

Our ref: 12575900

28 March 2022

13066266 Canada Inc.
Mr. Philippe Gregoire
101-787 rue Principale
Casselman, ON, K0A1M0

Traffic Impact Study (TIS) for McBain Subdivision residential development in Crysler, Ontario

Dear Mr. Gregoire,

In response to your request, GHD is providing a traffic impact study (TIS) related to a development in McBain Subdivision, Crysler, Ontario. The study examines the traffic operations at the key intersections in the study area for the existing conditions, for future conditions with no-build scenario and future conditions after full build-out of the development.

1. Project Description

The proposed residential development will be located to the east of Country Road 12 (CR 12) with two site accesses. One access will be across from Matheson Street and one access across from Gloss Street. It is expected that the development will have 300 units and have a mix of single family detached and townhomes. Nearby, there are existing residential properties, local businesses, and a local community centre. The proposed site layout is shown in Figure 1, attached.

The posted speed limit on Country Road 12 is 50 km/h south of Matheson Street. County Road 12 acts as a key north/south arterial road. It connects to County Road 5 which joins Trans-Canada Highway/ON-417 West to County Road 43.

2. Existing Conditions

2.1 Traffic Data

Traffic data for the Matheson Street/County Road 12 and Gloss Street/County Road 12 intersections were collected on Thursday February 15, 2022. The traffic count data is provided in Appendix A. The peak hours are 7:00-8:00 AM and 4:00-5:00 PM. The turning movement volumes for the existing conditions are shown in Figure 2, attached.

2.2 Traffic Operations

The traffic operations at the intersections of Charles Street/County Road 12 and Matheson Street/County Road 12 were analysed using the traffic engineering software, Synchro Version 10 and the methodologies published in the Highway Capacity Manual 6th Edition (HCM). Synchro outputs include multiple measures of

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effectiveness, including Level of Service (LOS) and volume to capacity ratio (v/c) for each approach and the overall intersection. LOS is defined in terms of average control delay per vehicle according to HCM criteria. LOS are expressed in a range from "A" through "F," with "A" being the highest level of service, and "F" representing the lowest level of service. Table 1 presents the thresholds for LOS "A" through "F" for stop-controlled intersections. The v/c ratio represents the capability to accommodate the traffic demand. As the v/c ratio approaches 1.0 there is an increased possibility of delays and queuing. Once the v/c ratio exceeds 1.0, excessive delays and queues are expected.

Table 1: Level of Service Criteria for a Stop-controlled intersection

| Level of service | Delay/Vehicle (seconds) |
|------------------|-------------------------|
| A | < 10 |
| B | 10 – 15 |
| C | 15 – 25 |
| D | 25 – 35 |
| E | 35 – 50 |
| F | > 50 |

Table 2 provides a summary of the existing intersection operations. Detailed Synchro analysis output reports are provided in Appendix B.

Table 2: Summary of Existing Intersection Operations

| Intersection | Intersection Approach | AM | | | | PM | | | |
|-----------------------------|-----------------------|-----------|-----|------|-------------|-----------|-----|------|-------------|
| | | Delay (s) | LOS | v/c | Overall LOS | Delay (s) | LOS | v/c | Overall LOS |
| Matheson St./County Road 12 | Matheson Eastbound | 9.4 | A | 0.03 | A | 10.0 | B | 0.02 | A |
| | CR12 Northbound | 0.0 | A | 0.00 | | 0.4 | A | 0.00 | |
| | CR12 Southbound | 0.0 | A | 0.04 | | 0.0 | A | 0.12 | |
| Charles St./County Road 12 | Charles Eastbound | 9.4 | A | 0.04 | A | 10.1 | B | 0.11 | A |
| | CR12 Northbound | 2.0 | A | 0.03 | | 3.1 | A | 0.04 | |
| | Charles Westbound | 8.9 | A | 0.00 | | - | - | - | |
| | CR12 Southbound | 0.1 | A | 0.00 | | 0.0 | A | 0.00 | |

As shown in Table 2, the 2022 existing capacity analyses indicate that the intersections operate with acceptable LOS and v/c ratios in current conditions. Charles Street Westbound has no traffic volumes during the PM peak, hence no delay.

3. Proposed Development

It is expected that the development will have 300 units and have a mix of single family detached and townhomes. Access to the site will be from a new street across from Matheson Street and a new street opposite Gloss Street. For the purpose of this analysis, the accesses will be labelled Matheson Street and Gloss Street. The existing three-leg stop controlled intersections will become a four-leg intersection with an additional stop control on the new street. It is anticipated that construction of the development will be completed by 2027.

3.1 Trip generation

The projected site trips were estimated based on trip generation rates contained in the Institute of Transportation Engineers' (ITE) Trip Generation, 10th Edition. The fitted curved equations for Single Family Housing (Land Use Code 210) were used to provide the number of trips generated by the development. The resulting trip generation is presented in Table 3 and Table 4.

Table 3: Peak Hour (AM) Trip Generation

| ITE Land Use | | AM | | | | | | | | |
|--------------------------------|-----------------------|------|----------------|-------|-----------------------|---------|--------|-------|-------|------|
| Proposed | Description | Code | Variable | Units | Equation | % Enter | % Exit | Total | Enter | Exit |
| Residential subdivision | Single Family Housing | 210 | Dwelling units | 300 | $\ln(T)=0.91(X)+0.12$ | 26% | 74% | 202 | 53 | 149 |

Table 4: Peak Hour (PM) Trip Generation

| ITE Land Use | | PM | | | | | | | | |
|--------------------------------|-----------------------|------|----------------|-------|----------------------|---------|--------|-------|-------|------|
| Proposed | Description | Code | Variable | Units | Equation | % Enter | % Exit | Total | Enter | Exit |
| Residential subdivision | Single Family Housing | 210 | Dwelling units | 300 | $T=0.94 \ln(X)+0.27$ | 63% | 37% | 279 | 176 | 103 |

The development will generate a total of 202 trips in the AM and 279 trips in the PM peak hour.

3.2 Trip distribution

Based on a review of the existing traffic volumes and turning movements at the intersection of Matheson Street/County Road 12 and Charles Street/County Road 12 the trip distribution was developed for the site traffic and is presented in Table 5. It is assumed that 50% of the volumes generated will take Matheson Street site access and 50% will take Gloss Street site access.

Table 5: Trip Distribution

| Access | Road Approach | AM | | PM | |
|------------------------|------------------------|-------|-------|-------|-------|
| | | Exit | Enter | Exit | Enter |
| Matheson Street | County Road 12 (North) | 31.6% | 35% | 36.4% | 35% |
| | County Road 12 (South) | 18.4% | 15% | 13.6% | 15% |
| Gloss Street | County Road 12 (North) | 31.6% | 35% | 36.4% | 25% |
| | County Road 12 (South) | 18.4% | 15% | 13.6% | 15% |
| Total | | 100% | 100% | 100% | 100% |

Vehicular trips to and from the site were added to the network at the site access points. The site generated traffic volumes are shown in Figure 3, attached.

4. Traffic Operations Analysis

4.1 Overview

The development is expected to be built-out by the year 2027 (opening year). The intersections in the study area were therefore analysed for the following scenarios.

- Existing traffic conditions (2022)
- Opening year (2027) + No development
- Opening year (2027) + Development
- Future year (2032) five years post-development

4.2 Growth

Background traffic growth is related to residential and commercial growth in the Township of North Stormont and is non-site related traffic. The background traffic growth rate was calculated based on daily traffic volumes collected by the United Counties of Stormont, Dundas, and Glengarry in 2017 and 2019 for County Road 12 from the nearest count stations. The traffic data was provided by the county and is shown in Table 6.

Table 6: Traffic volumes near development site

| Time | Traffic volumes | | | |
|----------------|-------------------------|---------------------------------|------------------------|-------------------------|
| | North of County Road 13 | South of 3 rd Street | East of Ouderkirk Road | South of Concession 4-5 |
| June 2017 | n/a | 2816 | 1171 | 2553 |
| August 2017 | 2871 | 3361 | 1108 | n/a |
| September 2017 | n/a | n/a | 1160 | n/a |
| November 2017 | 2899 | 3526 | n/a | n/a |
| May 2019 | 3088 | 3501 | 1348 | n/a |
| June 2019 | n/a | n/a | 1171 | n/a |
| July 2019 | 3397 | 3871 | n/a | n/a |
| August 2019 | 3223 | 3802 | 1451 | n/a |

A growth rate of 5% was determined from the past traffic data to best represent the expected future traffic growth on the road network near the proposed development.

