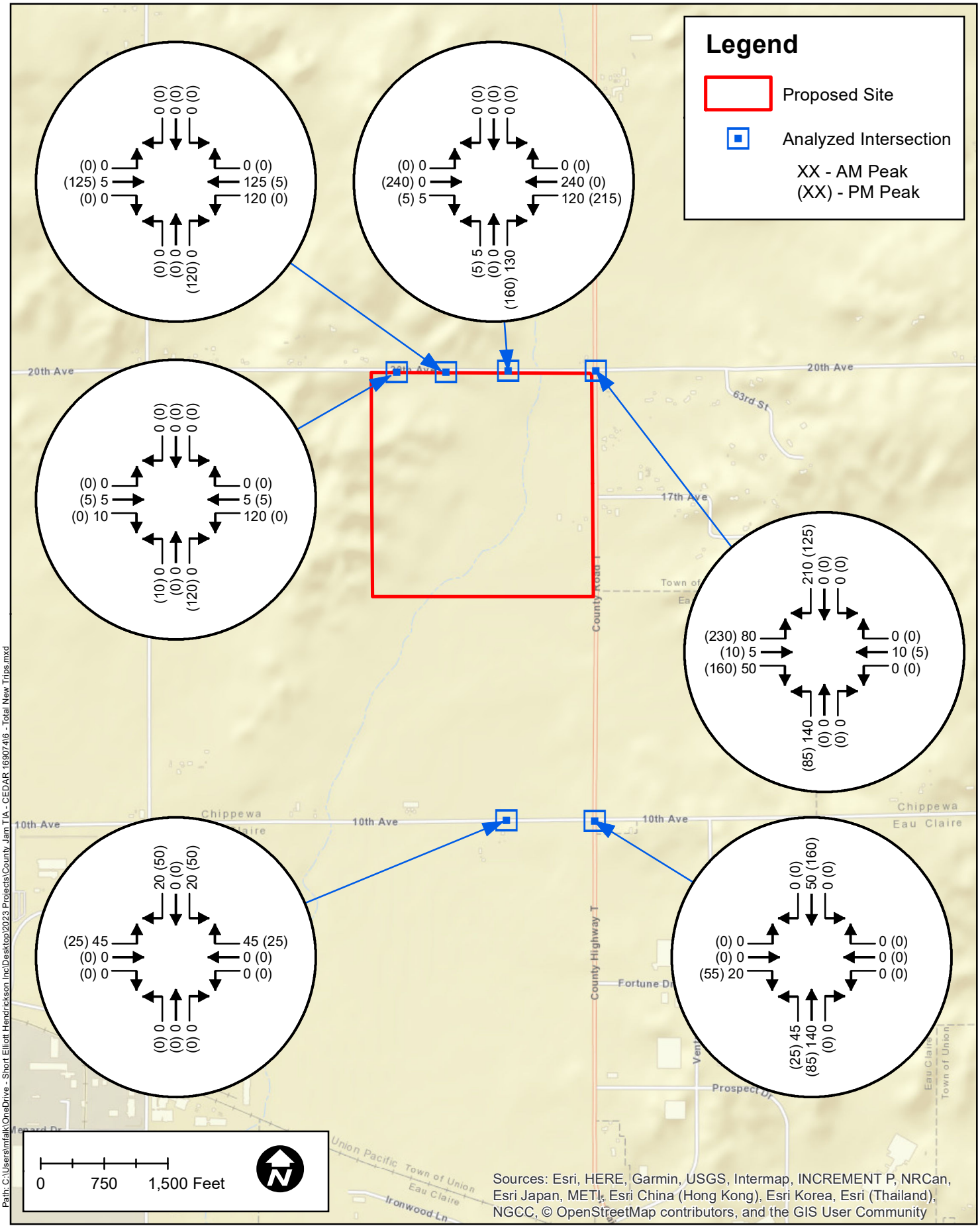
Project: CEDAR 169074
Print Date: 1/30/2023
Map by: mfalk
Projection: WISCRS Chippewa County (ft)

Figure 5 - Pass-by Trips
Highway T Property, LLC TIA
City of Eau Claire, Chippewa County, WI



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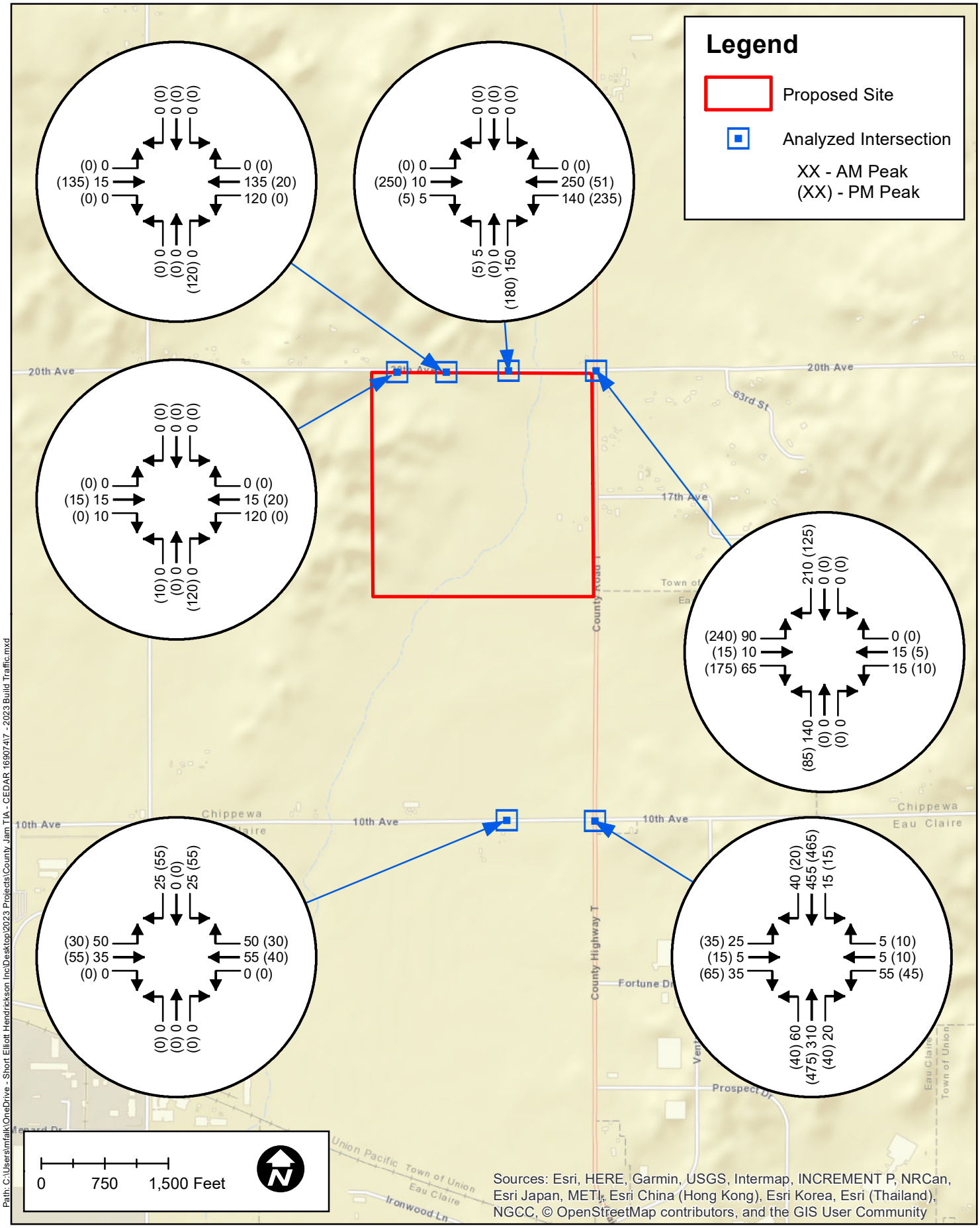
Project: CEDAR 169074
Print Date: 1/30/2023
Map by: mfalk
Projection: WISCRS Chippewa County (ft)

Figure 6 - Total New Trips
Highway T Property, LLC TIA
City of Eau Claire, Chippewa County, WI



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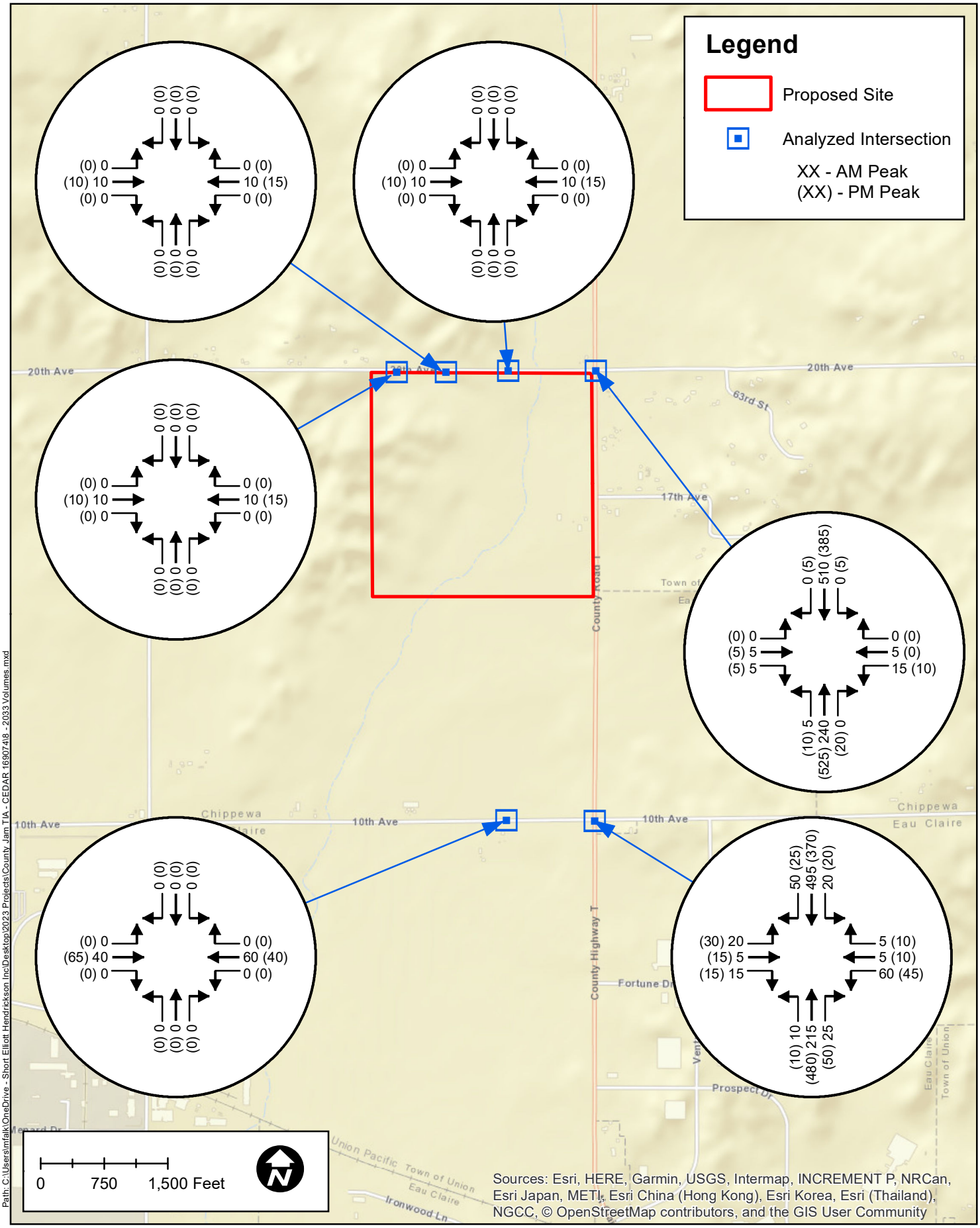
Project: CEDAR 169074
Print Date: 1/31/2023
Map by: mfalk
Projection: WISCRS Chippewa County (ft)

Figure 7 - 2023 Build Traffic
Highway T Property, LLC TIA
City of Eau Claire, Chippewa County, WI



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Madison, WI 53719
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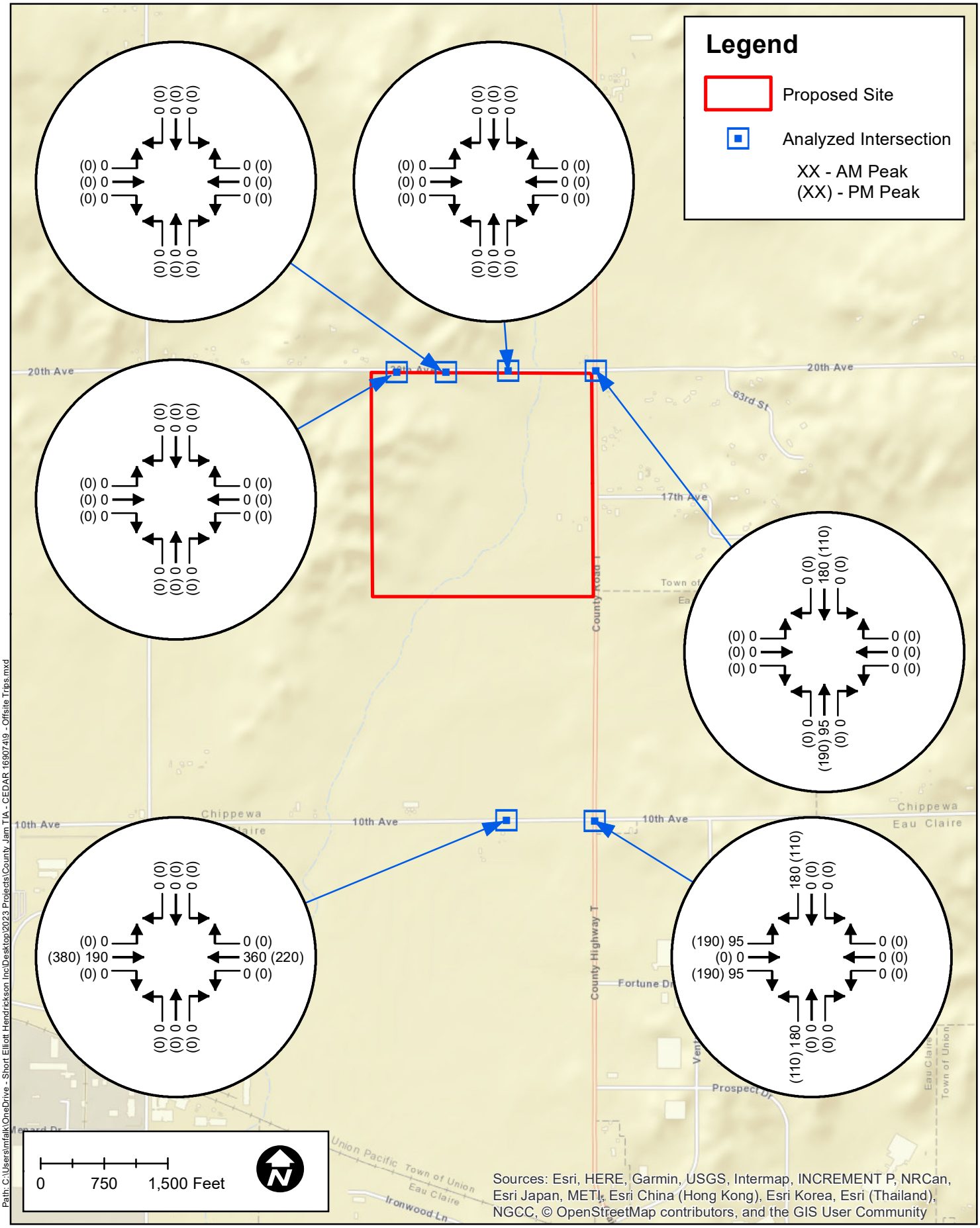
Project: CEDAR 169074
Print Date: 1/31/2023
Map by: mfalk
Projection: WISCRS Chippewa County (ft)

Figure 8 - 2033 Volumes
Highway T Property, LLC TIA
City of Eau Claire, Chippewa County, WI



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Madison, WI 53719
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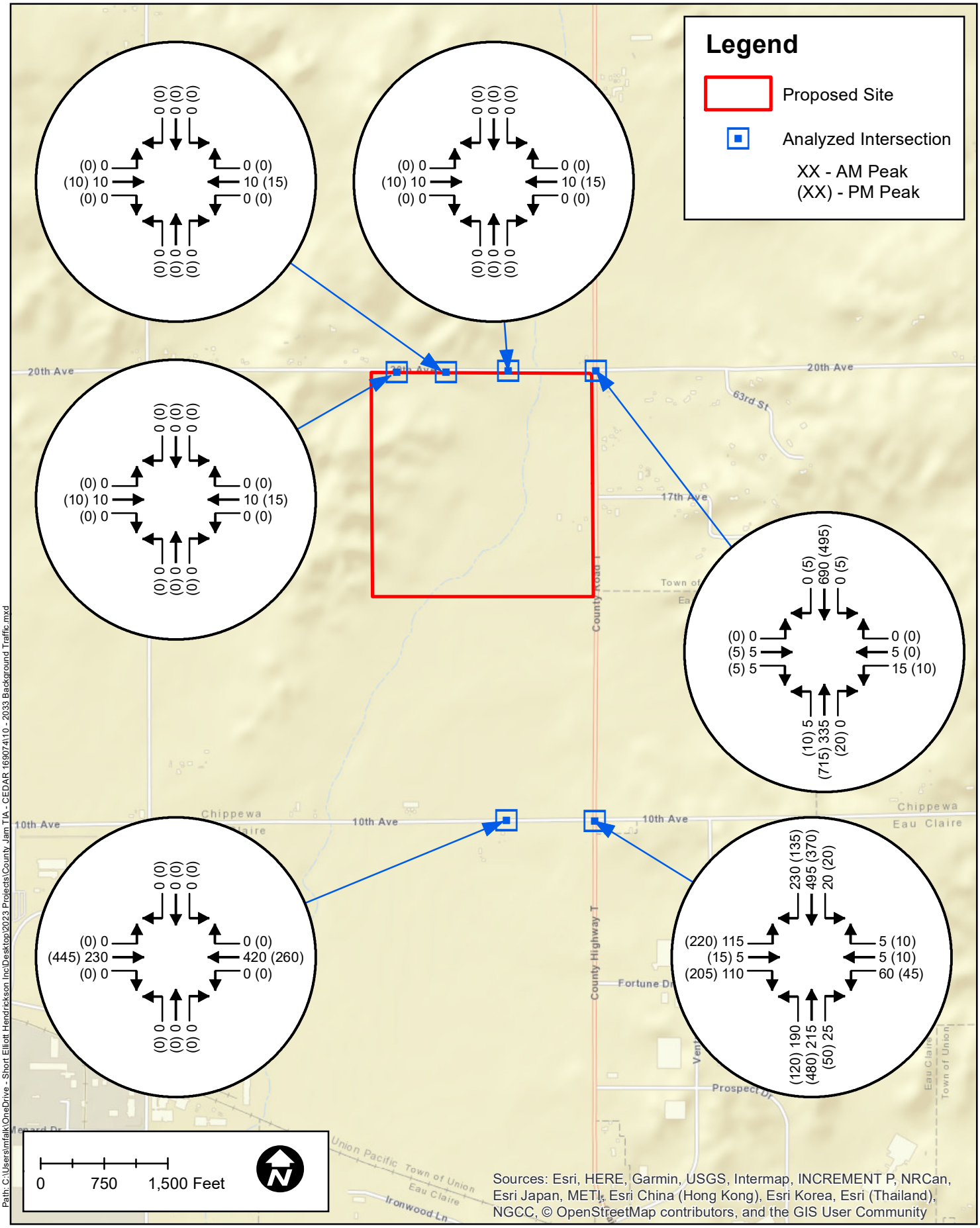
Project: CEDAR 169074
Print Date: 1/31/2023
Map by: mfalk
Projection: WISCRS
Chippewa County (ft)

Figure 9 - Offsite Trips
Highway T Property, LLC TIA
City of Eau Claire, Chippewa County, WI



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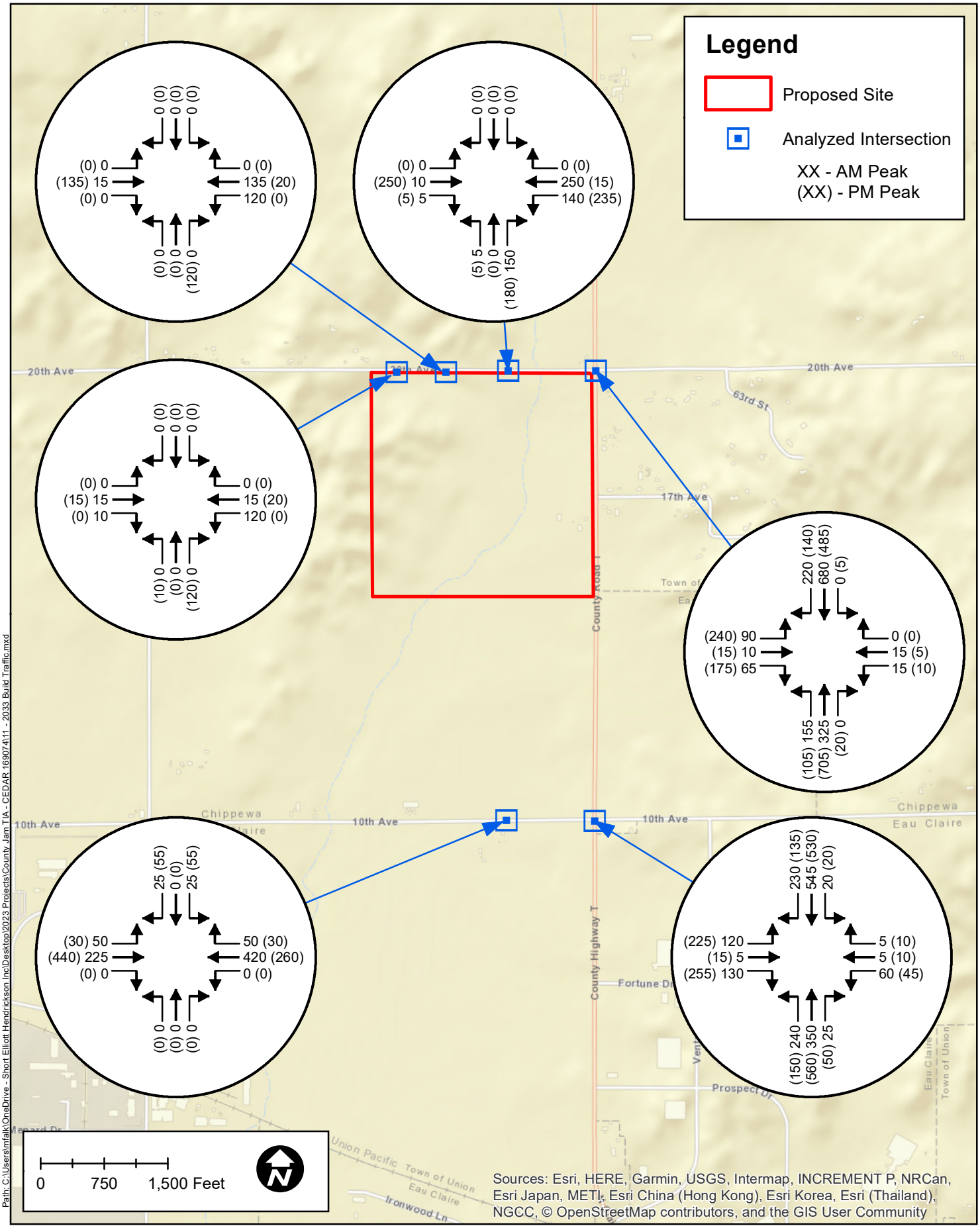
Project: CEDAR 169074
Print Date: 1/31/2023
Map by: mfalk
Projection: WISCRS Chippewa County (ft)

Figure 10 - Background Traffic
Highway T Property, LLC TIA
City of Eau Claire, Chippewa County, WI



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Project: CEDAR 169074
Print Date: 1/31/2023
Map by: mfalk
Projection: WISCRS Chippewa County (ft)

Figure 11 - 2033 Build Traffic
Highway T Property, LLC TIA
City of Eau Claire, Chippewa County, WI

ATTACHMENT 1

60th St at 10th Ave, 08182022, 0000-2359
Eau Claire
Thursday, August 18, 2022

	Southbound 60th St						Westbound 10th Ave						Northbound WI						Eastbound 60th St						
Time	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	TOTAL
12:00 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	3	3	0	0	6	0	2	0	3	0	5	**14**
12:15 AM	0	0	3	1	0	4	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	4	0	4	**12**
12:30 AM	0	0	1	0	0	1	0	1	0	0	0	1	0	1	1	0	0	2	0	3	1	22	0	26	**30**
12:45 AM	0	0	4	1	0	5	0	0	0	0	0	0	0	0	6	0	0	6	0	2	0	9	0	11	**22**
Hourly Total	0	0	11	2	0	13	0	1	0	0	0	1	0	4	14	0	0	18	0	7	1	38	0	46	**78**
1:00 AM	0	0	3	3	0	6	0	0	0	0	0	0	0	0	3	1	0	4	0	2	0	0	0	2	**12**
1:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	2	**4**
1:30 AM	0	0	4	2	0	6	0	0	0	0	0	0	0	0	3	0	0	3	0	1	0	0	0	1	**10**
1:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	2	2	0	0	4	0	1	0	0	0	1	**6**
Hourly Total	0	0	9	5	0	14	0	0	0	0	0	0	0	2	9	1	0	12	0	4	0	2	0	6	**32**
2:00 AM	0	0	1	1	0	2	0	1	0	0	0	1	0	0	3	0	0	3	0	1	1	0	0	2	**8**
2:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	0	**6**
2:30 AM	0	0	1	0	0	1	1	0	0	1	0	2	0	0	3	0	0	3	0	4	0	0	0	4	**10**
2:45 AM	0	0	1	0	0	1	0	1	0	1	0	2	0	0	8	0	0	8	0	0	0	2	0	2	**13**
Hourly Total	0	0	4	1	0	5	1	2	0	2	0	5	0	0	18	1	0	19	0	5	1	2	0	8	**37**
3:00 AM	0	0	6	0	0	6	0	1	0	0	0	1	0	0	6	0	0	6	0	1	0	1	0	2	**15**
3:15 AM	0	0	4	1	0	5	0	0	0	0	0	0	0	0	7	0	0	7	0	1	0	0	0	1	**13**
3:30 AM	0	0	4	0	0	4	0	2	0	0	0	2	0	0	1	0	0	1	0	1	0	0	0	1	**8**
3:45 AM	0	0	4	1	0	5	0	0	0	0	0	0	0	0	4	0	0	4	0	1	0	0	0	1	**10**
Hourly Total	0	0	18	2	0	20	0	3	0	0	0	3	0	0	18	0	0	18	0	4	0	1	0	5	**46**
4:00 AM	0	0	4	0	0	4	0	1	0	0	0	1	0	0	5	0	0	5	0	0	0	1	0	1	**11**
4:15 AM	0	1	9	1	0	11	0	3	0	0	0	3	0	0	6	0	0	6	0	2	0	0	0	2	**22**
4:30 AM	0	0	18	4	0	22	0	2	0	0	0	2	0	3	8	0	0	11	0	0	0	1	0	1	**36**
4:45 AM	0	0	17	1	0	18	0	2	0	1	0	3	0	0	14	1	0	15	0	1	0	1	0	2	**38**
Hourly Total	0	1	48	6	0	55	0	8	0	1	0	9	0	3	33	1	0	37	0	3	0	3	0	6	**107**
5:00 AM	0	0	12	6	0	18	0	1	1	1	0	3	0	1	9	0	0	10	0	2	0	0	0	2	**33**
5:15 AM	0	0	31	4	0	35	0	6	1	1	0	8	0	1	16	1	0	18	0	1	0	0	0	1	**62**
5:30 AM	0	1	36	14	0	51	0	5	1	1	0	7	0	3	25	2	0	30	0	4	2	1	0	7	**95**
5:45 AM	0	3	45	24	0	72	0	4	0	0	0	4	0	4	19	0	0	23	0	1	0	4	0	5	**104**
Hourly Total	0	4	124	48	0	176	0	16	3	3	0	22	0	9	69	3	0	81	0	8	2	5	0	15	**294**
6:00 AM	0	0	30	12	0	42	0	5	5	1	0	11	0	9	19	2	0	30	0	0	1	4	0	5	**88**
6:15 AM	0	2	52	16	0	70	0	3	1	2	0	6	0	4	29	4	0	37	0	3	1	2	0	6	**119**
6:30 AM	0	1	74	18	0	93	0	6	1	2	0	9	0	9	31	4	0	44	0	3	1	0	0	4	**150**
6:45 AM	0	3	91	13	0	107	0	5	2	0	0	7	0	6	42	1	0	49	0	6	3	2	0	11	**174**
Hourly Total	0	6	247	59	0	312	0	19	9	5	0	33	0	28	121	11	0	160	0	12	6	8	0	26	**531**
7:00 AM	0	1	91	6	0	98	0	9	2	0	0	11	0	2	47	3	0	52	0	6	2	1	0	9	**170**
7:15 AM	0	2	95	10	0	107	0	16	1	1	0	18	0	3	37	8	0	48	0	5	0	2	0	7	**180**
7:30 AM	0	3	114	12	0	129	0	12	3	2	0	17	0	2	40	6	0	48	0	3	0	5	0	8	**202**
7:45 AM	0	7	105	11	0	123	0	18	0	2	0	20	0	1	49	5	0	55	0	4	2	4	0	10	**208**
Hourly Total	0	13	405	39	0	457	0	55	6	5	0	66	0	8	173	22	0	203	0	18	4	12	0	34	**760**

60th St at 10th Ave, 08182022, 0000-2359
Eau Claire
Thursday, August 18, 2022

	Southbound 60th St						Westbound 10th Ave						Northbound WI						Eastbound 60th St						
Time	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	TOTAL
8:00 AM	0	1	71	4	0	76	0	9	0	2	0	11	0	4	38	3	0	45	0	5	0	3	0	8	**140**
8:15 AM	0	3	48	4	0	55	0	11	0	0	0	11	0	2	37	8	0	47	0	0	2	5	0	7	**120**
8:30 AM	0	0	63	4	0	67	0	12	0	0	0	12	0	5	40	2	0	47	0	2	0	4	0	6	**132**
8:45 AM	0	0	71	6	0	77	0	10	0	0	0	10	0	4	55	2	0	61	0	4	0	1	0	5	**153**
Hourly Total	0	4	253	18	0	275	0	42	0	2	0	44	0	15	170	15	0	200	0	11	2	13	0	26	**545**
9:00 AM	0	0	42	5	0	47	0	5	2	3	0	10	0	1	33	5	0	39	0	3	0	2	0	5	**101**
9:15 AM	0	2	42	6	0	50	0	12	0	0	0	12	0	1	28	5	0	34	0	6	1	1	0	8	**104**
9:30 AM	0	0	54	3	0	57	0	8	2	0	0	10	0	2	24	5	0	31	0	6	1	1	0	8	**106**
9:45 AM	0	1	53	6	0	60	0	10	1	1	0	12	0	2	50	8	0	60	0	3	1	3	0	7	**139**
Hourly Total	0	3	191	20	0	214	0	35	5	4	0	44	0	6	135	23	0	164	0	18	3	7	0	28	**450**
10:00 AM	0	2	28	5	0	35	0	8	1	1	0	10	0	2	33	4	0	39	0	6	0	2	0	8	**92**
10:15 AM	0	2	34	6	0	42	0	7	1	0	0	8	0	3	31	4	0	38	0	7	0	2	0	9	**97**
10:30 AM	0	0	29	6	0	35	0	10	1	2	0	13	0	2	34	5	0	41	0	5	2	1	0	8	**97**
10:45 AM	0	1	48	9	0	58	0	7	1	0	0	8	0	4	38	9	0	51	0	4	1	2	0	7	**124**
Hourly Total	0	5	139	26	0	170	0	32	4	3	0	39	0	11	136	22	0	169	0	22	3	7	0	32	**410**
11:00 AM	0	0	40	10	0	50	0	8	1	3	0	12	0	0	43	4	0	47	0	9	2	3	0	14	**123**
11:15 AM	0	1	38	14	0	53	0	12	3	2	0	17	0	0	36	5	0	41	0	3	2	3	0	8	**119**
11:30 AM	0	1	38	3	0	42	0	10	3	0	0	13	0	1	27	6	0	34	0	5	1	4	0	10	**99**
11:45 AM	0	3	43	8	0	54	0	7	1	0	0	8	0	4	54	12	0	70	0	4	1	2	0	7	**139**
Hourly Total	0	5	159	35	0	199	0	37	8	5	0	50	0	5	160	27	0	192	0	21	6	12	0	39	**480**
12:00 PM	0	4	51	5	0	60	0	13	1	1	0	15	0	5	54	5	0	64	0	9	1	2	0	12	**151**
12:15 PM	0	2	60	7	0	69	0	16	0	2	0	18	0	3	49	7	0	59	0	16	0	5	0	21	**167**
12:30 PM	0	2	60	2	0	64	0	14	1	3	0	18	0	3	76	10	0	89	0	10	0	2	0	12	**183**
12:45 PM	0	3	53	6	0	62	0	8	4	4	0	16	0	4	46	9	0	59	0	1	0	4	0	5	**142**
Hourly Total	0	11	224	20	0	255	0	51	6	10	0	67	0	15	225	31	0	271	0	36	1	13	0	50	**643**
1:00 PM	0	3	38	9	0	50	0	14	1	2	0	17	0	1	44	7	0	52	0	5	6	3	0	14	**133**
1:15 PM	0	1	47	4	0	52	0	13	4	3	0	20	0	6	52	11	0	69	0	6	1	2	0	9	**150**
1:30 PM	0	5	46	7	0	58	0	9	0	2	0	11	0	5	49	11	0	65	0	6	4	3	0	13	**147**
1:45 PM	0	1	51	7	0	59	0	10	2	4	0	16	0	5	46	4	1	55	0	3	1	1	1	5	**135**
Hourly Total	0	10	182	27	0	219	0	46	7	11	0	64	0	17	191	33	1	241	0	20	12	9	1	41	**565**
2:00 PM	0	3	42	8	0	53	0	3	2	0	0	5	0	2	56	6	0	64	0	10	4	2	0	16	**138**
2:15 PM	0	2	51	7	0	60	0	11	3	0	0	14	0	0	55	6	0	61	0	5	1	4	0	10	**145**
2:30 PM	0	1	57	9	0	67	0	9	4	2	0	15	0	6	62	10	0	78	0	5	4	3	0	12	**172**
2:45 PM	0	1	49	4	0	54	0	8	2	1	0	11	0	6	53	9	0	68	0	9	1	6	0	16	**149**
Hourly Total	0	7	199	28	0	234	0	31	11	3	0	45	0	14	226	31	0	271	0	29	10	15	0	54	**604**
3:00 PM	0	2	57	12	0	71	0	11	1	0	0	12	0	13	93	9	0	115	0	14	3	16	0	33	**231**
3:15 PM	0	1	67	8	0	76	0	7	5	2	0	14	0	12	77	7	0	96	0	11	8	10	0	29	**215**
3:30 PM	0	1	71	14	0	86	0	7	0	5	0	12	0	14	97	9	0	120	0	17	5	13	0	35	**253**
3:45 PM	0	0	65	7	0	72	0	9	4	1	0	14	0	6	89	11	0	106	0	7	4	6	0	17	**209**
Hourly Total	0	4	260	41	0	305	0	34	10	8	0	52	0	45	356	36	0	437	0	49	20	45	0	114	**908**