4.3 Traffic operations – Opening Year (2027) + No Development

The background traffic volumes were analysed, and the results are presented in Table 7.

| Intersection | Intersection Approach | AM | | | | PM | | | |
|-----------------------------|-----------------------|-----------|-----|------|-------------|-----------|-----|------|-------------|
| | | Delay (s) | LOS | v/c | Overall LOS | Delay (s) | LOS | v/c | Overall LOS |
| Matheson St./County Road 12 | CR12 Northbound | 0.0 | A | 0.00 | A | 0.4 | A | 0.00 | A |
| | Matheson Eastbound | 9.8 | A | 0.03 | | 10.6 | B | 0.02 | |
| | CR12 Southbound | 0.0 | A | 0.06 | | 0.0 | A | 0.15 | |
| Charles St./County Road 12 | Charles Westbound* | 9.0 | A | 0.00 | A | - | - | - | A |
| | CR12 Northbound | 2.1 | A | 0.03 | | 3.3 | A | 0.06 | |
| | Charles Eastbound | 9.8 | A | 0.06 | | 10.9 | B | 0.15 | |
| | CR12 Southbound | 0.1 | A | 0.00 | | 0.0 | A | 0.00 | |

*Charles Street Westbound has no traffic volumes during the PM peak, hence no delay

The capacity analyses indicate that the intersections operate with acceptable LOS and v/c ratios.

4.4 Traffic operations – Opening Year (2027) + Development

The traffic operations for the build-out year of 2027 were analysed and the results are presented in Table 8. The total traffic volumes are shown in Figure 4, attached. The detailed Synchro analysis output reports are provided in Appendix B.

Table 8: Synchro Results Summary – Opening Year (2027) + Development

| Intersection | Intersection Approach | AM | | | | PM | | | |
|-----------------------------|------------------------|-----------|-----|------|-------------|-----------|-----|------|-------------|
| | | Delay (s) | LOS | v/c | Overall LOS | Delay (s) | LOS | v/c | Overall LOS |
| Matheson St./County Road 12 | Matheson Westbound | 11.3 | B | 0.14 | A | 11.1 | B | 0.09 | A |
| | CR12 Northbound | 0.0 | A | 0.00 | | 0.3 | A | 0.00 | |
| | Matheson Eastbound | 11.6 | B | 0.05 | | 14.6 | B | 0.04 | |
| | CR12 Southbound | 1.4 | A | 0.02 | | 1.8 | A | 0.05 | |
| Gloss St./County Road 12 | Gloss St. Westbound | 10.5 | B | 0.12 | A | 10.7 | B | 0.08 | A |
| | CR12 Northbound | 0.0 | A | 0.00 | | 1.6 | A | 0.02 | |
| | Gloss St. Eastbound | 11.0 | B | 0.07 | | 15.1 | C | 0.01 | |
| | CR12 Southbound | 1.5 | A | 0.02 | | 2.0 | A | 0.05 | |
| Charles St./County Road 12 | Charles St. Westbound* | 9.1 | A | 0.00 | A | - | - | - | A |
| | CR12 Northbound | 2.0 | A | 0.03 | | 2.9 | A | 0.06 | |
| | Charles St. Eastbound | 9.8 | A | 0.06 | | 11.0 | B | 0.15 | |

| | | | | | | | | | |
|--|-----------------|-----|---|------|--|-----|---|------|--|
| | CR12 Southbound | 0.1 | A | 0.00 | | 0.0 | A | 0.00 | |
|--|-----------------|-----|---|------|--|-----|---|------|--|

*Charles Street Westbound has no traffic volumes during the PM peak, hence no delay

The three intersections operate at an acceptable LOS for all movements in both the AM and PM peak hours.

4.5 Traffic operations – Post Development (2032)

The traffic operations for the post-development horizon year of 2032 were analysed and the results are presented in Table 9. The total traffic volumes are shown in Figure 5, attached. The detailed Synchro analysis output reports are provided in Appendix B.

Table 9: Synchro Results Summary – 5 years Post Development (2032)

| Intersection | Intersection Approach | AM | | | | PM | | | |
|------------------------------------|------------------------|-----------|-----|------|-------------|-----------|-----|------|-------------|
| | | Delay (s) | LOS | v/c | Overall LOS | Delay (s) | LOS | v/c | Overall LOS |
| Matheson St./County Road 12 | Matheson Westbound | 11.8 | B | 0.13 | A | 11.8 | B | 0.09 | A |
| | CR12 Northbound | 0.0 | A | 0.00 | | 0.4 | A | 0.01 | |
| | Matheson Eastbound | 12.5 | B | 0.07 | | 16.2 | C | 0.06 | |
| | CR12 Southbound | 1.2 | A | 0.02 | | 1.6 | A | 0.05 | |
| Gloss St./County Road 12 | Gloss St. Westbound | 10.9 | B | 0.12 | A | 11.4 | B | 0.09 | A |
| | CR12 Northbound | 0.0 | A | 0.00 | | 1.8 | A | 0.03 | |
| | Gloss St. Eastbound | 11.8 | B | 0.10 | | 17.1 | C | 0.03 | |
| | CR12 Southbound | 1.2 | A | 0.02 | | 1.7 | A | 0.05 | |
| Charles St./County Road 12 | Charles St. Westbound* | 9.3 | A | 0.00 | A | - | - | - | A |
| | CR12 Northbound | 2.1 | A | 0.04 | | 3.2 | A | 0.07 | |
| | Charles St. Eastbound | 10.4 | A | 0.08 | | 12.3 | B | 0.22 | |
| | CR12 Southbound | 0.1 | A | 0.00 | | 0.0 | A | 0.00 | |

*Charles Street Westbound has no traffic volumes during the PM peak, hence no delay

The three intersections operate at an acceptable LOS for all movements in both the AM and PM peak hours.

4.5.1 Volume warrant for left-turn lanes

At an unsignalized intersection, the need for left-turn lanes is assessed using the methodology in the TAC CDG for Canadian Roads – June 2017 (MTO Design supplement, April 2020). The assessment was conducted for Matheson St./County Road 12 in the PM peak hour for the opening year (2027) and for post-development horizon year of 2032.

The percentage of left turning traffic for the opening year 2027 is 17%, hence warrant graph with a percentage of 15% and 20% were analysed in Figure 6 and 7, respectively. The projected lines intersect to

the left of the warrant line in Figure 6 and intersect on the warrant in Figure 7. Since 17% falls between these values, it was concluded that no left turn lane is needed. However, as shown in Figure 8 attached, the projected lines intersect to the right of the warrant line for the post-development horizon year of 2032. Therefore, it is recommended to monitor the intersection and plan for a southbound left-turn lane at the intersection Matheson Street/County Road 12 by 2032, assuming no changes in growth rate.

5. Conclusions

The site is projected to generate 202 new trips during the AM peak hour and 279 new trips during the PM peak hour. Based on the results of the capacity analyses for 2027 and 2032 future conditions, it was determined that the area roadways can adequately accommodate the site traffic however, a southbound left-turn lane at the intersection Matheson Street/County Road 12 may be needed by 2032 due to the growth in the background traffic. It is suggested to monitor the intersection and the annual traffic growth rates to assess when a southbound left-turn lane may be required.

Should you have any questions on the above, please do not hesitate to contact us.