60th St at 10th Ave, 08182022, 0000-2359
Eau Claire
Thursday, August 18, 2022

	Southbound 60th St						Westbound 10th Ave						Northbound WI						Eastbound 60th St						
Time	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	TOTAL
4:00 PM	0	0	60	4	0	64	0	7	1	3	0	11	0	3	94	11	0	108	0	11	4	2	0	17	**200**
4:15 PM	0	0	58	3	0	61	0	12	1	0	0	13	0	2	83	13	0	98	0	8	1	2	0	11	**183**
4:30 PM	0	4	75	3	0	82	0	13	4	3	0	20	0	0	91	6	0	97	0	7	2	1	0	10	**209**
4:45 PM	0	2	66	6	0	74	0	15	2	2	0	19	0	6	112	10	0	128	0	4	1	5	0	10	**231**
Hourly Total	0	6	259	16	0	281	0	47	8	8	0	63	0	11	380	40	0	431	0	30	8	10	0	48	**823**
5:00 PM	0	5	96	7	0	108	0	9	3	3	0	15	0	2	113	12	0	127	0	12	8	4	0	24	**274**
5:15 PM	0	4	66	6	0	76	0	8	0	2	0	10	0	2	77	13	0	92	0	8	4	5	0	17	**195**
5:30 PM	0	0	51	1	0	52	0	5	2	1	0	8	0	2	85	5	0	92	0	8	2	5	0	15	**167**
5:45 PM	0	0	50	4	0	54	0	8	2	0	0	10	0	3	67	12	0	82	0	3	3	3	0	9	**155**
Hourly Total	0	9	263	18	0	290	0	30	7	6	0	43	0	9	342	42	0	393	0	31	17	17	0	65	**791**
6:00 PM	0	3	40	3	0	46	0	8	3	0	0	11	0	0	47	6	0	53	0	6	2	9	0	17	**127**
6:15 PM	0	0	50	3	0	53	0	7	1	1	0	9	0	1	37	3	0	41	0	4	3	2	0	9	**112**
6:30 PM	0	2	38	4	0	44	0	7	0	1	0	8	0	6	55	5	0	66	0	5	1	0	0	6	**124**
6:45 PM	0	2	35	2	0	39	0	13	2	1	0	16	0	3	31	11	0	45	0	8	1	2	0	11	**111**
Hourly Total	0	7	163	12	0	182	0	35	6	3	0	44	0	10	170	25	0	205	0	23	7	13	0	43	**474**
7:00 PM	0	3	25	1	0	29	0	4	0	1	0	5	0	3	31	5	0	39	0	2	1	7	0	10	**83**
7:15 PM	0	2	42	4	0	48	0	2	0	1	0	3	0	5	37	6	0	48	0	3	0	0	0	3	**102**
7:30 PM	0	1	21	0	0	22	0	2	0	0	0	2	0	0	31	5	0	36	0	5	0	3	0	8	**68**
7:45 PM	0	0	19	0	0	19	0	5	1	1	0	7	0	0	22	5	0	27	0	1	1	1	0	3	**56**
Hourly Total	0	6	107	5	0	118	0	13	1	3	0	17	0	8	121	21	0	150	0	11	2	11	0	24	**309**
8:00 PM	0	0	27	1	0	28	0	4	1	0	0	5	0	2	30	5	0	37	0	2	2	4	0	8	**78**
8:15 PM	0	0	17	1	0	18	0	1	0	2	0	3	0	0	23	6	0	29	0	3	0	1	0	4	**54**
8:30 PM	0	0	18	2	0	20	0	4	0	0	0	4	0	3	22	3	0	28	0	2	1	2	0	5	**57**
8:45 PM	0	1	13	1	0	15	0	0	0	0	0	0	0	2	18	6	0	26	0	1	0	1	0	2	**43**
Hourly Total	0	1	75	5	0	81	0	9	1	2	0	12	0	7	93	20	0	120	0	8	3	8	0	19	**232**
9:00 PM	0	0	13	2	0	15	0	0	2	0	0	2	0	5	7	4	0	16	0	1	0	1	0	2	**35**
9:15 PM	0	1	9	2	0	12	0	1	0	0	0	1	0	4	22	5	0	31	0	1	2	1	0	4	**48**
9:30 PM	0	1	8	1	0	10	0	1	0	1	0	2	0	1	15	5	0	21	0	3	1	1	0	5	**38**
9:45 PM	0	0	14	0	0	14	0	1	0	0	0	1	0	0	8	1	0	9	0	0	0	2	0	2	**26**
Hourly Total	0	2	44	5	0	51	0	3	2	1	0	6	0	10	52	15	0	77	0	5	3	5	0	13	**147**
10:00 PM	0	2	8	2	0	12	0	5	0	0	0	5	0	2	19	3	0	24	0	0	0	2	0	2	**43**
10:15 PM	0	1	5	1	0	7	0	1	0	0	0	1	0	0	7	3	0	10	0	0	0	1	0	1	**19**
10:30 PM	0	0	6	1	0	7	0	1	0	0	0	1	0	0	6	3	0	9	0	1	0	1	0	2	**19**
10:45 PM	0	0	7	1	0	8	0	0	0	1	0	1	0	1	6	0	0	7	0	0	0	0	0	0	**16**
Hourly Total	0	3	26	5	0	34	0	7	0	1	0	8	0	3	38	9	0	50	0	1	0	4	0	5	**97**
11:00 PM	0	0	1	1	0	2	0	1	0	0	0	1	0	1	8	0	0	9	0	3	0	3	0	6	**18**
11:15 PM	0	1	3	0	0	4	0	1	0	0	0	1	0	0	6	1	0	7	0	0	0	0	0	0	**12**
11:30 PM	0	0	4	0	0	4	0	1	0	0	0	1	0	0	2	0	0	2	0	2	0	0	0	2	**9**
11:45 PM	0	0	3	1	0	4	0	0	0	0	0	0	0	1	2	2	0	5	0	1	0	2	0	3	**12**
Hourly Total	0	1	11	2	0	14	0	3	0	0	0	3	0	2	18	3	0	23	0	6	0	5	0	11	**51**
DAILY TOTAL	**0**	**108**	**3421**	**445**	**0**	**3974**	**1**	**559**	**94**	**86**	**0**	**740**	**0**	**242**	**3268**	**432**	**1**	**3942**	**0**	**382**	**111**	**265**	**1**	**758**	**9414**
Cars	0	100	3211	265	0	3576	1	544	60	82	0	687	0	234	3062	421	0	3717	0	201	74	259	0	534	**8514**
Heavy Vehicles	0	8	210	180	0	398	0	15	34	4	0	53	0	8	206	11	1	225	0	181	37	6	1	224	**900**
Heavy Vehicle %	0.00%	7.41%	6.14%	40.45%	0.00%	10.02%	0.00%	2.68%	36.17%	4.65%	0.00%	7.16%	0.00%	3.31%	6.30%	2.55%	100.00%	5.71%	0.00%	47.38%	33.33%	2.26%	100.00%	29.55%	**9.56%**

60th St at 10th Ave, 08182022, 0000-2359
Eau Claire
Thursday, August 18, 2022

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	
7:00 AM	0	1	91	6	0	98	0	9	2	0	0	11	0	2	47	3	0	52	0	6	2	1	0	9	**170**
7:15 AM	0	2	95	10	0	107	0	16	1	1	0	18	0	3	37	8	0	48	0	5	0	2	0	7	**180**
7:30 AM	0	3	114	12	0	129	0	12	3	2	0	17	0	2	40	6	0	48	0	3	0	5	0	8	**202**
7:45 AM	0	7	105	11	0	123	0	18	0	2	0	20	0	1	49	5	0	55	0	4	2	4	0	10	**208**
Peak Hour Total	0	13	405	39	0	457	0	55	6	5	0	66	0	8	173	22	0	203	0	18	4	12	0	34	**760**
PHF	0.000	0.464	0.888	0.813	0.000	0.886	0.000	0.764	0.500	0.625	0.000	0.825	0.000	0.667	0.883	0.688	0.000	0.923	0.000	0.750	0.500	0.600	0.000	0.850	**0.913**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	
4:30 PM	0	4	75	3	0	82	0	13	4	3	0	20	0	0	91	6	0	97	0	7	2	1	0	10	**209**
4:45 PM	0	2	66	6	0	74	0	15	2	2	0	19	0	6	112	10	0	128	0	4	1	5	0	10	**231**
5:00 PM	0	5	96	7	0	108	0	9	3	3	0	15	0	2	113	12	0	127	0	12	8	4	0	24	**274**
5:15 PM	0	4	66	6	0	76	0	8	0	2	0	10	0	2	77	13	0	92	0	8	4	5	0	17	**195**
Peak Hour Total	0	15	303	22	0	340	0	45	9	10	0	64	0	10	393	41	0	444	0	31	15	15	0	61	**909**
PHF	0.000	0.750	0.789	0.786	0.000	0.787	0.000	0.750	0.563	0.833	0.000	0.800	0.000	0.417	0.869	0.788	0.000	0.867	0.000	0.646	0.469	0.750	0.000	0.635	**0.829**

Total Vehicles On Leg 7710

Vehicles Entering Intersection	3974	Vehicles Exiting Intersection	3736

Southbound

Cars	265	3211	100	0	0
Heavy	180	210	8	0	0
Total	**445**	**3421**	**108**	**0**	**0**

Total Vehicles on Leg 1539

Vehicles Entering Intersection	758
Vehicles Exiting Intersection	781

Eastbound

Cars	Heavy	Total
0	1	**1**
0	0	**0**
201	181	**382**
74	37	**111**
259	6	**265**

Daily Volumes

Westbound

Cars	Heavy	Total
82	4	**86**
60	34	**94**
544	15	**559**
1	0	**1**
0	0	**0**

Vehicles Entering Intersection	740
Vehicles Exiting Intersection	652

Total Vehicles on Leg 1392

Cars	0	0	234	3062	421
Heavy	1	0	8	206	11
Total	**1**	**0**	**242**	**3268**	**432**

Northbound

Vehicles Entering Intersection	3942	Vehicles Exiting Intersection	4245

Total Vehicles On Leg 8187

60th St at 20th Ave, 08182022, 0000-2359
Eau Claire
Thursday, August 18, 2022

	Southbound 60th St						Westbound 20th Ave						Northbound WI						Eastbound 60th St						
Time	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	TOTAL
12:00 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	**7**
12:15 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0	**8**
12:30 AM	0	1	1	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	**4**
12:45 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	**13**
Hourly Total	0	1	13	0	0	14	0	0	0	0	0	0	0	1	17	0	0	18	0	0	0	0	0	0	**32**
1:00 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	0	**10**
1:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	**3**
1:30 AM	0	0	6	0	0	6	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	**10**
1:45 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	**5**
Hourly Total	0	0	14	0	0	14	0	0	0	0	0	0	0	0	13	1	0	14	0	0	0	0	0	0	**28**
2:00 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	**6**
2:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	**5**
2:30 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	**7**
2:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	**11**
Hourly Total	0	0	5	0	0	5	0	0	0	0	0	0	0	0	24	0	0	24	0	0	0	0	0	0	**29**
3:00 AM	0	0	6	0	0	6	0	0	0	0	0	0	0	0	7	0	0	7	0	0	1	0	0	1	**14**
3:15 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	**11**
3:30 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	**8**
3:45 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	**9**
Hourly Total	0	0	19	0	0	19	0	0	0	0	0	0	0	0	21	1	0	22	0	0	1	0	0	1	**42**
4:00 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	**8**
4:15 AM	0	0	12	0	0	12	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	**19**
4:30 AM	0	0	22	0	0	22	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	**29**
4:45 AM	0	0	21	0	0	21	0	0	0	1	0	1	0	0	13	0	0	13	0	0	0	0	0	0	**35**
Hourly Total	0	0	58	0	0	58	0	0	0	1	0	1	0	0	32	0	0	32	0	0	0	0	0	0	**91**
5:00 AM	0	0	13	0	0	13	0	0	0	0	0	0	0	0	17	0	0	17	0	1	0	0	0	1	**31**
5:15 AM	0	0	33	1	0	34	0	0	0	1	0	1	0	1	16	0	0	17	0	0	1	0	0	1	**53**
5:30 AM	0	0	56	0	0	56	0	0	0	1	0	1	0	0	28	0	0	28	0	1	0	0	0	1	**86**
5:45 AM	0	0	68	0	0	68	0	0	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	**89**
Hourly Total	0	0	170	1	0	171	0	0	0	2	0	2	0	1	82	0	0	83	0	2	1	0	0	3	**259**
6:00 AM	0	1	36	1	0	38	0	1	0	0	0	1	0	0	18	0	0	18	0	0	0	0	0	0	**57**
6:15 AM	0	0	74	0	0	74	0	2	1	0	0	3	1	0	30	0	0	31	0	0	0	0	0	0	**108**
6:30 AM	0	0	88	0	0	88	0	4	0	1	0	5	0	0	36	1	0	37	0	0	0	1	0	1	**131**
6:45 AM	0	0	103	1	0	104	0	2	1	0	0	3	0	0	51	2	0	53	0	1	0	1	0	2	**162**
Hourly Total	0	1	301	2	0	304	0	9	2	1	0	12	1	0	135	3	0	139	0	1	0	2	0	3	**458**
7:00 AM	0	0	85	0	0	85	0	5	1	1	0	7	0	0	53	0	0	53	0	1	0	1	0	2	**147**
7:15 AM	0	1	102	1	0	104	0	3	0	0	0	3	0	0	44	0	0	44	0	0	1	2	0	3	**154**
7:30 AM	0	0	135	0	0	135	0	3	1	0	0	4	0	0	44	0	0	44	0	0	0	3	0	3	**186**
7:45 AM	0	1	100	0	0	101	0	5	1	0	0	6	0	3	52	0	0	55	0	0	2	1	0	3	**165**
Hourly Total	0	2	422	1	0	425	0	16	3	1	0	20	0	3	193	0	0	196	0	1	3	7	0	11	**652**

60th St at 20th Ave, 08182022, 0000-2359
Eau Claire
Thursday, August 18, 2022

Time	Southbound 60th St						Westbound 20th Ave						Northbound WI						Eastbound 60th St						TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	
8:00 AM	0	0	70	1	0	71	0	2	1	0	0	3	0	1	43	1	0	45	0	1	1	2	0	4	**123**
8:15 AM	0	0	55	1	0	56	0	1	0	1	0	2	0	0	35	3	0	38	0	0	0	0	0	0	**96**
8:30 AM	0	0	70	0	0	70	0	3	1	0	0	4	0	1	33	3	0	37	0	0	0	0	0	0	**111**
8:45 AM	0	1	65	0	0	66	0	3	1	0	0	4	0	0	62	0	0	62	0	0	0	0	0	0	**132**
Hourly Total	0	1	260	2	0	263	0	9	3	1	0	13	0	2	173	7	0	182	0	1	1	2	0	4	**462**
9:00 AM	0	1	47	0	0	48	0	1	0	0	0	1	0	1	41	1	0	43	0	1	1	1	0	3	**95**
9:15 AM	0	0	44	0	0	44	0	3	0	0	0	3	0	0	35	1	0	36	0	0	0	1	0	1	**84**
9:30 AM	0	0	48	0	0	48	0	2	0	0	0	2	0	0	27	0	0	27	0	0	0	4	0	4	**81**
9:45 AM	0	1	57	0	0	58	0	1	0	0	0	1	0	2	47	0	0	49	0	0	1	1	0	2	**110**
Hourly Total	0	2	196	0	0	198	0	7	0	0	0	7	0	3	150	2	0	155	0	1	2	7	0	10	**370**
10:00 AM	0	0	33	0	0	33	0	1	0	0	0	1	0	1	43	2	0	46	0	0	0	1	0	1	**81**
10:15 AM	0	0	36	0	0	36	0	2	0	0	0	2	0	3	33	1	0	37	0	0	0	2	0	2	**77**
10:30 AM	0	0	33	1	0	34	0	2	1	0	0	3	0	2	30	0	0	32	0	1	0	1	0	2	**71**
10:45 AM	0	1	53	0	0	54	0	4	0	0	0	4	0	2	38	1	0	41	0	0	0	0	0	0	**99**
Hourly Total	0	1	155	1	0	157	0	9	1	0	0	10	0	8	144	4	0	156	0	1	0	4	0	5	**328**
11:00 AM	0	0	40	0	0	40	0	3	0	1	0	4	0	2	47	4	0	53	0	0	0	3	0	3	**100**
11:15 AM	0	1	53	0	0	54	0	2	0	0	0	2	0	1	42	0	0	43	0	1	0	0	0	1	**100**
11:30 AM	0	0	37	0	0	37	0	1	0	0	0	1	0	1	24	1	0	26	0	0	0	1	0	1	**65**
11:45 AM	0	0	51	0	0	51	0	1	0	0	0	1	0	1	58	3	0	62	0	0	0	3	0	3	**117**
Hourly Total	0	1	181	0	0	182	0	7	0	1	0	8	0	5	171	8	0	184	0	1	0	7	0	8	**382**
12:00 PM	0	0	60	0	0	60	0	0	0	0	0	0	0	1	60	2	0	63	0	0	0	0	0	0	**123**
12:15 PM	0	1	65	0	0	66	0	2	0	1	0	3	0	0	58	3	0	61	0	0	0	1	0	1	**131**
12:30 PM	0	0	59	0	0	59	0	5	0	1	0	6	0	0	85	2	0	87	0	1	2	2	0	5	**157**
12:45 PM	0	1	58	0	0	59	0	2	0	0	0	2	0	2	47	3	0	52	0	0	0	1	0	1	**114**
Hourly Total	0	2	242	0	0	244	0	9	0	2	0	11	0	3	250	10	0	263	0	1	2	4	0	7	**525**
1:00 PM	0	0	50	1	0	51	0	1	0	0	0	1	0	0	50	1	0	51	0	0	0	0	0	0	**103**
1:15 PM	0	0	49	0	0	49	0	0	0	0	0	0	0	1	58	2	0	61	0	0	0	0	0	0	**110**
1:30 PM	0	0	53	0	0	53	0	1	0	0	0	1	0	1	52	0	0	53	0	0	0	0	0	0	**107**
1:45 PM	1	0	56	0	0	57	0	2	0	0	0	2	0	1	52	0	0	53	0	0	0	2	0	2	**114**
Hourly Total	1	0	208	1	0	210	0	4	0	0	0	4	0	3	212	3	0	218	0	0	0	2	0	2	**434**
2:00 PM	0	0	51	0	0	51	0	2	0	0	0	2	0	1	65	1	0	67	0	0	1	0	0	1	**121**
2:15 PM	0	3	65	0	0	68	0	3	2	1	0	6	0	1	56	1	0	58	0	1	0	0	0	1	**133**
2:30 PM	0	1	55	1	0	57	0	3	0	0	0	3	0	0	66	1	0	67	0	1	0	0	0	1	**128**
2:45 PM	0	0	54	0	0	54	0	2	0	0	0	2	0	0	69	1	0	70	0	1	0	0	0	1	**127**
Hourly Total	0	4	225	1	0	230	0	10	2	1	0	13	0	2	256	4	0	262	0	3	1	0	0	4	**509**
3:00 PM	0	0	70	1	0	71	0	1	0	0	0	1	0	1	95	3	0	99	0	2	0	0	0	2	**173**
3:15 PM	0	0	76	3	0	79	0	2	0	0	0	2	0	3	91	0	0	94	0	3	1	0	0	4	**179**
3:30 PM	0	0	76	0	0	76	0	2	0	1	0	3	0	2	106	2	0	110	0	3	0	6	0	9	**198**
3:45 PM	0	0	73	0	0	73	0	1	1	1	0	3	0	2	94	4	0	100	0	0	1	1	0	2	**178**
Hourly Total	0	0	295	4	0	299	0	6	1	2	0	9	0	8	386	9	0	403	0	8	2	7	0	17	**728**