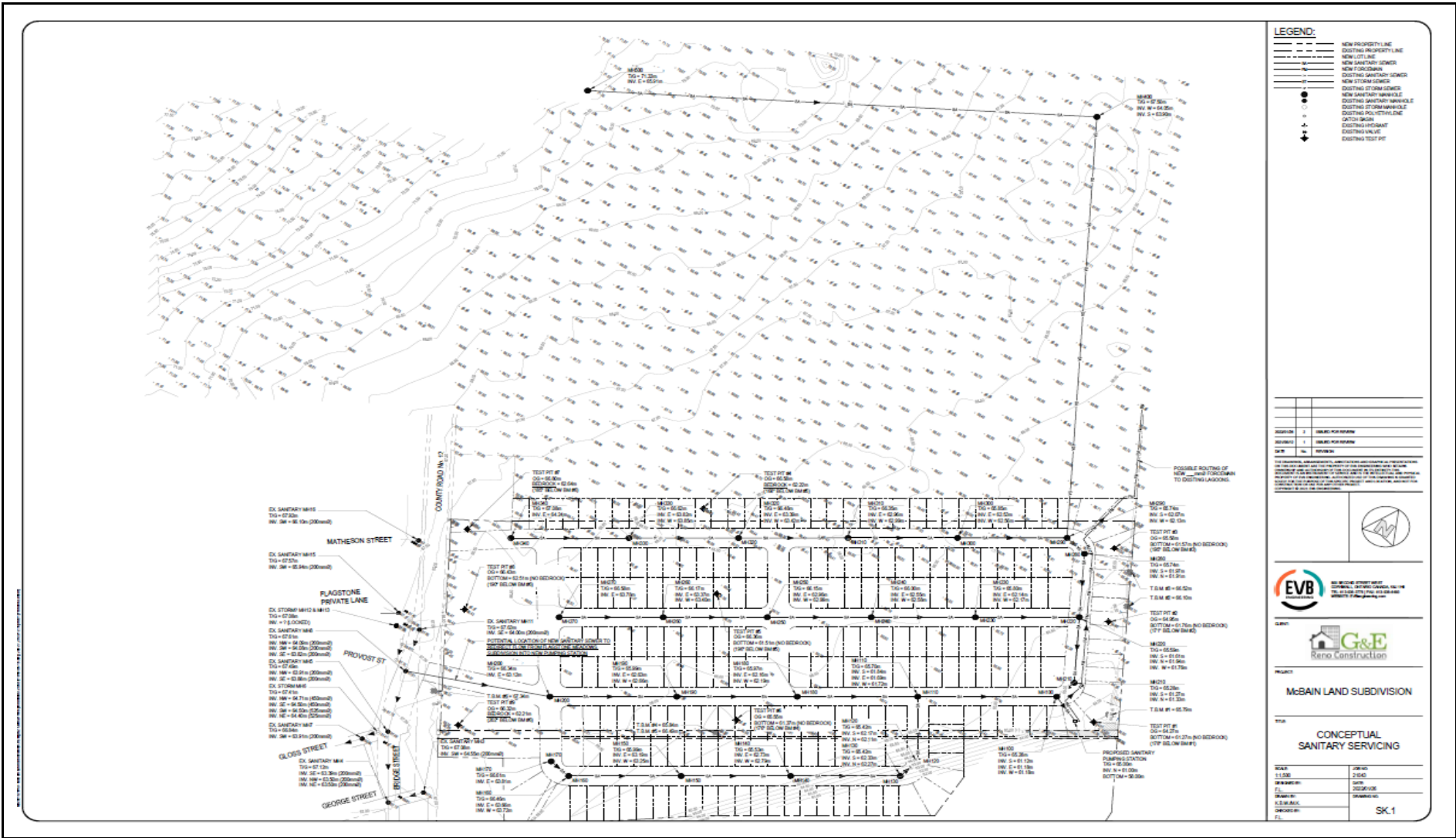
Regards



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Figures

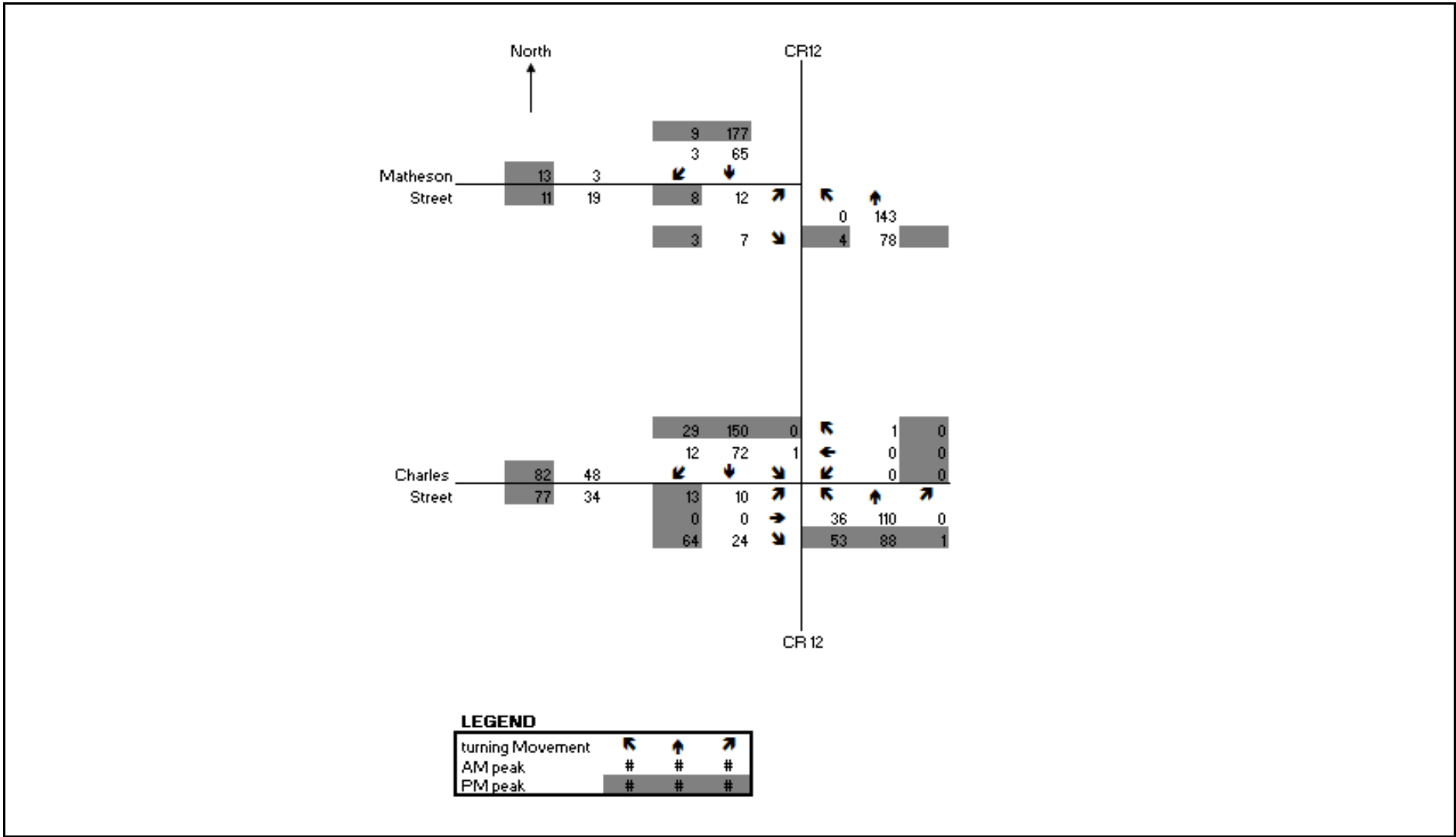


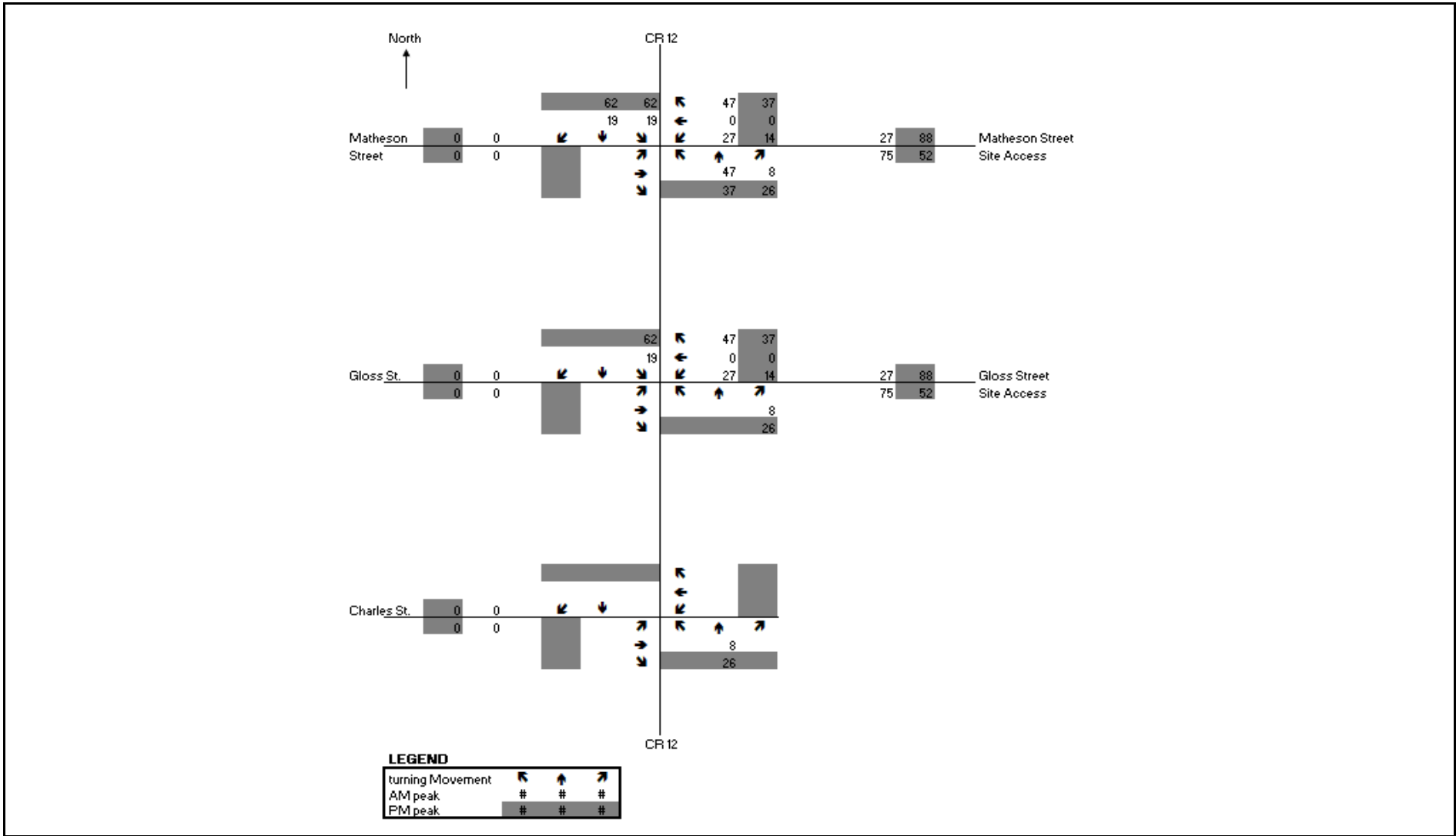
TRAFFIC IMPACT STUDY - MCBAIN SUBDIVISION
 PROPOSED SITE LAYOUT