60th St at 20th Ave, 08182022, 0000-2359
Eau Claire
Thursday, August 18, 2022

	Southbound 60th St						Westbound 20th Ave						Northbound WI						Eastbound 60th St						
Time	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	TOTAL
4:00 PM	0	0	57	1	0	58	0	1	0	1	0	2	0	0	100	2	0	102	0	0	0	1	0	1	**163**
4:15 PM	0	1	59	1	0	61	0	3	0	1	0	4	0	2	101	0	0	103	0	0	4	2	0	6	**174**
4:30 PM	0	0	77	0	0	77	0	3	1	0	0	4	0	2	83	3	0	88	0	0	0	0	0	0	**169**
4:45 PM	0	2	74	2	0	78	0	3	0	0	0	3	0	1	117	6	0	124	0	0	0	1	0	1	**206**
Hourly Total	0	3	267	4	0	274	0	10	1	2	0	13	0	5	401	11	0	417	0	0	4	4	0	8	**712**
5:00 PM	0	0	104	0	0	104	0	1	0	1	0	2	0	4	127	4	0	135	0	1	1	3	0	5	**246**
5:15 PM	0	2	72	0	0	74	0	0	0	1	0	1	0	0	87	2	0	89	0	0	0	0	0	0	**164**
5:30 PM	0	0	51	0	0	51	0	0	1	0	0	1	0	3	83	7	0	93	0	0	2	1	0	3	**148**
5:45 PM	0	0	47	0	0	47	0	4	0	2	0	6	0	0	62	3	0	65	0	1	2	2	0	5	**123**
Hourly Total	0	2	274	0	0	276	0	5	1	4	0	10	0	7	359	16	0	382	0	2	5	6	0	13	**681**
6:00 PM	0	1	43	1	0	45	0	1	0	0	0	1	0	0	54	4	0	58	0	1	1	1	0	3	**107**
6:15 PM	0	0	46	0	0	46	0	4	0	0	0	4	0	1	38	2	0	41	0	0	0	2	0	2	**93**
6:30 PM	0	0	43	0	0	43	0	1	1	0	0	2	0	0	57	2	0	59	0	1	0	0	0	1	**105**
6:45 PM	0	0	38	0	0	38	0	0	1	0	0	1	0	1	38	3	0	42	0	1	0	0	0	1	**82**
Hourly Total	0	1	170	1	0	172	0	6	2	0	0	8	0	2	187	11	0	200	0	3	1	3	0	7	**387**
7:00 PM	0	0	27	0	0	27	0	3	2	0	0	5	0	0	35	0	0	35	0	0	0	0	0	0	**67**
7:15 PM	0	0	39	0	0	39	0	5	0	0	0	5	0	0	38	1	0	39	0	2	0	0	0	2	**85**
7:30 PM	0	0	18	0	0	18	0	1	0	0	0	1	0	1	33	0	0	34	0	0	0	1	0	1	**54**
7:45 PM	0	0	19	0	0	19	0	0	0	0	0	0	0	0	23	0	0	23	0	0	0	0	0	0	**42**
Hourly Total	0	0	103	0	0	103	0	9	2	0	0	11	0	1	129	1	0	131	0	2	0	1	0	3	**248**
8:00 PM	0	2	26	1	0	29	0	1	1	0	0	2	0	0	29	2	0	31	0	0	0	0	0	0	**62**
8:15 PM	0	0	18	0	0	18	0	0	0	0	0	0	0	0	24	2	0	26	0	0	0	0	0	0	**44**
8:30 PM	0	1	19	0	0	20	0	1	0	0	0	1	0	0	22	0	0	22	0	2	0	0	0	2	**45**
8:45 PM	0	0	14	0	0	14	0	0	0	0	0	0	0	0	18	0	0	18	0	0	0	1	0	1	**33**
Hourly Total	0	3	77	1	0	81	0	2	1	0	0	3	0	0	93	4	0	97	0	2	0	1	0	3	**184**
9:00 PM	0	0	14	0	0	14	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	**23**
9:15 PM	0	0	12	0	0	12	0	0	0	0	0	0	0	0	23	1	0	24	0	0	0	0	0	0	**36**
9:30 PM	0	0	9	0	0	9	0	0	0	0	0	0	0	0	17	0	0	17	0	0	2	0	0	2	**28**
9:45 PM	0	0	17	0	0	17	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	**24**
Hourly Total	0	0	52	0	0	52	0	0	0	0	0	0	0	0	56	1	0	57	0	0	2	0	0	2	**111**
10:00 PM	0	0	10	0	0	10	0	0	0	0	0	0	0	0	21	0	0	21	0	0	1	0	0	1	**32**
10:15 PM	0	0	7	0	0	7	0	0	1	0	0	1	0	0	7	0	0	7	0	0	0	0	0	0	**15**
10:30 PM	0	0	5	0	0	5	0	0	0	0	0	0	1	0	6	0	0	7	0	0	2	0	0	2	**14**
10:45 PM	0	0	8	0	0	8	0	1	0	0	0	1	0	0	6	1	0	7	0	0	0	0	0	0	**16**
Hourly Total	0	0	30	0	0	30	0	1	1	0	0	2	1	0	40	1	0	42	0	0	3	0	0	3	**77**
11:00 PM	0	1	2	0	0	3	0	0	0	0	0	0	0	0	10	1	0	11	0	0	0	0	0	0	**14**
11:15 PM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	**11**
11:30 PM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	**8**
11:45 PM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	**8**
Hourly Total	0	1	15	0	0	16	0	0	0	0	0	0	0	0	24	1	0	25	0	0	0	0	0	0	**41**
DAILY TOTAL	**1**	**25**	**3752**	**19**	**0**	**3797**	**0**	**119**	**20**	**18**	**0**	**157**	**2**	**54**	**3548**	**98**	**0**	**3702**	**0**	**29**	**28**	**57**	**0**	**114**	**7770**
Cars	1	25	3361	18	0	3405	0	116	19	18	0	153	2	53	3165	97	0	3317	0	29	26	57	0	112	**6987**
Heavy Vehicles	0	0	391	1	0	392	0	3	1	0	0	4	0	1	383	1	0	385	0	0	2	0	0	2	**783**
Heavy Vehicle %	0.00%	0.00%	10.42%	5.26%	0.00%	10.32%	0.00%	2.52%	5.00%	0.00%	0.00%	2.55%	0.00%	1.85%	10.79%	1.02%	0.00%	10.40%	0.00%	0.00%	7.14%	0.00%	0.00%	1.75%	**10.08%**

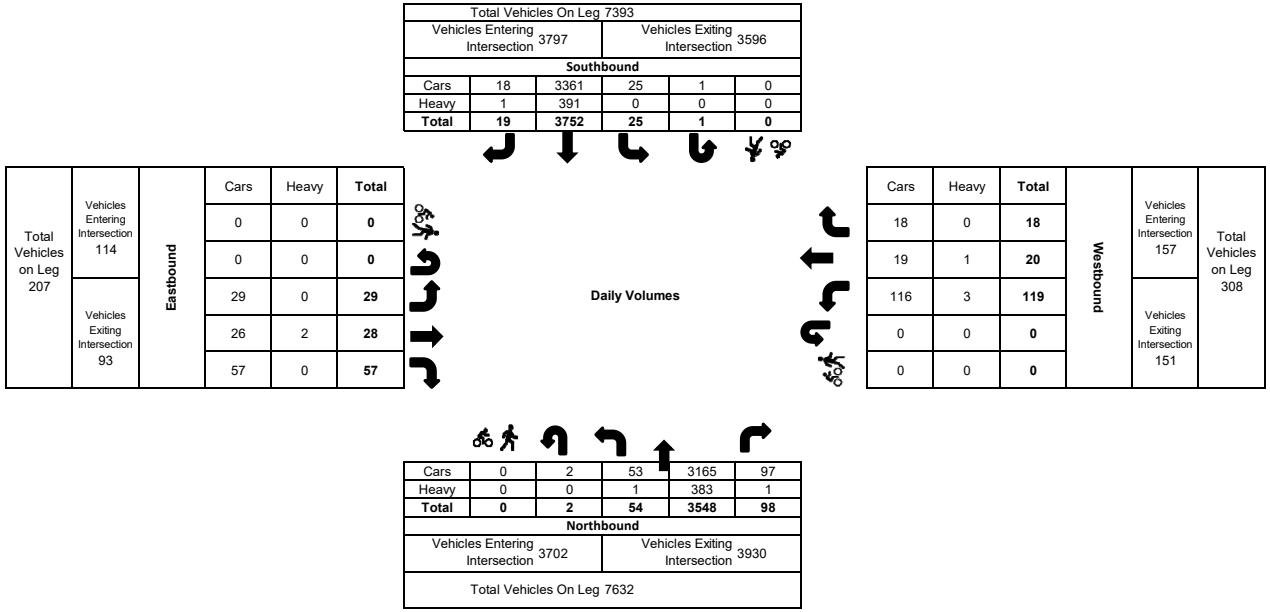
60th St at 20th Ave, 08182022, 0000-2359
Eau Claire
Thursday, August 18, 2022

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	
7:00 AM	0	0	85	0	0	85	0	5	1	1	0	7	0	0	53	0	0	53	0	1	0	1	0	2	**147**
7:15 AM	0	1	102	1	0	104	0	3	0	0	0	3	0	0	44	0	0	44	0	0	1	2	0	3	**154**
7:30 AM	0	0	135	0	0	135	0	3	1	0	0	4	0	0	44	0	0	44	0	0	0	3	0	3	**186**
7:45 AM	0	1	100	0	0	101	0	5	1	0	0	6	0	3	52	0	0	55	0	0	2	1	0	3	**165**
Peak Hour Total	0	2	422	1	0	425	0	16	3	1	0	20	0	3	193	0	0	196	0	1	3	7	0	11	**652**
PHF	0.000	0.500	0.781	0.250	0.000	0.787	0.000	0.800	0.750	0.250	0.000	0.714	0.000	0.250	0.910	0.000	0.000	0.891	0.000	0.250	0.375	0.583	0.000	0.917	**0.876**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Peds/ Bicycles	*Vehicle Approach Total*	
4:15 PM	0	1	59	1	0	61	0	3	0	1	0	4	0	2	101	0	0	103	0	0	4	2	0	6	**174**
4:30 PM	0	0	77	0	0	77	0	3	1	0	0	4	0	2	83	3	0	88	0	0	0	0	0	0	**169**
4:45 PM	0	2	74	2	0	78	0	3	0	0	0	3	0	1	117	6	0	124	0	0	0	1	0	1	**206**
5:00 PM	0	0	104	0	0	104	0	1	0	1	0	2	0	4	127	4	0	135	0	1	1	3	0	5	**246**
Peak Hour Total	0	3	314	3	0	320	0	10	1	2	0	13	0	9	428	13	0	450	0	1	5	6	0	12	**795**
PHF	0.000	0.375	0.755	0.375	0.000	0.769	0.000	0.833	0.250	0.500	0.000	0.813	0.000	0.563	0.843	0.542	0.000	0.833	0.000	0.250	0.313	0.500	0.000	0.500	**0.808**



Highway T Property, LLC Development

Highway T Property, LLC Trip Generation Table

Eau Claire, Wisconsin

Land Use	ITE Code	Proposed Size			Weekday Daily	AM Peak In	AM Peak Out	AM Peak Total	PM Peak In	PM Peak Out	PM Peak Total
				Vehicle Fueling	4105	130	120	250	145	135	280
Gasoline/Service Station with Convienence Market	945*	20	x	Positions	205.36	51%	49%	12.47	51%	49%	13.99
					750	35	30	65	40	25	65
High-Turnover (Sit-Down) Restaurant	932	7.0	x	1,000 SF	107.20	55%	45%	9.57	61%	39%	9.05
					800	25	20	45	30	30	60
Hotel	310	100.0	x	Rooms	7.99	56%	44%	0.46	51%	49%	0.59
					340	20	10	30	20	25	45
Building Materials and Lumber Store	812	20.0	x	1,000 SF	17.05	62%	38%	1.59	46%	54%	2.25
					160	10	10	20	25	35	60
Hardware/Paint Store	816	20.0	x	1,000 SF	8.07	54%	46%	0.92	46%	54%	2.98
					1090	30	20	50	50	50	100
Automobile Parts Sales	843	20.0	x	1,000 SF	54.57	55%	45%	2.51	48%	52%	4.90
					1000	250	0	250	0	250	250
Event Center		38	x	1,000 SF		Assumed 100% parking occupied					
Subtotal					**8245**	**500**	**210**	**710**	**310**	**550**	**860**
Total Linked Trips (Minus) (5%)	812/816/843				**80**	**5**	**0**	**5**	**5**	**5**	**10**
Total Linked Trips (Minus) (20%)	310				**160**	**5**	**5**	**10**	**5**	**5**	**10**
Total Driveway Trips					**8005**	**490**	**205**	**695**	**300**	**540**	**840**
Total Pass-by Trips (Minus) (10%)	932				**75**	**5**	**5**	**10**	**5**	**5**	**10**
Total Pass-by Trips (Minus) (15%)	945				**615**	**20**	**20**	**40**	**20**	**20**	**40**
Total New Trips					**7315**	**465**	**180**	**645**	**275**	**515**	**790**

NOTES:

FAR = 15%

*ITE 10th Edition Rates

							Weekday	AM Peak			PM Peak		
	Parcel No	**Lot Size**	**Land Use**	**ITE Code**	**Proposed Size**		**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
NNW Quad	16-1600-A	1,742,400 SF	Light Industrial										
			Mixed Manufacturing	110		36 ac		225	45	270	55	195	250
			Warehouse/Distribution										
SNW Quad	16-1600-B	1,703,196 SF	Industrial										
			Mixed Manufacturing			15 ac							
			Warehouse/Distribution	150				110	40	150	45	90	135
NE Quad	16-1200	6,882,480 SF	Industrial										
			Mixed Manufacturing			12 ac		300	50	350	75	325	400
			Warehouse/Distribution			12 ac							
						25 ac							
			***Based on largest inquiry to date			52 ac							
						11 ac							
SE on Co Line	14-1510	1,475813 SF	Mixed Residential	210	350-550 units*								
SE on Co Line	14-1511	1,742,400 SF	stormwater		450	7.5 ac		80	245	325	260	155	415
SE on Co Line	14-1513	1,393,920 SF	Greenways			8.5 ac							
			Parks & Open Space			9.4 ac							

* Estimated that 50% of trips use CTH T fo access - reported in table is total trips

ATTACHMENT 2

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	5	15	55	5	5	10	175	20	15	405	40
Future Vol, veh/h	20	5	15	55	5	5	10	175	20	15	405	40
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	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	30	30	30	7	7	7	6	6	6	10	10	10
Mvmt Flow	22	5	16	60	5	5	11	192	22	16	445	44