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FIGURE 1



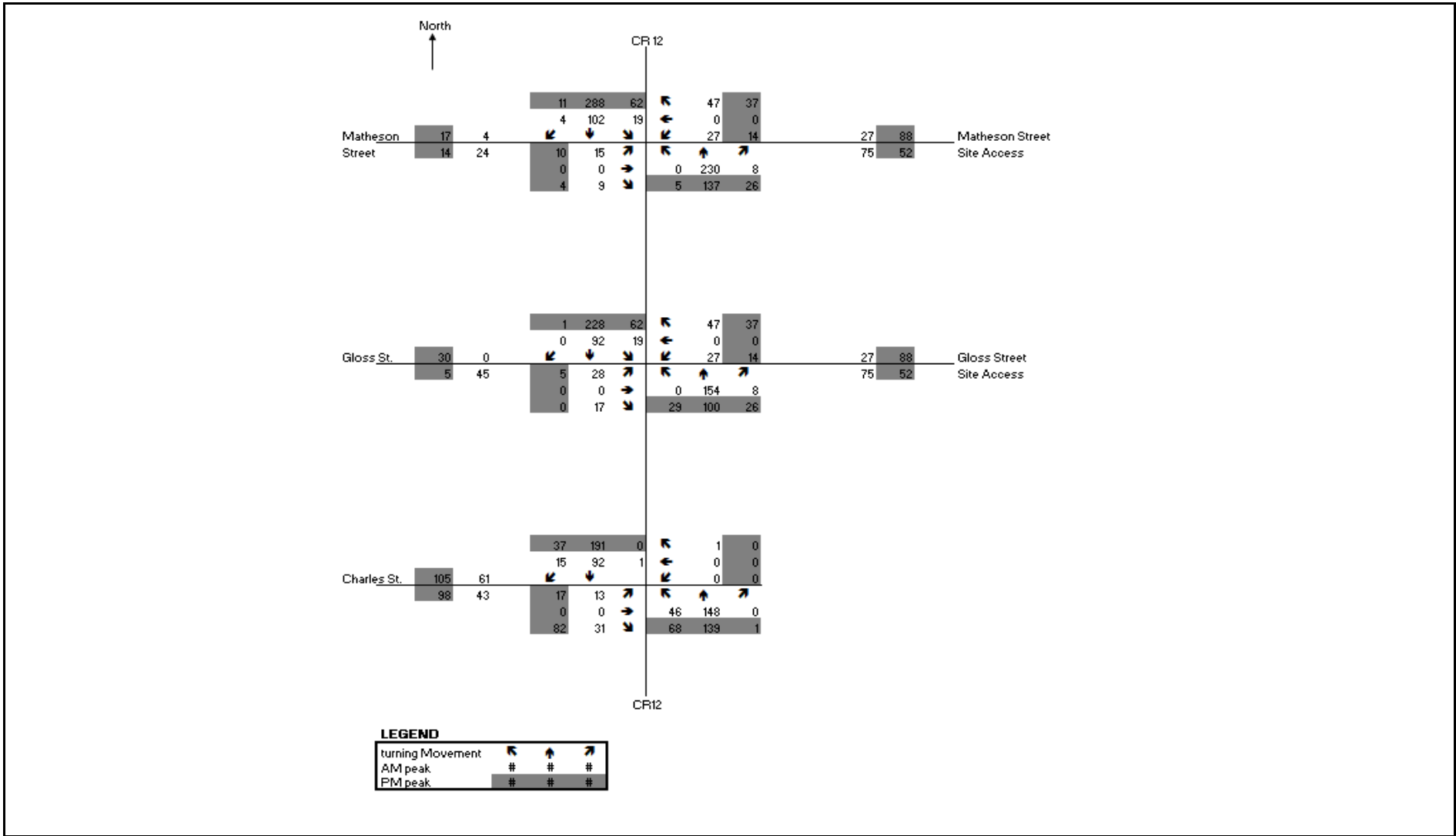


TRAFFIC IMPACT STUDY - MCBAIN SUBDIVISION
 SITE GENERATED TRIPS

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FIGURE 3

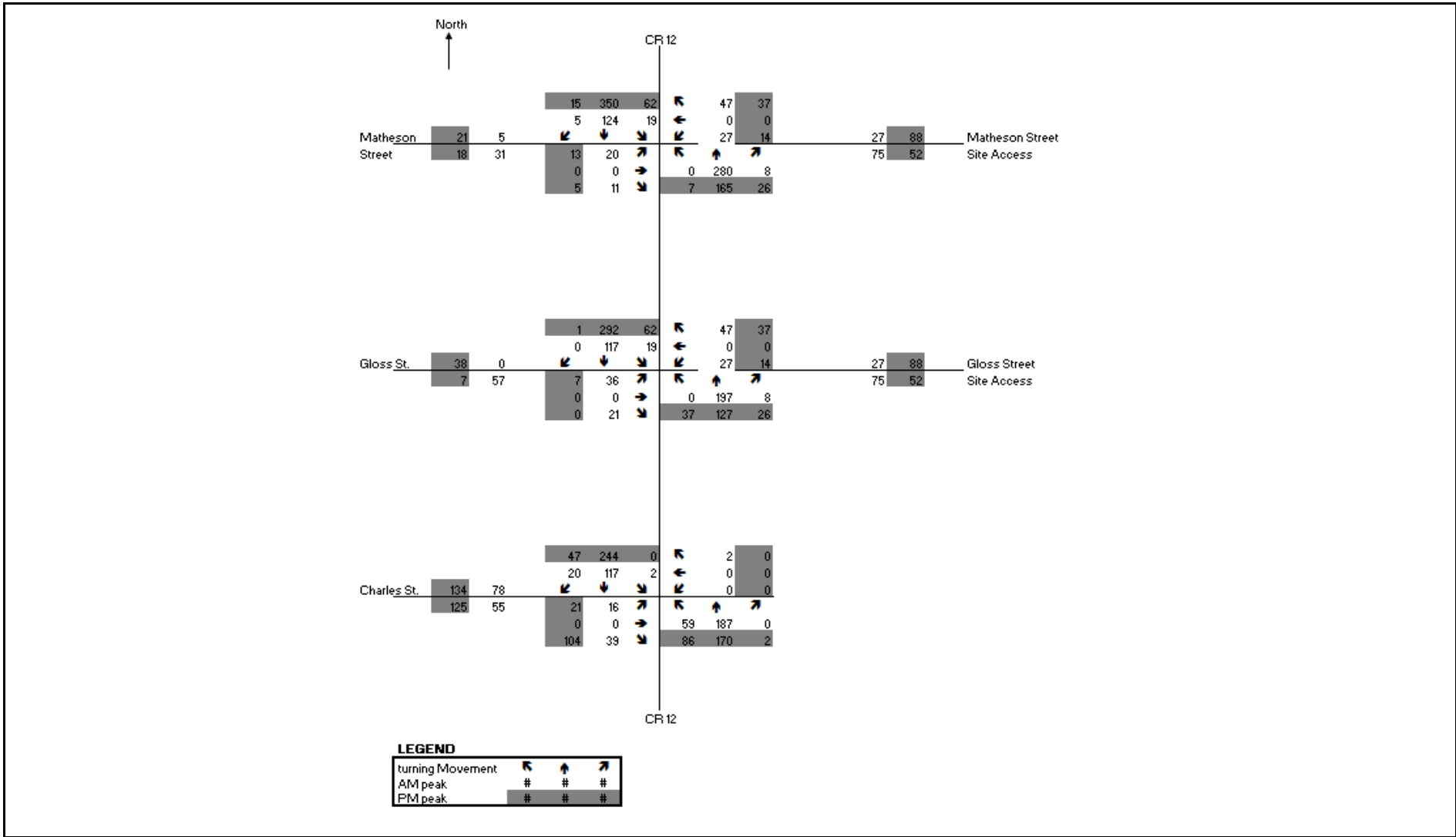


TRAFFIC IMPACT STUDY - MCBAIN SUBDIVISION
 2027 TOTAL TRAFFIC VOLUMES (OPENING + DEVELOPMENT)

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FIGURE 4

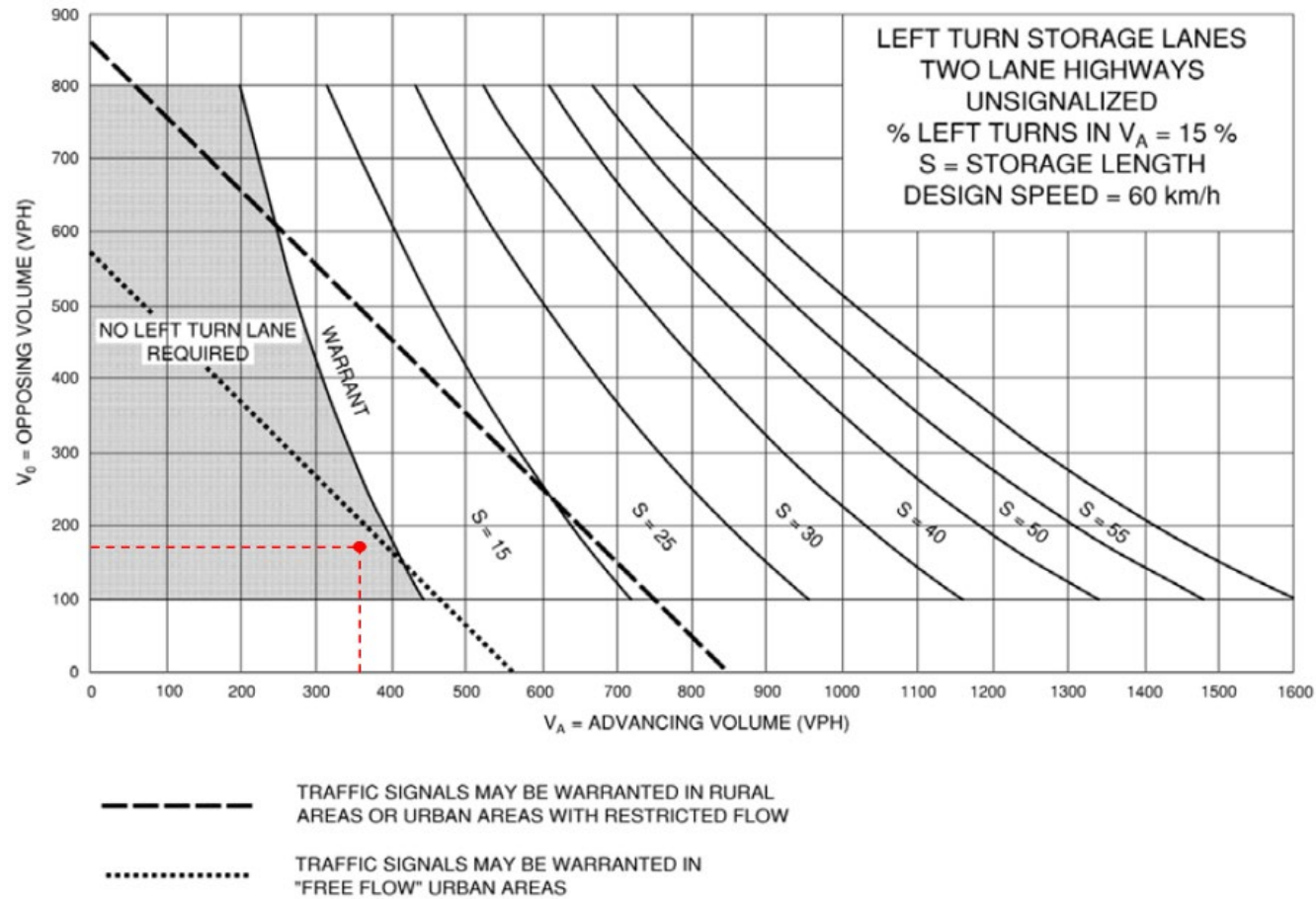


TRAFFIC IMPACT STUDY - MCBAIN SUBDIVISION
2032 TOTAL TRAFFIC VOLUMES

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FIGURE 5



TRAFFIC IMPACT STUDY - MCBAIN SUBDIVISION

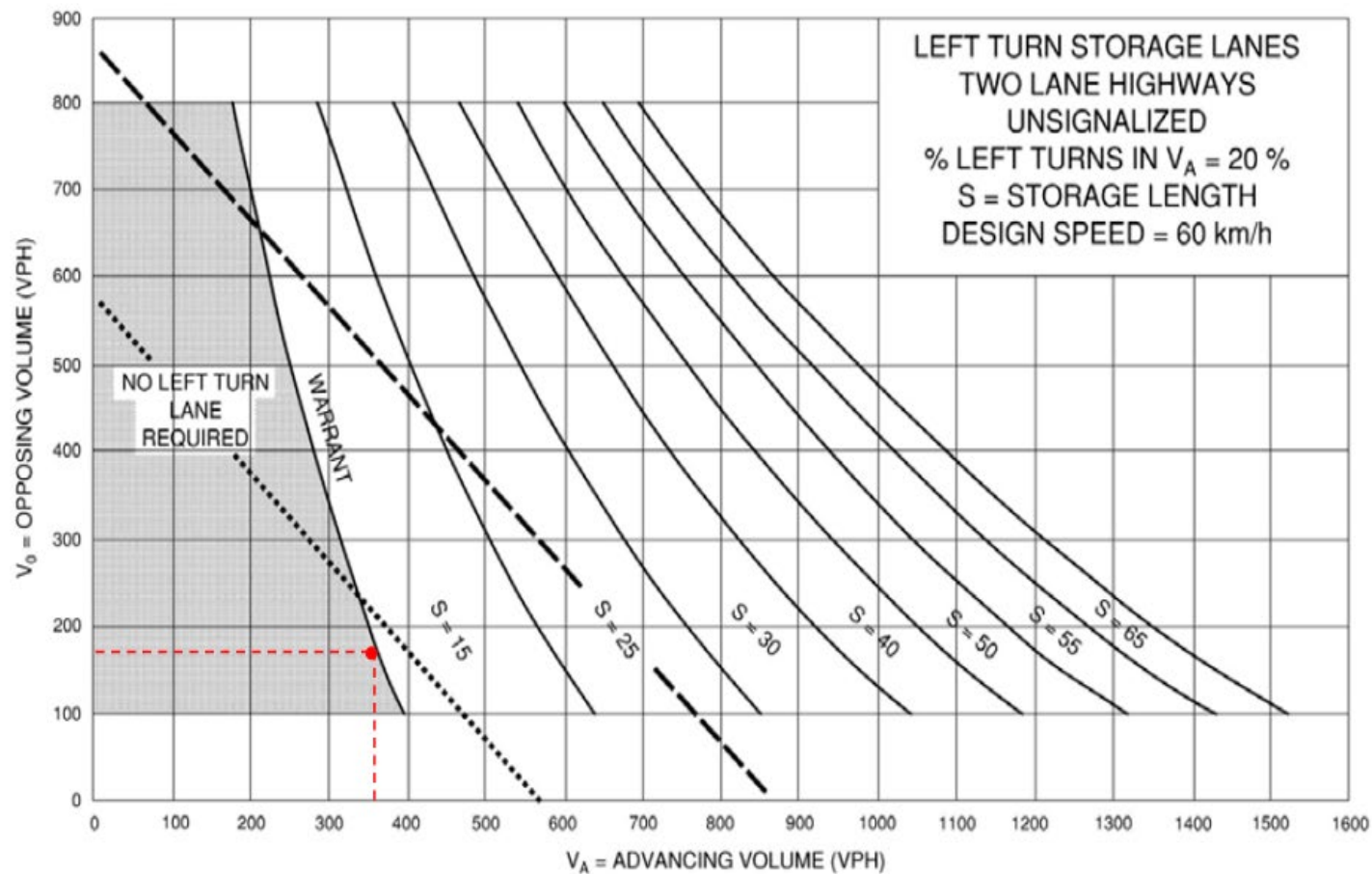
15% LEFT TURN LANE WARRANT FOR MATHESON STREET/COUNTY ROAD 12 INTERSECTION (2027)

Source: the TAC CDG for Canadian Roads – June 2017 (MTO Design supplement, April 2020)

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FIGURE 6