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	729	735	467	735	746	203	489	0	0	214	0	0
Stage 1	499	499	-	225	225	-	-	-	-	-	-	-
Stage 2	230	236	-	510	521	-	-	-	-	-	-	-
Critical Hdwy	7.4	6.8	6.5	7.17	6.57	6.27	4.16	-	-	4.2	-	-
Critical Hdwy Stg 1	6.4	5.8	-	6.17	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.4	5.8	-	6.17	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.77	4.27	3.57	3.563	4.063	3.363	2.254	-	-	2.29	-	-
Pot Cap-1 Maneuver	305	315	542	329	336	825	1054	-	-	1310	-	-
Stage 1	505	500	-	766	708	-	-	-	-	-	-	-
Stage 2	714	661	-	537	523	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	292	306	542	308	326	825	1054	-	-	1310	-	-
Mov Cap-2 Maneuver	292	306	-	308	326	-	-	-	-	-	-	-
Stage 1	499	492	-	757	700	-	-	-	-	-	-	-
Stage 2	695	653	-	506	514	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.5	19.2	0.4	0.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1054	-	-	356	325	1310	-	-
HCM Lane V/C Ratio	0.01	-	-	0.123	0.22	0.013	-	-
HCM Control Delay (s)	8.5	0	-	16.5	19.2	7.8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.8	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	5	5	15	5	0	5	195	0	0	420	0
Future Vol, veh/h	0	5	5	15	5	0	5	195	0	0	420	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	3	3	3	10	10	10	10	10	10
Mvmt Flow	0	6	6	17	6	0	6	222	0	0	477	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	714	711	477	717	711	222	477	0	0	222	0	0
Stage 1	477	477	-	234	234	-	-	-	-	-	-	-
Stage 2	237	234	-	483	477	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.53	6.23	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.027	3.327	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	346	358	588	343	357	815	1045	-	-	1301	-	-
Stage 1	569	556	-	767	709	-	-	-	-	-	-	-
Stage 2	766	711	-	563	554	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	340	355	588	334	355	815	1045	-	-	1301	-	-
Mov Cap-2 Maneuver	340	355	-	334	355	-	-	-	-	-	-	-
Stage 1	565	556	-	762	704	-	-	-	-	-	-	-
Stage 2	754	706	-	552	554	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	16.4	0.2	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1045	-	-	443	339	1301	-	-
HCM Lane V/C Ratio	0.005	-	-	0.026	0.067	-	-	-
HCM Control Delay (s)	8.5	0	-	13.3	16.4	0	-	-
HCM Lane LOS	A	A	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	30	15	15	45	10	10	10	395	40	15	305	20
Future Vol, veh/h	30	15	15	45	10	10	10	395	40	15	305	20
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	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	30	30	30	7	7	7	6	6	6	10	10	10
Mvmt Flow	36	18	18	54	12	12	12	476	48	18	367	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	951	963	379	957	951	500	391	0	0	524	0	0
Stage 1	415	415	-	524	524	-	-	-	-	-	-	-
Stage 2	536	548	-	433	427	-	-	-	-	-	-	-
Critical Hdwy	7.4	6.8	6.5	7.17	6.57	6.27	4.16	-	-	4.2	-	-
Critical Hdwy Stg 1	6.4	5.8	-	6.17	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.4	5.8	-	6.17	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.77	4.27	3.57	3.563	4.063	3.363	2.254	-	-	2.29	-	-
Pot Cap-1 Maneuver	214	229	610	232	255	561	1146	-	-	1003	-	-
Stage 1	563	547	-	527	522	-	-	-	-	-	-	-
Stage 2	481	474	-	591	577	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	196	220	610	205	245	561	1146	-	-	1003	-	-
Mov Cap-2 Maneuver	196	220	-	205	245	-	-	-	-	-	-	-
Stage 1	555	534	-	519	514	-	-	-	-	-	-	-
Stage 2	453	467	-	541	564	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.8	27.9	0.2	0.4
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1146	-	-	244	234	1003	-	-
HCM Lane V/C Ratio	0.011	-	-	0.296	0.335	0.018	-	-
HCM Control Delay (s)	8.2	0	-	25.8	27.9	8.7	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.2	1.4	0.1	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	5	5	10	0	0	10	430	15	5	315	5
Future Vol, veh/h	0	5	5	10	0	0	10	430	15	5	315	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	3	3	3	10	10	10	10	10	10
Mvmt Flow	0	6	6	12	0	0	12	531	19	6	389	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	969	978	392	975	972	541	395	0	0	550	0	0
Stage 1	404	404	-	565	565	-	-	-	-	-	-	-
Stage 2	565	574	-	410	407	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.53	6.23	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.027	3.327	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	233	250	657	230	251	539	1121	-	-	981	-	-
Stage 1	623	599	-	508	506	-	-	-	-	-	-	-
Stage 2	510	503	-	617	596	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	229	244	657	220	245	539	1121	-	-	981	-	-
Mov Cap-2 Maneuver	229	244	-	220	245	-	-	-	-	-	-	-
Stage 1	614	594	-	500	498	-	-	-	-	-	-	-
Stage 2	502	495	-	600	591	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.5	22.3	0.2	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1121	-	-	356	220	981	-	-
HCM Lane V/C Ratio	0.011	-	-	0.035	0.056	0.006	-	-
HCM Control Delay (s)	8.2	0	-	15.5	22.3	8.7	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	25	5	35	55	5	5	60	310	20	15	455	40
Future Vol, veh/h	25	5	35	55	5	5	60	310	20	15	455	40
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	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	7	7	7	6	6	6	10	10	10
Mvmt Flow	27	5	38	60	5	5	66	341	22	16	500	44

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1043	1049	522	1060	1060	352	544	0	0	363	0	0
Stage 1	554	554	-	484	484	-	-	-	-	-	-	-
Stage 2	489	495	-	576	576	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.17	6.57	6.27	4.16	-	-	4.2	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.17	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.17	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.563	4.063	3.363	2.254	-	-	2.29	-	-
Pot Cap-1 Maneuver	207	227	555	198	220	680	1005	-	-	1153	-	-
Stage 1	517	514	-	555	544	-	-	-	-	-	-	-
Stage 2	561	546	-	494	494	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	186	204	555	167	198	680	1005	-	-	1153	-	-
Mov Cap-2 Maneuver	186	204	-	167	198	-	-	-	-	-	-	-
Stage 1	475	504	-	509	499	-	-	-	-	-	-	-
Stage 2	505	501	-	446	484	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	21.2	37.6	1.4	0.2
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1005	-	-	293	180	1153	-	-
HCM Lane V/C Ratio	0.066	-	-	0.244	0.397	0.014	-	-
HCM Control Delay (s)	8.8	0	-	21.2	37.6	8.2	0	-
HCM Lane LOS	A	A	-	C	E	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.9	1.7	0	-	-

Intersection	
Int Delay, s/veh	20.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	90	10	65	15	15	0	155	185	0	0	410	220
Future Vol, veh/h	90	10	65	15	15	0	155	185	0	0	410	220
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	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	3	3	3	10	10	10	10	10	10
Mvmt Flow	102	11	74	17	17	0	176	210	0	0	466	250

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1162	1153	591	1196	1278	210	716	0	0	210	0	0
Stage 1	591	591	-	562	562	-	-	-	-	-	-	-
Stage 2	571	562	-	634	716	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.53	6.23	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.027	3.327	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	172	197	507	162	165	828	849	-	-	1314	-	-
Stage 1	493	494	-	510	508	-	-	-	-	-	-	-
Stage 2	506	510	-	466	433	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	127	151	507	107	126	828	849	-	-	1314	-	-
Mov Cap-2 Maneuver	127	151	-	107	126	-	-	-	-	-	-	-
Stage 1	377	494	-	390	389	-	-	-	-	-	-	-
Stage 2	370	390	-	389	433	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	125.6	48.5	4.7	0
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	849	-	-	183	116	1314	-	-
HCM Lane V/C Ratio	0.207	-	-	1.025	0.294	-	-	-
HCM Control Delay (s)	10.3	0	-	125.6	48.5	0	-	-
HCM Lane LOS	B	A	-	F	E	A	-	-
HCM 95th %tile Q(veh)	0.8	-	-	8.7	1.1	0	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	35	55	50	25	25
Future Vol, veh/h	50	35	55	50	25	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	38	60	54	27	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	114	0	-	0	233	87
Stage 1	-	-	-	-	87	-
Stage 2	-	-	-	-	146	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1475	-	-	-	755	971
Stage 1	-	-	-	-	936	-
Stage 2	-	-	-	-	881	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1475	-	-	-	727	971
Mov Cap-2 Maneuver	-	-	-	-	727	-
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	881	-

Approach	EB	WB	SB
HCM Control Delay, s	4.4	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1475	-	-	-	831
HCM Lane V/C Ratio	0.037	-	-	-	0.065
HCM Control Delay (s)	7.5	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	4.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	5	140	250	5	150
Future Vol, veh/h	10	5	140	250	5	150
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	5	152	272	5	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	590	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	576	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	470	1066
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	562	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	417	1066
Mov Cap-2 Maneuver	-	-	-	-	417	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	499	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1015	-	-	1602	-
HCM Lane V/C Ratio	0.166	-	-	0.095	-
HCM Control Delay (s)	9.3	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.3	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	0	120	135	0	0
Future Vol, veh/h	15	0	120	135	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	0	130	147	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	423	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	407	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	588	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	536	1063
Mov Cap-2 Maneuver	-	-	-	-	536	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	613	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.5	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1602	-
HCM Lane V/C Ratio	-	-	-	0.081	-
HCM Control Delay (s)	0	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.3	-

Intersection	
Int Delay, s/veh	5.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	10	120	15	0	0
Future Vol, veh/h	15	10	120	15	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	11	130	16	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	27	0	298	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	276	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1587	-	693	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	771	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1587	-	635	1055
Mov Cap-2 Maneuver	-	-	-	-	635	-
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	707	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.6	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1587	-
HCM Lane V/C Ratio	-	-	-	0.082	-
HCM Control Delay (s)	0	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.3	-

Intersection	
Int Delay, s/veh	11.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	35	15	65	45	10	10	40	475	40	15	465	20
Future Vol, veh/h	35	15	65	45	10	10	40	475	40	15	465	20
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	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	30	30	30	7	7	7	6	6	6	10	10	10
Mvmt Flow	42	18	78	54	12	12	48	572	48	18	560	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1312	1324	572	1348	1312	596	584	0	0	620	0	0
Stage 1	608	608	-	692	692	-	-	-	-	-	-	-
Stage 2	704	716	-	656	620	-	-	-	-	-	-	-
Critical Hdwy	7.4	6.8	6.5	7.17	6.57	6.27	4.16	-	-	4.2	-	-
Critical Hdwy Stg 1	6.4	5.8	-	6.17	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.4	5.8	-	6.17	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.77	4.27	3.57	3.563	4.063	3.363	2.254	-	-	2.29	-	-
Pot Cap-1 Maneuver	118	137	470	125	155	494	971	-	-	923	-	-
Stage 1	438	444	-	426	438	-	-	-	-	-	-	-
Stage 2	386	395	-	446	472	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	99	123	470	85	139	494	971	-	-	923	-	-
Mov Cap-2 Maneuver	99	123	-	85	139	-	-	-	-	-	-	-
Stage 1	405	431	-	394	405	-	-	-	-	-	-	-
Stage 2	338	365	-	346	458	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	65	103.7	0.6	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	971	-	-	187	105	923	-	-
HCM Lane V/C Ratio	0.05	-	-	0.741	0.746	0.02	-	-
HCM Control Delay (s)	8.9	0	-	65	103.7	9	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	4.8	4	0.1	-	-

Intersection	
Int Delay, s/veh	289.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	240	15	175	10	5	0	105	420	15	5	305	140
Future Vol, veh/h	240	15	175	10	5	0	105	420	15	5	305	140
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	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	3	3	3	10	10	10	10	10	10
Mvmt Flow	296	19	216	12	6	0	130	519	19	6	377	173

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1268	1274	464	1382	1351	529	550	0	0	538	0	0
Stage 1	476	476	-	789	789	-	-	-	-	-	-	-
Stage 2	792	798	-	593	562	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.53	6.23	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.027	3.327	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	~ 145	167	598	121	150	548	981	-	-	991	-	-
Stage 1	570	557	-	382	401	-	-	-	-	-	-	-
Stage 2	382	398	-	490	508	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 118	134	598	59	121	548	981	-	-	991	-	-
Mov Cap-2 Maneuver	~ 118	134	-	59	121	-	-	-	-	-	-	-
Stage 1	462	552	-	310	325	-	-	-	-	-	-	-
Stage 2	304	323	-	300	503	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 962.4	72.7	1.8	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	981	-	-	176	71	991	-	-
HCM Lane V/C Ratio	0.132	-	-	3.016	0.261	0.006	-	-
HCM Control Delay (s)	9.2	0	-	$ 962.4	72.7	8.7	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.5	-	-	48.5	0.9	0	-	-

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

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	55	40	30	55	55
Future Vol, veh/h	30	55	40	30	55	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	60	43	33	60	60

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	76	0	-	0	186	60
Stage 1	-	-	-	-	60	-
Stage 2	-	-	-	-	126	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1523	-	-	-	803	1005
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	900	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1523	-	-	-	785	1005
Mov Cap-2 Maneuver	-	-	-	-	785	-
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	900	-

Approach	EB	WB	SB
HCM Control Delay, s	2.6	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1523	-	-	-	881
HCM Lane V/C Ratio	0.021	-	-	-	0.136
HCM Control Delay (s)	7.4	0	-	-	9.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	6.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	250	5	235	15	5	180
Future Vol, veh/h	250	5	235	15	5	180
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	272	5	255	16	5	196

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	277	0	801	275
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	526	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1286	-	354	764
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	593	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1286	-	283	764
Mov Cap-2 Maneuver	-	-	-	-	283	-
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	474	-

Approach	EB	WB	NB
HCM Control Delay, s	0	8	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	730	-	-	1286	-
HCM Lane V/C Ratio	0.275	-	-	0.199	-
HCM Control Delay (s)	11.8	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.1	-	-	0.7	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	135	0	0	20	0	120
Future Vol, veh/h	135	0	0	20	0	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	0	0	22	0	130

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	147	0	169	147
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1435	-	821	900
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1435	-	821	900
Mov Cap-2 Maneuver	-	-	-	-	821	-
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	1001	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	900	-	-	1435	-
HCM Lane V/C Ratio	0.145	-	-	-	-
HCM Control Delay (s)	9.7	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0	-

Intersection	
Int Delay, s/veh	7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	0	0	20	10	120
Future Vol, veh/h	15	0	0	20	10	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	0	0	22	11	130

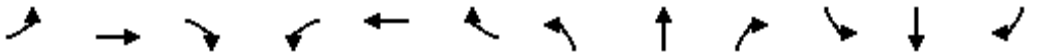
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	38	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	974	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	974	1063
Mov Cap-2 Maneuver	-	-	-	-	974	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	1001	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1056	-	-	1602	-
HCM Lane V/C Ratio	0.134	-	-	-	-
HCM Control Delay (s)	8.9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0	-

HCM 6th Signalized Intersection Summary
1: CTH T & 10th Avenue

01/30/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	5	35	55	5	5	60	310	20	15	455	40
Future Volume (veh/h)	25	5	35	55	5	5	60	310	20	15	455	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1796	1796	1796	1811	1811	1811	1752	1752	1752
Adj Flow Rate, veh/h	27	5	38	60	5	5	66	341	22	16	500	44
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	7	7	7	6	6	6	10	10	10
Cap, veh/h	168	56	147	334	28	17	373	741	48	475	609	54
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.08	0.44	0.44	0.03	0.38	0.38
Sat Flow, veh/h	397	327	860	1165	161	102	1725	1683	109	1668	1587	140
Grp Volume(v), veh/h	70	0	0	70	0	0	66	0	363	16	0	544
Grp Sat Flow(s),veh/h/ln	1584	0	0	1428	0	0	1725	0	1792	1668	0	1727
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	7.1	0.3	0.0	14.2
Cycle Q Clear(g_c), s	1.8	0.0	0.0	1.7	0.0	0.0	1.1	0.0	7.1	0.3	0.0	14.2
Prop In Lane	0.39		0.54	0.86		0.07	1.00		0.06	1.00		0.08
Lane Grp Cap(c), veh/h	372	0	0	379	0	0	373	0	789	475	0	663
V/C Ratio(X)	0.19	0.00	0.00	0.18	0.00	0.00	0.18	0.00	0.46	0.03	0.00	0.82
Avail Cap(c_a), veh/h	843	0	0	796	0	0	712	0	1399	896	0	1348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.9	0.0	0.0	17.9	0.0	0.0	9.5	0.0	9.8	7.6	0.0	13.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.4	0.0	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.6	0.0	0.0	0.3	0.0	1.8	0.1	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	0.0	0.0	18.1	0.0	0.0	9.7	0.0	10.2	7.7	0.0	16.4
LnGrp LOS	B	A	A	B	A	A	A	A	B	A	A	B
Approach Vol, veh/h		70			70			429			560	
Approach Delay, s/veh		18.1			18.1			10.2			16.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	28.0		14.6	10.2	25.2		14.6				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	39.0		24.0	14.0	39.0		24.0				
Max Q Clear Time (g_c+I1), s	2.3	9.1		3.8	3.1	16.2		3.7				
Green Ext Time (p_c), s	0.0	1.9		0.2	0.1	3.0		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			14.1									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	10	65	15	15	0	155	185	0	0	410	220
Future Volume (veh/h)	90	10	65	15	15	0	155	185	0	0	410	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	102	11	74	17	17	0	176	210	0	0	466	250
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	3	3	3	10	10	10	10	10	10
Cap, veh/h	291	251	213	156	131	0	499	1231	0	827	927	786
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.00	0.09	0.70	0.00	0.00	0.53	0.53
Sat Flow, veh/h	1396	1870	1585	616	979	0	1668	1752	0	1668	1752	1485
Grp Volume(v), veh/h	102	11	74	34	0	0	176	210	0	0	466	250
Grp Sat Flow(s),veh/h/ln	1396	1870	1585	1594	0	0	1668	1752	0	1668	1752	1485
Q Serve(g_s), s	3.5	0.4	3.1	0.0	0.0	0.0	3.3	3.0	0.0	0.0	12.6	7.0
Cycle Q Clear(g_c), s	4.7	0.4	3.1	1.2	0.0	0.0	3.3	3.0	0.0	0.0	12.6	7.0
Prop In Lane	1.00		1.00	0.50		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	251	213	287	0	0	499	1231	0	827	927	786
V/C Ratio(X)	0.35	0.04	0.35	0.12	0.00	0.00	0.35	0.17	0.00	0.00	0.50	0.32
Avail Cap(c_a), veh/h	653	736	624	684	0	0	661	1231	0	1142	927	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	27.8	29.0	28.1	0.0	0.0	7.3	3.7	0.0	0.0	11.1	9.8
Incr Delay (d2), s/veh	0.7	0.1	1.0	0.2	0.0	0.0	0.4	0.3	0.0	0.0	1.9	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.2	1.1	0.5	0.0	0.0	0.8	0.6	0.0	0.0	4.1	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	27.9	29.9	28.3	0.0	0.0	7.8	4.0	0.0	0.0	13.1	10.9
LnGrp LOS	C	C	C	C	A	A	A	A	A	A	B	B
Approach Vol, veh/h		187			34			386			716	
Approach Delay, s/veh		30.0			28.3			5.7			12.3	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	57.8		15.9	12.8	45.0		15.9
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	14.0	39.0		29.0	14.0	39.0		29.0
Max Q Clear Time (g_c+I1), s	10.0	5.0		6.7	5.3	14.6		3.2
Green Ext Time (p_c), s	0.0	1.0		0.5	0.3	3.4		0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	35	55	50	25	25
Future Vol, veh/h	50	35	55	50	25	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	38	60	54	27	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	114	0	-	0	233	87
Stage 1	-	-	-	-	87	-
Stage 2	-	-	-	-	146	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1475	-	-	-	755	971
Stage 1	-	-	-	-	936	-
Stage 2	-	-	-	-	881	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1475	-	-	-	727	971
Mov Cap-2 Maneuver	-	-	-	-	727	-
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	881	-