TRAFFIC IMPACT STUDY - MCBAIN SUBDIVISION

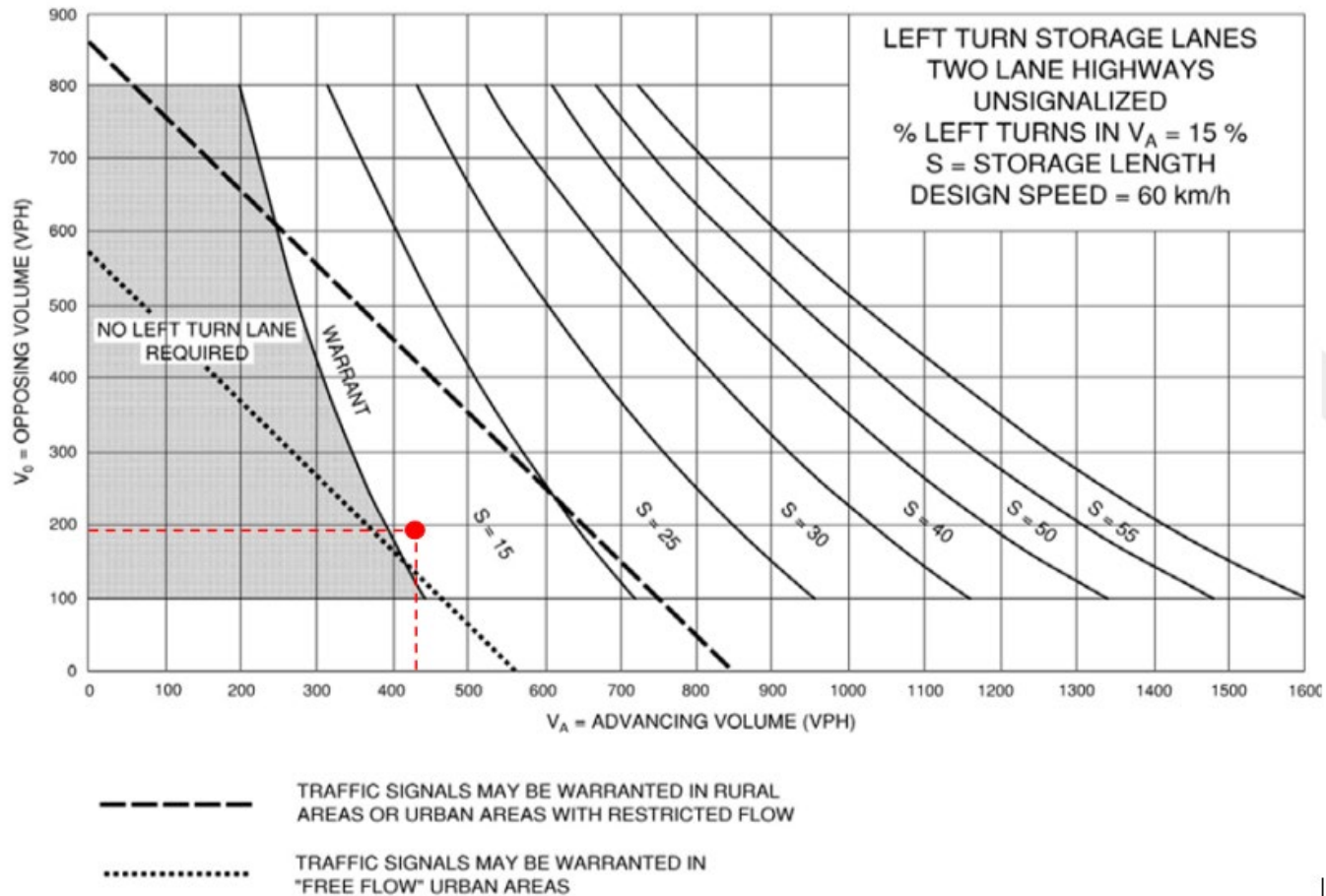
20% LEFT TURN LANE WARRANT FOR MATHESON STREET/COUNTY ROAD 12 INTERSECTION (2027)

Source: the TAC CDG for Canadian Roads – June 2017 (MTO Design supplement, April 2020)

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FIGURE 7



TRAFFIC IMPACT STUDY - MCBAIN SUBDIVISION

LEFT TURN LANE WARRANT FOR MATHESON STREET/COUNTY ROAD 12 INTERSECTION (2032)

Source: the TAC CDG for Canadian Roads – June 2017 (MTO Design supplement, April 2020)