Approach	EB	WB	SB
HCM Control Delay, s	4.4	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1475	-	-	-	831
HCM Lane V/C Ratio	0.037	-	-	-	0.065
HCM Control Delay (s)	7.5	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	5	140	250	5	150
Future Vol, veh/h	10	5	140	250	5	150
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	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	11	5	152	272	5	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	590	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	576	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	470	1066
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	562	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	425	1066
Mov Cap-2 Maneuver	-	-	-	-	425	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	509	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1017	-	-	1602	-
HCM Lane V/C Ratio	0.166	-	-	0.095	-
HCM Control Delay (s)	9.2	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.3	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	0	120	135	0	0
Future Vol, veh/h	15	0	120	135	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	0	130	147	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	423	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	407	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	588	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	536	1063
Mov Cap-2 Maneuver	-	-	-	-	536	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	613	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.5	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1602	-
HCM Lane V/C Ratio	-	-	-	0.081	-
HCM Control Delay (s)	0	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.3	-

Intersection	
Int Delay, s/veh	5.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	10	120	15	0	0
Future Vol, veh/h	15	10	120	15	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	11	130	16	0	0

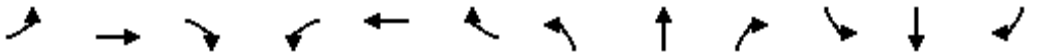
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	27	0	298	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	276	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1587	-	693	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	771	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1587	-	635	1055
Mov Cap-2 Maneuver	-	-	-	-	635	-
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	707	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.6	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1587	-
HCM Lane V/C Ratio	-	-	-	0.082	-
HCM Control Delay (s)	0	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.3	-

HCM 6th Signalized Intersection Summary
1: CTH T & 10th Avenue

01/30/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	15	65	45	10	10	40	475	40	15	465	20
Future Volume (veh/h)	35	15	65	45	10	10	40	475	40	15	465	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1455	1455	1455	1796	1796	1796	1811	1811	1811	1752	1752	1752
Adj Flow Rate, veh/h	42	18	78	54	12	12	48	572	48	18	560	24
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	30	30	30	7	7	7	6	6	6	10	10	10
Cap, veh/h	136	54	129	289	63	43	336	724	61	296	672	29
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.07	0.44	0.44	0.03	0.40	0.40
Sat Flow, veh/h	248	293	702	934	345	232	1725	1648	138	1668	1667	71
Grp Volume(v), veh/h	138	0	0	78	0	0	48	0	620	18	0	584
Grp Sat Flow(s),veh/h/ln	1243	0	0	1511	0	0	1725	0	1786	1668	0	1739
Q Serve(g_s), s	2.1	0.0	0.0	0.0	0.0	0.0	0.8	0.0	15.5	0.3	0.0	15.7
Cycle Q Clear(g_c), s	5.2	0.0	0.0	2.1	0.0	0.0	0.8	0.0	15.5	0.3	0.0	15.7
Prop In Lane	0.30		0.57	0.69		0.15	1.00		0.08	1.00		0.04
Lane Grp Cap(c), veh/h	319	0	0	395	0	0	336	0	785	296	0	700
V/C Ratio(X)	0.43	0.00	0.00	0.20	0.00	0.00	0.14	0.00	0.79	0.06	0.00	0.83
Avail Cap(c_a), veh/h	653	0	0	769	0	0	684	0	1339	694	0	1304
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	0.0	18.2	0.0	0.0	10.0	0.0	12.5	9.7	0.0	14.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.2	0.0	0.0	0.2	0.0	1.8	0.1	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	0.7	0.0	0.0	0.2	0.0	4.3	0.1	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	0.0	0.0	18.4	0.0	0.0	10.2	0.0	14.4	9.8	0.0	16.7
LnGrp LOS	C	A	A	B	A	A	B	A	B	A	A	B
Approach Vol, veh/h		138			78			668			602	
Approach Delay, s/veh		20.3			18.4			14.1			16.4	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	28.8		15.6	9.5	26.9		15.6				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	39.0		24.0	14.0	39.0		24.0				
Max Q Clear Time (g_c+I1), s	2.3	17.5		7.2	2.8	17.7		4.1				
Green Ext Time (p_c), s	0.0	3.5		0.5	0.0	3.2		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		15.8	
HCM 6th LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	15	175	10	5	0	105	420	15	5	305	140
Future Volume (veh/h)	240	15	175	10	5	0	105	420	15	5	305	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	296	19	216	12	6	0	130	519	19	6	377	173
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	3	3	3	10	10	10	10	10	10
Cap, veh/h	425	446	378	269	121	0	476	899	33	370	817	693
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.00	0.08	0.54	0.54	0.01	0.47	0.47
Sat Flow, veh/h	1410	1870	1585	826	506	0	1668	1679	61	1668	1752	1485
Grp Volume(v), veh/h	296	19	216	18	0	0	130	0	538	6	377	173
Grp Sat Flow(s),veh/h/ln	1410	1870	1585	1332	0	0	1668	0	1741	1668	1752	1485
Q Serve(g_s), s	16.1	0.7	10.0	0.0	0.0	0.0	3.2	0.0	17.4	0.1	12.2	5.9
Cycle Q Clear(g_c), s	16.7	0.7	10.0	0.6	0.0	0.0	3.2	0.0	17.4	0.1	12.2	5.9
Prop In Lane	1.00		1.00	0.67		0.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	425	446	378	390	0	0	476	0	932	370	817	693
V/C Ratio(X)	0.70	0.04	0.57	0.05	0.00	0.00	0.27	0.00	0.58	0.02	0.46	0.25
Avail Cap(c_a), veh/h	578	649	550	531	0	0	623	0	932	631	817	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	24.5	28.1	24.5	0.0	0.0	10.4	0.0	13.1	10.5	15.2	13.5
Incr Delay (d2), s/veh	2.2	0.0	1.4	0.0	0.0	0.0	0.3	0.0	2.6	0.0	1.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.3	3.6	0.3	0.0	0.0	1.0	0.0	5.9	0.0	4.5	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	24.5	29.4	24.5	0.0	0.0	10.7	0.0	15.7	10.5	17.0	14.3
LnGrp LOS	C	C	C	C	A	A	B	A	B	B	B	B
Approach Vol, veh/h		531			18			668			556	
Approach Delay, s/veh		31.1			24.5			14.7			16.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	50.7		25.9	12.7	45.0		25.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	39.0		29.0	14.0	39.0		29.0				
Max Q Clear Time (g_c+I1), s	2.1	19.4		18.7	5.2	14.2		2.6				
Green Ext Time (p_c), s	0.0	2.8		1.2	0.2	2.5		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	55	40	30	55	55
Future Vol, veh/h	30	55	40	30	55	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	60	43	33	60	60

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	76	0	-	0	186	60
Stage 1	-	-	-	-	60	-
Stage 2	-	-	-	-	126	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1523	-	-	-	803	1005
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	900	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1523	-	-	-	785	1005
Mov Cap-2 Maneuver	-	-	-	-	785	-
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	900	-

Approach	EB	WB	SB
HCM Control Delay, s	2.6	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1523	-	-	-	881
HCM Lane V/C Ratio	0.021	-	-	-	0.136
HCM Control Delay (s)	7.4	0	-	-	9.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	6.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	250	5	235	15	5	180
Future Vol, veh/h	250	5	235	15	5	180
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	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	272	5	255	16	5	196

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	277	0	801	275
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	526	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1286	-	354	764
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	593	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1286	-	284	764
Mov Cap-2 Maneuver	-	-	-	-	284	-
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	476	-

Approach	EB	WB	NB
HCM Control Delay, s	0	8	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	731	-	-	1286	-
HCM Lane V/C Ratio	0.275	-	-	0.199	-
HCM Control Delay (s)	11.8	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.1	-	-	0.7	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	135	0	0	20	0	120
Future Vol, veh/h	135	0	0	20	0	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	0	0	22	0	130

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	147	0	169	147
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1435	-	821	900
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1435	-	821	900
Mov Cap-2 Maneuver	-	-	-	-	821	-
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	1001	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	900	-	-	1435	-
HCM Lane V/C Ratio	0.145	-	-	-	-
HCM Control Delay (s)	9.7	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0	-

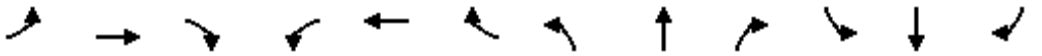
Intersection	
Int Delay, s/veh	7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	0	0	20	10	120
Future Vol, veh/h	15	0	0	20	10	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	0	0	22	11	130

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	38	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	974	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	974	1063
Mov Cap-2 Maneuver	-	-	-	-	974	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	1001	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1056	-	-	1602	-
HCM Lane V/C Ratio	0.134	-	-	-	-
HCM Control Delay (s)	8.9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	5	130	60	5	5	240	350	25	20	545	230
Future Volume (veh/h)	120	5	130	60	5	5	240	350	25	20	545	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1796	1796	1796	1811	1811	1811	1752	1752	1752
Adj Flow Rate, veh/h	132	5	143	66	5	5	264	385	27	22	599	253
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	7	7	7	6	6	6	10	10	10
Cap, veh/h	205	15	164	256	19	14	302	925	65	523	538	227
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.13	0.55	0.55	0.03	0.46	0.46
Sat Flow, veh/h	707	73	814	879	96	69	1725	1673	117	1668	1169	494
Grp Volume(v), veh/h	280	0	0	76	0	0	264	0	412	22	0	852
Grp Sat Flow(s),veh/h/ln	1594	0	0	1044	0	0	1725	0	1790	1668	0	1663
Q Serve(g_s), s	8.8	0.0	0.0	0.0	0.0	0.0	8.5	0.0	11.3	0.5	0.0	39.0
Cycle Q Clear(g_c), s	14.2	0.0	0.0	5.4	0.0	0.0	8.5	0.0	11.3	0.5	0.0	39.0
Prop In Lane	0.47		0.51	0.87		0.07	1.00		0.07	1.00		0.30
Lane Grp Cap(c), veh/h	383	0	0	289	0	0	302	0	990	523	0	766
V/C Ratio(X)	0.73	0.00	0.00	0.26	0.00	0.00	0.87	0.00	0.42	0.04	0.00	1.11
Avail Cap(c_a), veh/h	506	0	0	391	0	0	370	0	990	743	0	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.4	0.0	0.0	29.1	0.0	0.0	23.4	0.0	11.0	8.1	0.0	22.9
Incr Delay (d2), s/veh	3.7	0.0	0.0	0.5	0.0	0.0	17.3	0.0	0.3	0.0	0.0	68.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	0.0	1.2	0.0	0.0	3.2	0.0	3.6	0.1	0.0	26.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.1	0.0	0.0	29.6	0.0	0.0	40.7	0.0	11.3	8.2	0.0	91.0
LnGrp LOS	D	A	A	C	A	A	D	A	B	A	A	F
Approach Vol, veh/h		280			76			676			874	
Approach Delay, s/veh		36.1			29.6			22.8			88.9	
Approach LOS		D			C			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	52.8		23.0	16.7	45.0		23.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	39.0		24.0	14.0	39.0		24.0				
Max Q Clear Time (g_c+I1), s	2.5	13.3		16.2	10.5	41.0		7.4				
Green Ext Time (p_c), s	0.0	2.2		0.8	0.2	0.0		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			55.3									
HCM 6th LOS			E									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	10	65	15	15	0	155	325	0	0	680	220
Future Volume (veh/h)	90	10	65	15	15	0	155	325	0	0	680	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	102	11	74	17	17	0	176	369	0	0	773	250
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	3	3	3	10	10	10	10	10	10
Cap, veh/h	291	251	213	156	131	0	333	1231	0	692	927	786
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.00	0.09	0.70	0.00	0.00	0.53	0.53
Sat Flow, veh/h	1396	1870	1585	616	979	0	1668	1752	0	1668	1752	1485
Grp Volume(v), veh/h	102	11	74	34	0	0	176	369	0	0	773	250
Grp Sat Flow(s),veh/h/ln	1396	1870	1585	1594	0	0	1668	1752	0	1668	1752	1485
Q Serve(g_s), s	3.5	0.4	3.1	0.0	0.0	0.0	3.3	5.8	0.0	0.0	27.4	7.0
Cycle Q Clear(g_c), s	4.7	0.4	3.1	1.2	0.0	0.0	3.3	5.8	0.0	0.0	27.4	7.0
Prop In Lane	1.00		1.00	0.50		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	251	213	287	0	0	333	1231	0	692	927	786
V/C Ratio(X)	0.35	0.04	0.35	0.12	0.00	0.00	0.53	0.30	0.00	0.00	0.83	0.32
Avail Cap(c_a), veh/h	653	736	624	684	0	0	496	1231	0	1006	927	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	27.8	29.0	28.1	0.0	0.0	13.5	4.1	0.0	0.0	14.6	9.8
Incr Delay (d2), s/veh	0.7	0.1	1.0	0.2	0.0	0.0	1.3	0.6	0.0	0.0	8.7	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.2	1.1	0.5	0.0	0.0	1.1	1.2	0.0	0.0	10.1	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	27.9	29.9	28.3	0.0	0.0	14.8	4.7	0.0	0.0	23.3	10.9
LnGrp LOS	C	C	C	C	A	A	B	A	A	A	C	B
Approach Vol, veh/h		187			34			545			1023	
Approach Delay, s/veh		30.0			28.3			8.0			20.3	
Approach LOS		C			C			A			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	57.8		15.9	12.8	45.0		15.9
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	4.0	39.0		29.0	14.0	39.0		29.0
Max Q Clear Time (g_c+I1), s	10.0	7.8		6.7	5.3	29.4		3.2
Green Ext Time (p_c), s	0.0	1.9		0.5	0.3	3.9		0.1

Intersection Summary	
HCM 6th Ctrl Delay	17.7
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	225	420	50	25	25
Future Vol, veh/h	50	225	420	50	25	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	245	457	54	27	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	511	0	-	0	837	484
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	353	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1054	-	-	-	337	583
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	711	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1054	-	-	-	317	583
Mov Cap-2 Maneuver	-	-	-	-	317	-
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	711	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1054	-	-	-	411
HCM Lane V/C Ratio	0.052	-	-	-	0.132
HCM Control Delay (s)	8.6	0	-	-	15.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	5	140	250	5	150
Future Vol, veh/h	10	5	140	250	5	150
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	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	11	5	152	272	5	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	590	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	576	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	470	1066
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	562	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	425	1066
Mov Cap-2 Maneuver	-	-	-	-	425	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	509	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1017	-	-	1602	-
HCM Lane V/C Ratio	0.166	-	-	0.095	-
HCM Control Delay (s)	9.2	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.3	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	0	120	135	0	0
Future Vol, veh/h	15	0	120	135	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	0	130	147	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	423	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	407	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	588	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	536	1063
Mov Cap-2 Maneuver	-	-	-	-	536	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	613	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.5	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1602	-
HCM Lane V/C Ratio	-	-	-	0.081	-
HCM Control Delay (s)	0	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.3	-

Intersection	
Int Delay, s/veh	5.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	10	120	15	0	0
Future Vol, veh/h	15	10	120	15	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	11	130	16	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	27	0	298	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	276	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1587	-	693	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	771	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1587	-	635	1055
Mov Cap-2 Maneuver	-	-	-	-	635	-
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	707	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.6	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1587	-
HCM Lane V/C Ratio	-	-	-	0.082	-
HCM Control Delay (s)	0	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.3	-

HCM 6th Signalized Intersection Summary
1: CTH T & 10th Avenue

01/30/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	15	255	45	10	10	150	560	50	20	530	135
Future Volume (veh/h)	225	15	255	45	10	10	150	560	50	20	530	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1455	1455	1455	1796	1796	1796	1811	1811	1811	1752	1752	1752
Adj Flow Rate, veh/h	271	18	307	54	12	12	181	675	60	24	639	163
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	30	30	30	7	7	7	6	6	6	10	10	10
Cap, veh/h	209	10	169	251	55	43	220	800	71	228	596	152
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.08	0.49	0.49	0.04	0.44	0.44
Sat Flow, veh/h	547	36	620	666	203	158	1725	1639	146	1668	1347	343
Grp Volume(v), veh/h	596	0	0	78	0	0	181	0	735	24	0	802
Grp Sat Flow(s),veh/h/ln	1204	0	0	1026	0	0	1725	0	1785	1668	0	1690
Q Serve(g_s), s	19.3	0.0	0.0	0.0	0.0	0.0	4.9	0.0	31.6	0.6	0.0	39.0
Cycle Q Clear(g_c), s	24.0	0.0	0.0	4.7	0.0	0.0	4.9	0.0	31.6	0.6	0.0	39.0
Prop In Lane	0.45		0.52	0.69		0.15	1.00		0.08	1.00		0.20
Lane Grp Cap(c), veh/h	388	0	0	349	0	0	220	0	871	228	0	748
V/C Ratio(X)	1.54	0.00	0.00	0.22	0.00	0.00	0.82	0.00	0.84	0.11	0.00	1.07
Avail Cap(c_a), veh/h	388	0	0	349	0	0	356	0	871	434	0	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.6	0.0	0.0	24.8	0.0	0.0	19.8	0.0	19.6	16.0	0.0	24.5
Incr Delay (d2), s/veh	254.7	0.0	0.0	0.3	0.0	0.0	7.8	0.0	7.6	0.2	0.0	53.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	35.3	0.0	0.0	1.2	0.0	0.0	2.0	0.0	12.5	0.2	0.0	24.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	288.3	0.0	0.0	25.2	0.0	0.0	27.7	0.0	27.3	16.2	0.0	78.4
LnGrp LOS	F	A	A	C	A	A	C	A	C	B	A	F
Approach Vol, veh/h		596			78			916			826	
Approach Delay, s/veh		288.3			25.2			27.3			76.6	
Approach LOS		F			C			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	49.0		30.0	13.1	45.0		30.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	39.0		24.0	14.0	39.0		24.0				
Max Q Clear Time (g_c+I1), s	2.6	33.6		26.0	6.9	41.0		6.7				
Green Ext Time (p_c), s	0.0	2.1		0.0	0.2	0.0		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			108.5									
HCM 6th LOS			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	15	175	10	5	0	105	705	20	5	485	140
Future Volume (veh/h)	240	15	175	10	5	0	105	705	20	5	485	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	296	19	216	12	6	0	130	870	25	6	599	173
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	3	3	3	10	10	10	10	10	10
Cap, veh/h	425	446	378	269	121	0	343	907	26	130	817	693
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.00	0.08	0.54	0.54	0.01	0.47	0.47
Sat Flow, veh/h	1410	1870	1585	826	506	0	1668	1694	49	1668	1752	1485
Grp Volume(v), veh/h	296	19	216	18	0	0	130	0	895	6	599	173
Grp Sat Flow(s),veh/h/ln	1410	1870	1585	1332	0	0	1668	0	1743	1668	1752	1485
Q Serve(g_s), s	16.1	0.7	10.0	0.0	0.0	0.0	3.2	0.0	41.0	0.1	23.2	5.9
Cycle Q Clear(g_c), s	16.7	0.7	10.0	0.6	0.0	0.0	3.2	0.0	41.0	0.1	23.2	5.9
Prop In Lane	1.00		1.00	0.67		0.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	425	446	378	390	0	0	343	0	933	130	817	693
V/C Ratio(X)	0.70	0.04	0.57	0.05	0.00	0.00	0.38	0.00	0.96	0.05	0.73	0.25
Avail Cap(c_a), veh/h	578	649	550	531	0	0	489	0	933	392	817	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	24.5	28.1	24.5	0.0	0.0	13.3	0.0	18.6	18.8	18.1	13.5
Incr Delay (d2), s/veh	2.2	0.0	1.4	0.0	0.0	0.0	0.7	0.0	21.1	0.1	5.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.3	3.6	0.3	0.0	0.0	1.0	0.0	18.0	0.0	8.9	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	24.5	29.4	24.5	0.0	0.0	14.0	0.0	39.7	18.9	23.8	14.3
LnGrp LOS	C	C	C	C	A	A	B	A	D	B	C	B
Approach Vol, veh/h		531			18			1025			778	
Approach Delay, s/veh		31.1			24.5			36.4			21.7	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	50.7		25.9	12.7	45.0		25.9
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	14.0	39.0		29.0	14.0	39.0		29.0
Max Q Clear Time (g_c+I1), s	2.1	43.0		18.7	5.2	25.2		2.6
Green Ext Time (p_c), s	0.0	0.0		1.2	0.2	3.4		0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.3
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	440	260	30	55	55
Future Vol, veh/h	30	440	260	30	55	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	478	283	33	60	60

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	316	0	-	0	844	300
Stage 1	-	-	-	-	300	-
Stage 2	-	-	-	-	544	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1244	-	-	-	334	740
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	582	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1244	-	-	-	322	740
Mov Cap-2 Maneuver	-	-	-	-	322	-
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	582	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	15.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1244	-	-	-	449
HCM Lane V/C Ratio	0.026	-	-	-	0.266
HCM Control Delay (s)	8	0	-	-	15.9
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1

Intersection	
Int Delay, s/veh	6.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	250	5	235	15	5	180
Future Vol, veh/h	250	5	235	15	5	180
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	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	272	5	255	16	5	196

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	277	0	801	275
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	526	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1286	-	354	764
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	593	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1286	-	284	764
Mov Cap-2 Maneuver	-	-	-	-	284	-
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	476	-

Approach	EB	WB	NB
HCM Control Delay, s	0	8	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	731	-	-	1286	-
HCM Lane V/C Ratio	0.275	-	-	0.199	-
HCM Control Delay (s)	11.8	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.1	-	-	0.7	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	135	0	0	20	0	120
Future Vol, veh/h	135	0	0	20	0	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	0	0	22	0	130

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	147	0	169	147
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1435	-	821	900
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1435	-	821	900
Mov Cap-2 Maneuver	-	-	-	-	821	-
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	1001	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	900	-	-	1435	-
HCM Lane V/C Ratio	0.145	-	-	-	-
HCM Control Delay (s)	9.7	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0	-

Intersection	
Int Delay, s/veh	7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	0	0	20	10	120
Future Vol, veh/h	15	0	0	20	10	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	0	0	22	11	130

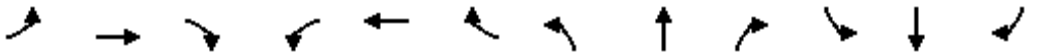
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	38	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	974	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	974	1063
Mov Cap-2 Maneuver	-	-	-	-	974	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	1001	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1056	-	-	1602	-
HCM Lane V/C Ratio	0.134	-	-	-	-
HCM Control Delay (s)	8.9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0	-

HCM 6th Signalized Intersection Summary
1: CTH T & 10th Avenue

01/30/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	5	130	60	5	5	240	350	25	20	545	230
Future Volume (veh/h)	120	5	130	60	5	5	240	350	25	20	545	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1796	1796	1796	1811	1811	1811	1752	1752	1752
Adj Flow Rate, veh/h	132	5	143	66	5	5	264	385	27	22	599	253
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	7	7	7	6	6	6	10	10	10
Cap, veh/h	455	11	305	258	19	10	484	1327	93	503	995	444
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.14	0.41	0.41	0.04	0.30	0.30
Sat Flow, veh/h	1405	54	1539	627	98	51	1725	3263	228	1668	3328	1485
Grp Volume(v), veh/h	132	0	148	76	0	0	264	202	210	22	599	253
Grp Sat Flow(s),veh/h/ln	1405	0	1593	777	0	0	1725	1721	1770	1668	1664	1485
Q Serve(g_s), s	0.0	0.0	4.1	2.4	0.0	0.0	5.0	4.0	4.0	0.4	7.7	7.2
Cycle Q Clear(g_c), s	3.5	0.0	4.1	6.6	0.0	0.0	5.0	4.0	4.0	0.4	7.7	7.2
Prop In Lane	1.00		0.97	0.87		0.07	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	455	0	315	288	0	0	484	700	720	503	995	444
V/C Ratio(X)	0.29	0.00	0.47	0.26	0.00	0.00	0.55	0.29	0.29	0.04	0.60	0.57
Avail Cap(c_a), veh/h	849	0	762	634	0	0	715	1337	1375	907	2586	1153
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	0.0	17.8	20.0	0.0	0.0	10.2	10.0	10.0	8.0	15.0	14.9
Incr Delay (d2), s/veh	0.3	0.0	1.1	0.5	0.0	0.0	1.0	0.2	0.2	0.0	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.3	0.7	0.0	0.0	1.3	1.0	1.1	0.1	2.2	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.9	0.0	18.9	20.5	0.0	0.0	11.2	10.2	10.2	8.1	15.6	16.0
LnGrp LOS	B	A	B	C	A	A	B	B	B	A	B	B
Approach Vol, veh/h		280			76			676			874	
Approach Delay, s/veh		18.4			20.5			10.6			15.6	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	26.4		15.9	13.3	21.0		15.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	39.0		24.0	14.0	39.0		24.0				
Max Q Clear Time (g_c+I1), s	2.4	6.0		6.1	7.0	9.7		8.6				
Green Ext Time (p_c), s	0.0	2.1		1.0	0.4	4.6		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		14.4	
HCM 6th LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	10	65	15	15	0	155	325	0	0	680	220
Future Volume (veh/h)	90	10	65	15	15	0	155	325	0	0	680	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	102	11	74	17	17	0	176	369	0	0	773	250
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	3	3	3	10	10	10	10	10	10
Cap, veh/h	291	251	213	156	131	0	452	2340	0	732	1761	786
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.00	0.09	0.70	0.00	0.00	0.53	0.53
Sat Flow, veh/h	1396	1870	1585	616	979	0	1668	3416	0	1668	3328	1485
Grp Volume(v), veh/h	102	11	74	34	0	0	176	369	0	0	773	250
Grp Sat Flow(s),veh/h/ln	1396	1870	1585	1594	0	0	1668	1664	0	1668	1664	1485
Q Serve(g_s), s	3.5	0.4	3.1	0.0	0.0	0.0	3.3	2.7	0.0	0.0	10.5	7.0
Cycle Q Clear(g_c), s	4.7	0.4	3.1	1.2	0.0	0.0	3.3	2.7	0.0	0.0	10.5	7.0
Prop In Lane	1.00		1.00	0.50		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	251	213	287	0	0	452	2340	0	732	1761	786
V/C Ratio(X)	0.35	0.04	0.35	0.12	0.00	0.00	0.39	0.16	0.00	0.00	0.44	0.32
Avail Cap(c_a), veh/h	653	736	624	684	0	0	614	2340	0	1047	1761	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	27.8	29.0	28.1	0.0	0.0	7.0	3.7	0.0	0.0	10.6	9.8
Incr Delay (d2), s/veh	0.7	0.1	1.0	0.2	0.0	0.0	0.5	0.1	0.0	0.0	0.8	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.2	1.1	0.5	0.0	0.0	0.8	0.5	0.0	0.0	3.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	27.9	29.9	28.3	0.0	0.0	7.6	3.8	0.0	0.0	11.4	10.9
LnGrp LOS	C	C	C	C	A	A	A	A	A	A	B	B
Approach Vol, veh/h		187			34			545			1023	
Approach Delay, s/veh		30.0			28.3			5.0			11.3	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	57.8		15.9	12.8	45.0		15.9
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	14.0	39.0		29.0	14.0	39.0		29.0
Max Q Clear Time (g_c+I1), s	10.0	4.7		6.7	5.3	12.5		3.2
Green Ext Time (p_c), s	0.0	2.2		0.5	0.3	5.9		0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	225	420	50	25	25
Future Vol, veh/h	50	225	420	50	25	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	245	457	54	27	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	511	0	-	0	837	484
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	353	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1054	-	-	-	337	583
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	711	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1054	-	-	-	317	583
Mov Cap-2 Maneuver	-	-	-	-	317	-
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	711	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1054	-	-	-	411
HCM Lane V/C Ratio	0.052	-	-	-	0.132
HCM Control Delay (s)	8.6	0	-	-	15.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	5	140	250	5	150
Future Vol, veh/h	10	5	140	250	5	150
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	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	11	5	152	272	5	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	590	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	576	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	470	1066
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	562	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	425	1066
Mov Cap-2 Maneuver	-	-	-	-	425	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	509	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1017	-	-	1602	-
HCM Lane V/C Ratio	0.166	-	-	0.095	-
HCM Control Delay (s)	9.2	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.3	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	0	120	135	0	0
Future Vol, veh/h	15	0	120	135	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	0	130	147	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	423	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	407	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	588	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	536	1063
Mov Cap-2 Maneuver	-	-	-	-	536	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	613	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.5	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1602	-
HCM Lane V/C Ratio	-	-	-	0.081	-
HCM Control Delay (s)	0	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.3	-

Intersection	
Int Delay, s/veh	5.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	10	120	15	0	0
Future Vol, veh/h	15	10	120	15	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	11	130	16	0	0

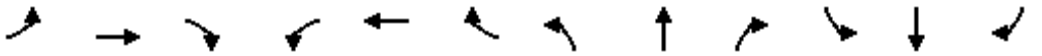
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	27	0	298	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	276	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1587	-	693	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	771	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1587	-	635	1055
Mov Cap-2 Maneuver	-	-	-	-	635	-
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	707	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.6	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1587	-
HCM Lane V/C Ratio	-	-	-	0.082	-
HCM Control Delay (s)	0	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.3	-

HCM 6th Signalized Intersection Summary
1: CTH T & 10th Avenue

01/30/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	15	255	45	10	10	40	475	40	20	530	135
Future Volume (veh/h)	225	15	255	45	10	10	40	475	40	20	530	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1455	1455	1455	1796	1796	1796	1811	1811	1811	1752	1752	1752
Adj Flow Rate, veh/h	271	18	307	54	12	12	48	572	48	24	639	163
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	30	30	30	7	7	7	6	6	6	10	10	10
Cap, veh/h	458	22	377	174	38	19	322	1010	85	320	956	426
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.07	0.31	0.31	0.04	0.29	0.29
Sat Flow, veh/h	1079	69	1175	199	119	58	1725	3214	269	1668	3328	1485
Grp Volume(v), veh/h	271	0	325	78	0	0	48	306	314	24	639	163
Grp Sat Flow(s),veh/h/ln	1079	0	1244	376	0	0	1725	1721	1763	1668	1664	1485
Q Serve(g_s), s	0.0	0.0	13.3	2.2	0.0	0.0	1.0	8.2	8.2	0.5	9.3	4.9
Cycle Q Clear(g_c), s	13.7	0.0	13.3	15.5	0.0	0.0	1.0	8.2	8.2	0.5	9.3	4.9
Prop In Lane	1.00		0.94	0.69		0.15	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	458	0	399	231	0	0	322	541	554	320	956	426
V/C Ratio(X)	0.59	0.00	0.81	0.34	0.00	0.00	0.15	0.57	0.57	0.07	0.67	0.38
Avail Cap(c_a), veh/h	581	0	541	362	0	0	645	1216	1246	678	2352	1049
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	0.0	17.2	19.3	0.0	0.0	12.7	15.8	15.8	12.3	17.4	15.8
Incr Delay (d2), s/veh	1.2	0.0	6.9	0.9	0.0	0.0	0.2	0.9	0.9	0.1	0.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	3.6	0.9	0.0	0.0	0.3	2.6	2.6	0.2	2.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	24.1	20.2	0.0	0.0	12.9	16.7	16.7	12.4	18.2	16.3
LnGrp LOS	B	A	C	C	A	A	B	B	B	B	B	B
Approach Vol, veh/h		596			78			668			826	
Approach Delay, s/veh		21.6			20.2			16.4			17.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	23.3		23.7	9.6	21.8		23.7				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	39.0		24.0	14.0	39.0		24.0				
Max Q Clear Time (g_c+I1), s	2.5	10.2		15.7	3.0	11.3		17.5				
Green Ext Time (p_c), s	0.0	3.3		2.0	0.0	4.5		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			18.5									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	15	175	10	5	0	105	705	20	5	485	140
Future Volume (veh/h)	240	15	175	10	5	0	105	705	20	5	485	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	296	19	216	12	6	0	130	870	25	6	599	173
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	3	3	3	10	10	10	10	10	10
Cap, veh/h	425	446	378	269	121	0	447	1768	51	319	1553	693
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.00	0.08	0.54	0.54	0.01	0.47	0.47
Sat Flow, veh/h	1410	1870	1585	826	506	0	1668	3304	95	1668	3328	1485
Grp Volume(v), veh/h	296	19	216	18	0	0	130	438	457	6	599	173
Grp Sat Flow(s),veh/h/ln	1410	1870	1585	1332	0	0	1668	1664	1735	1668	1664	1485
Q Serve(g_s), s	16.1	0.7	10.0	0.0	0.0	0.0	3.2	13.9	13.9	0.1	9.8	5.9
Cycle Q Clear(g_c), s	16.7	0.7	10.0	0.6	0.0	0.0	3.2	13.9	13.9	0.1	9.8	5.9
Prop In Lane	1.00		1.00	0.67		0.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	425	446	378	390	0	0	447	891	929	319	1553	693
V/C Ratio(X)	0.70	0.04	0.57	0.05	0.00	0.00	0.29	0.49	0.49	0.02	0.39	0.25
Avail Cap(c_a), veh/h	578	649	550	531	0	0	594	891	929	580	1553	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	24.5	28.1	24.5	0.0	0.0	10.1	12.3	12.3	9.8	14.5	13.5
Incr Delay (d2), s/veh	2.2	0.0	1.4	0.0	0.0	0.0	0.4	1.9	1.9	0.0	0.7	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.3	3.6	0.3	0.0	0.0	1.0	4.5	4.7	0.0	3.2	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	24.5	29.4	24.5	0.0	0.0	10.4	14.2	14.1	9.8	15.2	14.3
LnGrp LOS	C	C	C	C	A	A	B	B	B	A	B	B
Approach Vol, veh/h		531			18			1025			778	
Approach Delay, s/veh		31.1			24.5			13.7			15.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	50.7		25.9	12.7	45.0		25.9
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	14.0	39.0		29.0	14.0	39.0		29.0
Max Q Clear Time (g_c+I1), s	2.1	15.9		18.7	5.2	11.8		2.6
Green Ext Time (p_c), s	0.0	5.0		1.2	0.2	4.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	440	260	30	55	55
Future Vol, veh/h	30	440	260	30	55	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	478	283	33	60	60