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FIGURE 8

Appendices

Appendix A

Raw Traffic Count Data



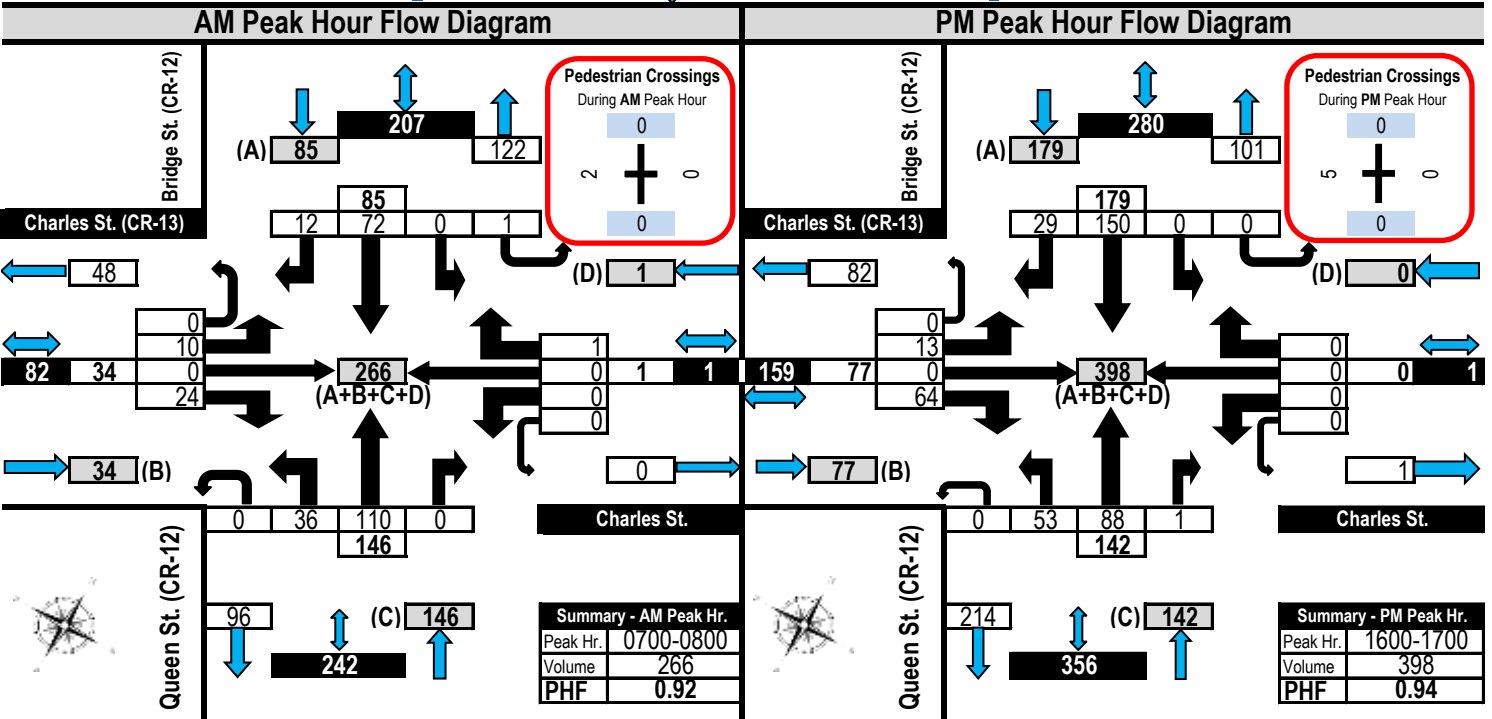
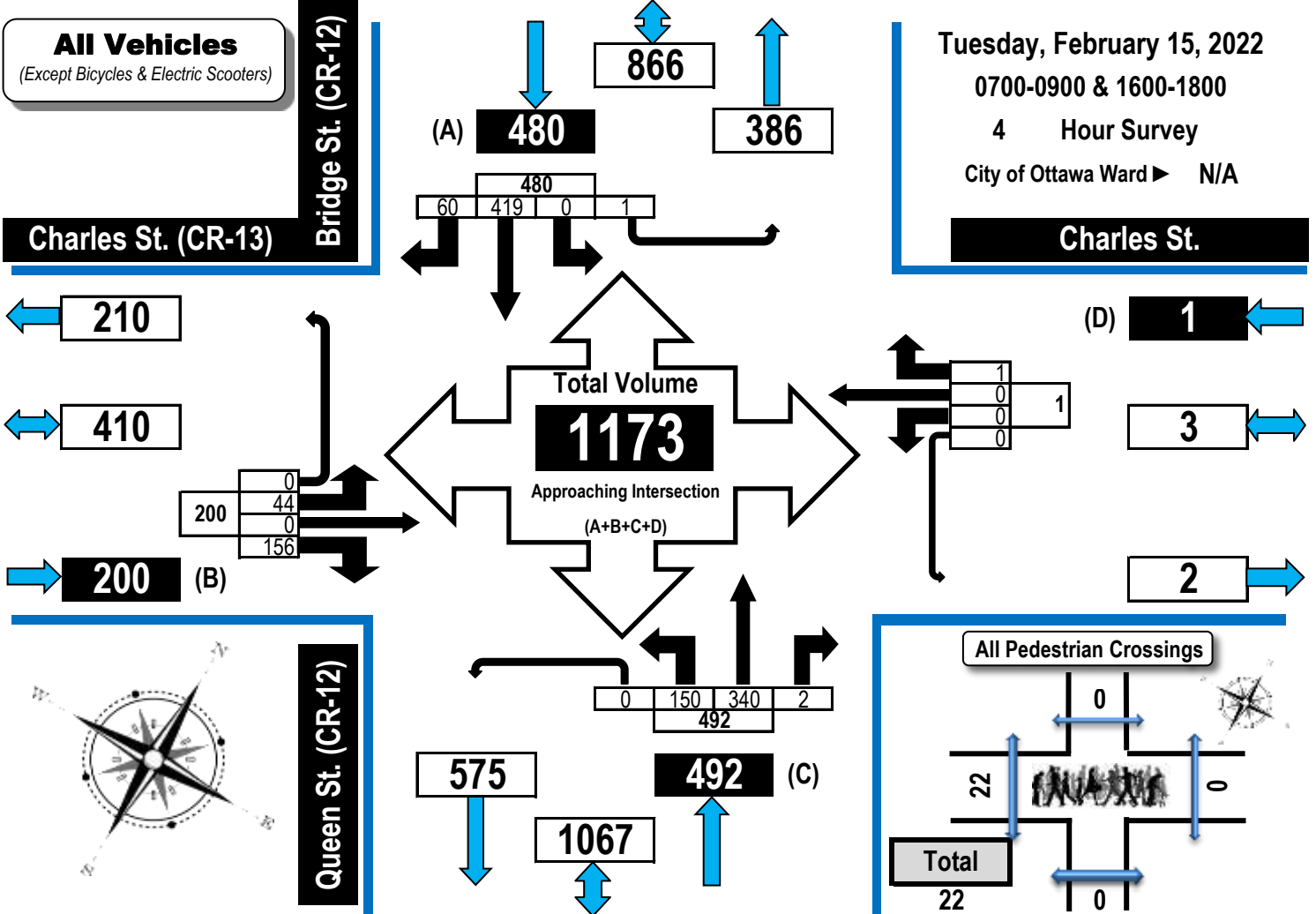
Turning Movement Count Summary, AM and PM Peak Hour Flow Diagrams

All Vehicles Except Bicycles



Bridge Street/Queen Street (CR-12) & Charles Street (CR-13)