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	316	0	-	0	844	300
Stage 1	-	-	-	-	300	-
Stage 2	-	-	-	-	544	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1244	-	-	-	334	740
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	582	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1244	-	-	-	322	740
Mov Cap-2 Maneuver	-	-	-	-	322	-
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	582	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	15.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1244	-	-	-	449
HCM Lane V/C Ratio	0.026	-	-	-	0.266
HCM Control Delay (s)	8	0	-	-	15.9
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1

Intersection	
Int Delay, s/veh	6.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	250	5	235	15	5	180
Future Vol, veh/h	250	5	235	15	5	180
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	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	272	5	255	16	5	196

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	277	0	801	275
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	526	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1286	-	354	764
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	593	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1286	-	284	764
Mov Cap-2 Maneuver	-	-	-	-	284	-
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	476	-

Approach	EB	WB	NB
HCM Control Delay, s	0	8	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	731	-	-	1286	-
HCM Lane V/C Ratio	0.275	-	-	0.199	-
HCM Control Delay (s)	11.8	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.1	-	-	0.7	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	135	0	0	20	0	120
Future Vol, veh/h	135	0	0	20	0	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	0	0	22	0	130

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	147	0	169	147
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1435	-	821	900
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1435	-	821	900
Mov Cap-2 Maneuver	-	-	-	-	821	-
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	1001	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	900	-	-	1435	-
HCM Lane V/C Ratio	0.145	-	-	-	-
HCM Control Delay (s)	9.7	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0	-

Intersection	
Int Delay, s/veh	7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	0	0	20	10	120
Future Vol, veh/h	15	0	0	20	10	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	0	0	22	11	130

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	38	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	974	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	974	1063
Mov Cap-2 Maneuver	-	-	-	-	974	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	1001	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1056	-	-	1602	-
HCM Lane V/C Ratio	0.134	-	-	-	-
HCM Control Delay (s)	8.9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0	-

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2023
Time Analyzed	AM
Project Description	2023 Build

Site Information

Intersection	CTH T & 10th Avenue
E/W Street Name	10th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.91
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR				LTR				LTR				LTR	
Volume (V), veh/h	0	25	5	35	0	55	5	5	0	60	310	20	0	15	455	40
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	28	6	40	0	62	6	6	0	68	351	23	0	17	515	45
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		74			74			442			577	
Entry Volume, veh/h		72			72			429			560	
Circulating Flow (v_c), pc/h	594			447			51			136		
Exiting Flow (v_{ex}), pc/h	46			119			385			617		
Capacity (c_{pce}), pc/h		790			908			1320			1218	
Capacity (c), veh/h		767			881			1281			1182	
v/c Ratio (x)		0.09			0.08			0.33			0.47	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		5.6			4.9			5.9			8.1	
Lane LOS		A			A			A			A	
95% Queue, veh		0.3			0.3			1.5			2.6	
Approach Delay, s/veh	5.6			4.9			5.9			8.1		
Approach LOS	A			A			A			A		
Intersection Delay, s/veh | LOS	6.9						A					

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2023
Time Analyzed	AM
Project Description	2023 Build

Site Information

Intersection	CTH T & 20th Avenue
E/W Street Name	20th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.88
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR				LTR				LTR				LTR	
Volume (V), veh/h	0	90	10	65	0	15	15	0	0	155	185	0	0	0	410	220
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	105	12	76	0	18	18	0	0	181	217	0	0	0	480	258
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		193			36			398			738	
Entry Volume, veh/h		187			35			386			717	
Circulating Flow (v_c), pc/h	498			503			117			217		
Exiting Flow (v_{ex}), pc/h	12			457			322			574		
Capacity (c_{pce}), pc/h		865			861			1240			1128	
Capacity (c), veh/h		840			836			1204			1095	
v/c Ratio (x)		0.22			0.04			0.32			0.65	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		6.6			4.7			6.0			12.5	
Lane LOS		A			A			A			B	
95% Queue, veh		0.9			0.1			1.4			5.1	
Approach Delay, s/veh	6.6			4.7			6.0			12.5		
Approach LOS	A			A			A			B		
Intersection Delay, s/veh | LOS	9.6						A					

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2023
Time Analyzed	PM
Project Description	2023 Build

Site Information

Intersection	CTH T & 10th Avenue
E/W Street Name	10th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.83
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR				LTR				LTR				LTR	
Volume (V), veh/h	0	35	15	65	0	45	10	10	0	40	475	40	0	15	465	20
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	43	19	81	0	56	12	12	0	50	589	50	0	19	577	25
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		143			80			689			621	
Entry Volume, veh/h		139			78			669			603	
Circulating Flow (v_c), pc/h	652			682			81			118		
Exiting Flow (v_{ex}), pc/h	88			87			644			714		
Capacity (c_{pce}), pc/h		748			727			1283			1239	
Capacity (c), veh/h		726			706			1245			1203	
v/c Ratio (x)		0.19			0.11			0.54			0.50	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		7.1			6.3			8.9			8.5	
Lane LOS		A			A			A			A	
95% Queue, veh		0.7			0.4			3.3			2.9	
Approach Delay, s/veh	7.1			6.3			8.9			8.5		
Approach LOS	A			A			A			A		
Intersection Delay, s/veh | LOS	8.4						A					

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2023
Time Analyzed	PM
Project Description	2023 Build

Site Information

Intersection	CTH T & 20th Avenue
E/W Street Name	20th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.81
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR				LTR				LTR				LTR	
Volume (V), veh/h	0	240	15	175	0	10	5	0	0	105	420	15	0	5	305	140
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	305	19	223	0	13	6	0	0	134	534	19	0	6	388	178
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		547			19			687			572	
Entry Volume, veh/h		531			18			667			555	
Circulating Flow (v_c), pc/h	407			973			330			153		
Exiting Flow (v_{ex}), pc/h	44			318			839			624		
Capacity (c_{pce}), pc/h		943			552			1014			1198	
Capacity (c), veh/h		915			536			984			1163	
v/c Ratio (x)		0.58			0.03			0.68			0.48	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		12.1			7.1			14.4			8.3	
Lane LOS		B			A			B			A	
95% Queue, veh		3.8			0.1			5.5			2.6	
Approach Delay, s/veh	12.1			7.1			14.4			8.3		
Approach LOS	B			A			B			A		
Intersection Delay, s/veh | LOS	11.7						B					

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2033
Time Analyzed	AM
Project Description	2033 Build

Site Information

Intersection	CTH T & 10th Avenue
E/W Street Name	10th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.91
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR				LTR				LTR				LTR	
Volume (V), veh/h	0	120	5	130	0	60	5	5	0	240	350	25	0	20	545	230
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	136	6	147	0	68	6	6	0	272	396	28	0	23	617	260
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		289			80			696			900	
Entry Volume, veh/h		281			78			676			874	
Circulating Flow (v_c), pc/h	708			804			165			346		
Exiting Flow (v_{ex}), pc/h	57			538			538			832		
Capacity (c_{pce}), pc/h		709			648			1185			999	
Capacity (c), veh/h		689			629			1150			970	
v/c Ratio (x)		0.41			0.12			0.59			0.90	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		10.8			7.1			10.4			30.7	
Lane LOS		B			A			B			D	
95% Queue, veh		2.0			0.4			4.0			13.1	
Approach Delay, s/veh	10.8			7.1			10.4			30.7		
Approach LOS	B			A			B			D		
Intersection Delay, s/veh | LOS	19.6						C					

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2033
Time Analyzed	AM
Project Description	2033 Build

Site Information

Intersection	CTH T & 20th Avenue
E/W Street Name	20th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.88
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR				LTR				LTR				LTR	
Volume (V), veh/h	0	90	10	65	0	15	15	0	0	155	325	0	0	0	680	220
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	105	12	76	0	18	18	0	0	181	380	0	0	0	796	258
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		193			36			561			1054	
Entry Volume, veh/h		187			35			545			1023	
Circulating Flow (v_c), pc/h	814			666			117			217		
Exiting Flow (v_{ex}), pc/h	12			457			485			890		
Capacity (c_{pce}), pc/h		642			738			1240			1128	
Capacity (c), veh/h		623			717			1204			1095	
v/c Ratio (x)		0.30			0.05			0.45			0.93	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		9.7			5.5			7.7			33.2	
Lane LOS		A			A			A			D	
95% Queue, veh		1.3			0.2			2.4			15.6	
Approach Delay, s/veh	9.7			5.5			7.7			33.2		
Approach LOS	A			A			A			D		
Intersection Delay, s/veh | LOS	22.4						C					

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2033
Time Analyzed	PM
Project Description	2033 Build

Site Information

Intersection	CTH T & 10th Avenue
E/W Street Name	10th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.83
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LT				LTR				LTR				LTR	
Volume (V), veh/h	0	225	15	255	0	45	10	10	0	150	560	50	0	20	530	135
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	279	19	316	0	56	12	12	0	186	695	62	0	25	658	168
Right-Turn Bypass	Non-Yielding				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		298	316		80			943			851	
Entry Volume, veh/h		289	307		78			916			826	
Circulating Flow (v_c), pc/h	739			1160			323			254		
Exiting Flow (v_{ex}), pc/h	106			366			986			714		
Capacity (c_{pce}), pc/h		689			463			1021			1089	
Capacity (c), veh/h		669			449			991			1058	
v/c Ratio (x)		0.43			0.17			0.92			0.78	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		11.6			10.5			33.6			18.3	
Lane LOS		B	A		B			D			C	
95% Queue, veh		2.2			0.6			14.4			8.3	
Approach Delay, s/veh	5.6			10.5			33.6			18.3		
Approach LOS	A			B			D			C		
Intersection Delay, s/veh | LOS	20.7						C					

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2033
Time Analyzed	PM
Project Description	2033 Build

Site Information

Intersection	CTH T & 20th Avenue
E/W Street Name	20th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.81
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR				LTR				LTR				LTR	
Volume (V), veh/h	0	240	15	175	0	10	5	0	0	105	705	20	0	5	485	140
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	305	19	223	0	13	6	0	0	134	896	25	0	6	617	178
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		547			19			1055			801	
Entry Volume, veh/h		531			18			1024			778	
Circulating Flow (v_c), pc/h	636			1335			330			153		
Exiting Flow (v_{ex}), pc/h	50			318			1201			853		
Capacity (c_{pce}), pc/h		759			392			1014			1198	
Capacity (c), veh/h		737			381			984			1163	
v/c Ratio (x)		0.72			0.05			1.04			0.67	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		20.0			10.2			60.2			12.4	
Lane LOS		C			B			F			B	
95% Queue, veh		6.2			0.2			22.3			5.4	
Approach Delay, s/veh	20.0			10.2			60.2			12.4		
Approach LOS	C			B			F			B		
Intersection Delay, s/veh | LOS	34.9						D					

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2033
Time Analyzed	AM
Project Description	2033 Build (CTH Expanded)

Site Information

Intersection	CTH T & 10th Avenue
E/W Street Name	10th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.91
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0
Lane Assignment			LTR				LTR		LT		TR		LT		TR	
Volume (V), veh/h	0	120	5	130	0	60	5	5	0	240	350	25	0	20	545	230
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	136	6	147	0	68	6	6	0	272	396	28	0	23	617	260
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	2				2				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.8000			4.8000		4.6000	4.3000		4.6000	4.3000	
Follow-Up Headway (s)		2.6000			2.6000		2.6000	2.6000		2.6000	2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		289			80		327	369		423	477	
Entry Volume, veh/h		281			78		318	358		411	463	
Circulating Flow (v_c), pc/h	708			804			165			346		
Exiting Flow (v_{ex}), pc/h	57			538			538			832		
Capacity (c_{pce}), pc/h		696			634		1190	1207		1008	1038	
Capacity (c), veh/h		675			615		1156	1172		979	1008	
v/c Ratio (x)		0.42			0.13		0.27	0.31		0.42	0.46	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		11.1			7.3		5.7	5.9		8.4	8.9	
Lane LOS		B			A		A	A		A	A	
95% Queue, veh		2.0			0.4		1.1	1.3		2.1	2.5	
Approach Delay, s/veh	11.1			7.3			5.8			8.7		
Approach LOS	B			A			A			A		
Intersection Delay, s/veh | LOS	8.0						A					

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2033
Time Analyzed	AM
Project Description	2033 Build (CTH T Expansion)

Site Information

Intersection	CTH T & 20th Avenue
E/W Street Name	20th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.88
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0
Lane Assignment			LTR				LTR		LT		TR		LT		TR	
Volume (V), veh/h	0	90	10	65	0	15	15	0	0	155	325	0	0	0	680	220
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	105	12	76	0	18	18	0	0	181	380	0	0	0	796	258
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	2				2				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.8000			4.8000		4.6000	4.3000		4.6000	4.3000	
Follow-Up Headway (s)		2.6000			2.6000		2.6000	2.6000		2.6000	2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		193			36		264	297		495	559	
Entry Volume, veh/h		187			35		256	289		481	542	
Circulating Flow (v_c), pc/h	814			666			117			217		
Exiting Flow (v_{ex}), pc/h	12			457			485			890		
Capacity (c_{pce}), pc/h		628			725		1244	1256		1135	1156	
Capacity (c), veh/h		609			704		1208	1219		1102	1122	
v/c Ratio (x)		0.31			0.05		0.21	0.24		0.44	0.48	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		10.0			5.6		4.8	5.0		8.0	8.6	
Lane LOS		B			A		A	A		A	A	
95% Queue, veh		1.3			0.2		0.8	0.9		2.3	2.7	
Approach Delay, s/veh	10.0			5.6			5.0			8.3		
Approach LOS	B			A			A			A		
Intersection Delay, s/veh | LOS	7.4						A					

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2033
Time Analyzed	PM
Project Description	2033 Build

Site Information

Intersection	CTH T & 10th Avenue
E/W Street Name	10th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.83
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0
Lane Assignment			LT				LTR		LT		TR		LT		TR	
Volume (V), veh/h	0	225	15	255	0	45	10	10	0	150	560	50	0	20	530	135
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	279	19	316	0	56	12	12	0	186	695	62	0	25	658	168
Right-Turn Bypass	Non-Yielding				None				None				None			
Conflicting Lanes	2				2				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.8000			4.8000		4.6000	4.3000		4.6000	4.3000	
Follow-Up Headway (s)		4.6000			2.6000		2.6000	2.6000		2.6000	2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		298	316		80		443	500		400	451	
Entry Volume, veh/h		289	307		78		430	485		388	438	
Circulating Flow (v_c), pc/h	739			1160			323			254		
Exiting Flow (v_{ex}), pc/h	106			366			986			714		
Capacity (c_{pce}), pc/h		468			448		1030	1058		1097	1120	
Capacity (c), veh/h		455			435		1000	1027		1065	1088	
v/c Ratio (x)		0.64			0.18		0.43	0.47		0.36	0.40	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		23.9			11.0		8.4	9.0		7.1	7.5	
Lane LOS		C	A		B		A	A		A	A	
95% Queue, veh		4.3			0.6		2.2	2.6		1.7	2.0	
Approach Delay, s/veh	11.6			11.0			8.7			7.3		
Approach LOS	B			B			A			A		
Intersection Delay, s/veh | LOS	9.0						A					

HCS7 Roundabouts Report

General Information

Analyst	SEH
Agency or Co.	City of Eau Claire
Date Performed	1/30/2023
Analysis Year	2033
Time Analyzed	PM
Project Description	2033 Build (CTH T Expansion)

Site Information

Intersection	CTH T & 20th Avenue
E/W Street Name	20th Avenue
N/S Street Name	CTH T
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.81
Jurisdiction	Chippewa County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0
Lane Assignment			LTR				LTR		LT		TR		LT		TR	
Volume (V), veh/h	0	240	15	175	0	10	5	0	0	105	705	20	0	5	485	140
Percent Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Flow Rate (v_{PCE}), pc/h	0	305	19	223	0	13	6	0	0	134	896	25	0	6	617	178
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	2				2				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.8000			4.8000		4.6000	4.3000		4.6000	4.3000	
Follow-Up Headway (s)		2.6000			2.6000		2.6000	2.6000		2.6000	2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		547			19		496	559		376	425	
Entry Volume, veh/h		531			18		481	543		366	412	
Circulating Flow (v_c), pc/h	636			1335			330			153		
Exiting Flow (v_{ex}), pc/h	50			318			1201			853		
Capacity (c_{pce}), pc/h		746			378		1023	1052		1203	1219	
Capacity (c), veh/h		724			367		993	1021		1168	1183	
v/c Ratio (x)		0.73			0.05		0.48	0.53		0.31	0.35	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		21.0			10.6		9.4	10.1		6.0	6.4	
Lane LOS		C			B		A	B		A	A	
95% Queue, veh		6.5			0.2		2.7	3.2		1.3	1.6	
Approach Delay, s/veh	21.0			10.6			9.8			6.2		
Approach LOS	C			B			A			A		
Intersection Delay, s/veh | LOS	11.2						B					