Crysler, ON

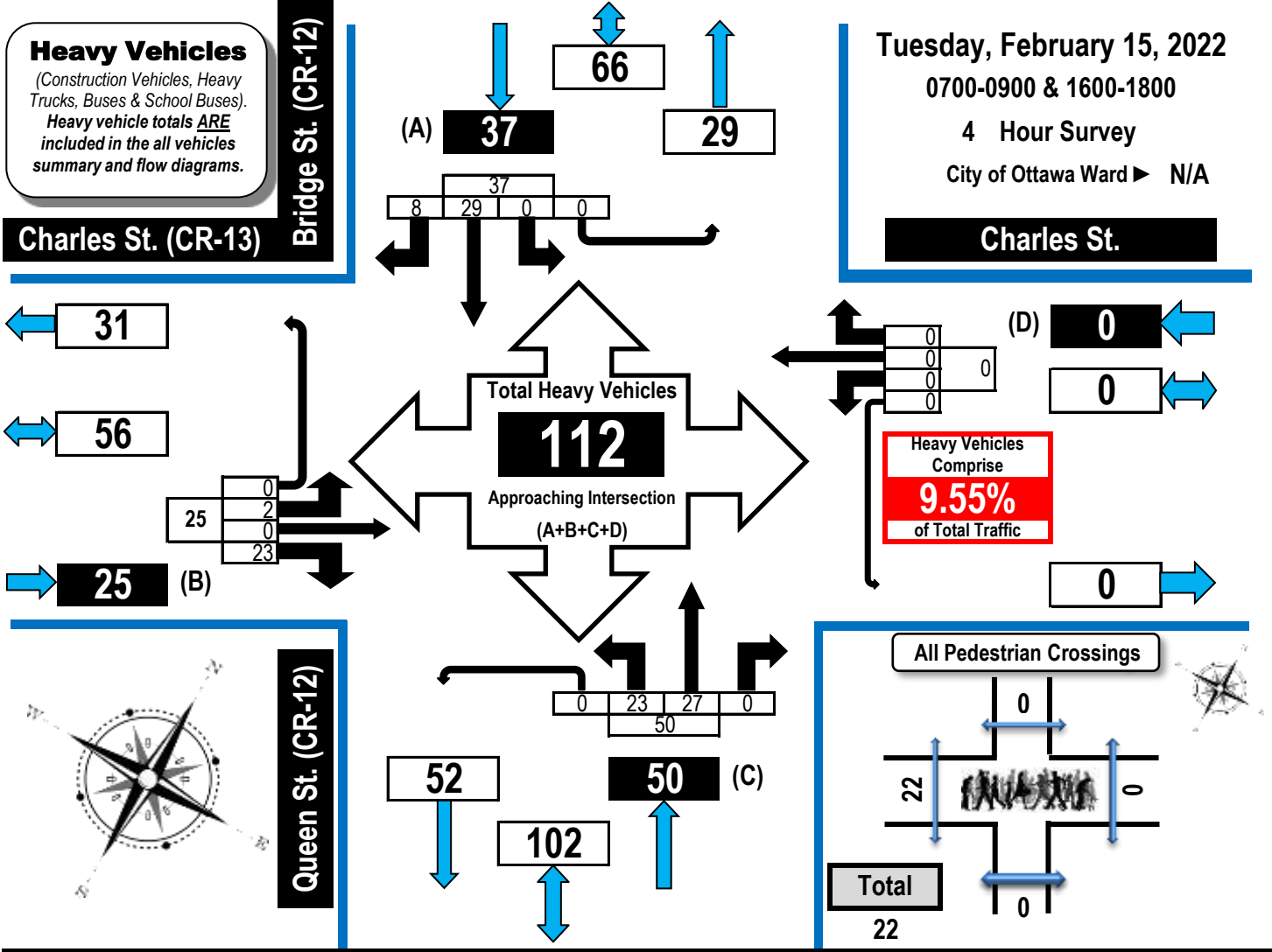




Turning Movement Count Heavy Vehicle Summary (FHWA Class 4-13) Flow Diagram



Bridge Street/Queen Street (CR-12) & Charles Street (CR-13) Crysler, ON



| | Charles St. (CR-13) | | | | | Charles St. | | | | | Queen St. (CR-12) | | | | | Bridge St. (CR-12) | | | | |
|--|---------------------|--|--|--|--|-------------|--|--|--|--|-------------------|--|--|--|--|--------------------|--|--|--|--|
| | Eastbound | | | | | Westbound | | | | | Northbound | | | | | Southbound | | | | |

| Time Period | LT | ST | RT | UT | EB Tot | LT | ST | RT | UT | WB Tot | LT | ST | RT | UT | NB Tot | LT | ST | RT | UT | SB Tot | GR Tot |
|---------------|----------|----------|-----------|----------|-----------|----------|----------|----------|----------|----------|-----------|-----------|----------|----------|-----------|----------|-----------|----------|----------|-----------|------------|
| 0700-0800 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 8 | 10 | 0 | 0 | 18 | 0 | 13 | 2 | 0 | 15 | 37 |
| 0800-0900 | 1 | 0 | 10 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 8 | 11 | 0 | 0 | 19 | 0 | 6 | 2 | 0 | 8 | 38 |
| 1600-1700 | 1 | 0 | 6 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 10 | 0 | 6 | 3 | 0 | 9 | 26 |
| 1700-1800 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 3 | 0 | 4 | 1 | 0 | 5 | 11 |
| Totals | 2 | 0 | 23 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 23 | 27 | 0 | 0 | 50 | 0 | 29 | 8 | 0 | 37 | 112 |

Comments:

Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All schools open to in-person classes; however, all restaurants, gyms and entertainment venues open to vaccinated residents only. School buses comprise 22.31% of the heavy vehicle traffic. Light snow until approximately 0830 with little accumulation. Traffic was not affected.



Turning Movement Count

Summary Report

Including AM and PM Peak Hours

All Vehicles Except Bicycles



Bridge Street/Queen Street (CR-12) & Charles Street (CR-13) Crysler, ON

Survey Date: Tuesday, February 15, 2022 **Start Time:** 0700 **AADT Factor:** 1.0
Weather AM: Light snow -20° C **Survey Duration:** 4 Hrs. **Survey Hours:** 0700-0900 & 1600-1800
Weather PM: Clear -10° C **Surveyor(s):** T. Carmody

| Time Period | Charles St. (CR-13) | | | | | Charles St. | | | | | Queen St. (CR-12) | | | | | Bridge St. (CR-12) | | | | | | | |
|---------------|---------------------|----------|------------|----------|------------|-------------|----------|----------|----------|----------|-------------------|------------|------------|----------|----------|--------------------|----------|------------|-----------|----------|------------|--------------|-------------|
| | Eastbound | | | | | Westbound | | | | | Northbound | | | | | Southbound | | | | | | | |
| | LT | ST | RT | UT | E/B Tot | LT | ST | RT | UT | W/B Tot | Street Total | LT | ST | RT | UT | N/B Tot | LT | ST | RT | UT | S/B Tot | Street Total | Grand Total |
| 0700-0800 | 10 | 0 | 24 | 0 | 34 | 0 | 0 | 1 | 0 | 1 | 35 | 36 | 110 | 0 | 0 | 146 | 0 | 72 | 12 | 1 | 85 | 231 | 266 |
| 0800-0900 | 7 | 0 | 25 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 32 | 34 | 80 | 0 | 0 | 114 | 0 | 66 | 8 | 0 | 74 | 188 | 220 |
| 1600-1700 | 13 | 0 | 64 | 0 | 77 | 0 | 0 | 0 | 0 | 0 | 77 | 53 | 88 | 1 | 0 | 142 | 0 | 150 | 29 | 0 | 179 | 321 | 398 |
| 1700-1800 | 14 | 0 | 43 | 0 | 57 | 0 | 0 | 0 | 0 | 0 | 57 | 27 | 62 | 1 | 0 | 90 | 0 | 131 | 11 | 0 | 142 | 232 | 289 |
| Totals | 44 | 0 | 156 | 0 | 200 | 0 | 0 | 1 | 0 | 1 | 201 | 150 | 340 | 2 | 0 | 492 | 0 | 419 | 60 | 1 | 480 | 972 | 1173 |

Equivalent 12 & 24-hour Vehicle Volumes Including the Annual Average Daily Traffic (AADT) Factor Applicable to the Day and Month of the Turning Movement Count

Expansion factors are applied exclusively to standard weekday 8-hour turning movement counts conducted during the hours of 0700h - 1000h, 1130h - 1330h and 1500h - 1800h

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Equivalent 12-hour vehicle volumes. These volumes are calculated by multiplying the 8-hour totals by the 8 → 12 expansion factor of 1.39 | | | | | | | | | | | | | | | | | | | | | | | |
| Equ. 12 Hr | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Average daily 12-hour vehicle volumes. These volumes are calculated by multiplying the equivalent 12-hour totals by the AADT factor of: 1.0 | | | | | | | | | | | | | | | | | | | | | | | |
| AADT 12-hr | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 24-Hour AADT. These volumes are calculated by multiplying the average daily 12-hour vehicle volumes by the 12 → 24 expansion factor of 1.31 | | | | | | | | | | | | | | | | | | | | | | | |
| AADT 24 Hr | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

AADT and expansion factors provided by the City of Ottawa

| | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|----|----|----|----|-------|----|----|----|----|-------|---|----|-----|----|----|-------|----|----|----|----|-------|-----------|----------|
| AM Peak Hour Factor → 0.92 | | | | | | | | | | | Highest Hourly Vehicle Volume Between 0700h & 0900h | | | | | | | | | | | | |
| AM Peak Hr | LT | ST | RT | UT | Total | LT | ST | RT | UT | Total | Str. Tot. | LT | ST | RT | UT | Total | LT | ST | RT | UT | Total | Str. Tot. | Gr. Tot. |
| 0700-0800 | 10 | 0 | 24 | 0 | 34 | 0 | 0 | 1 | 0 | 1 | 35 | 36 | 110 | 0 | 0 | 146 | 0 | 72 | 12 | 1 | 85 | 231 | 266 |

| | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|----|----|----|----|-------|----|----|----|----|-------|---|----|----|----|----|-------|----|-----|----|----|-------|-----------|----------|
| PM Peak Hour Factor → 0.94 | | | | | | | | | | | Highest Hourly Vehicle Volume Between 1600h & 1800h | | | | | | | | | | | | |
| PM Peak Hr | LT | ST | RT | UT | Total | LT | ST | RT | UT | Total | Str. Tot. | LT | ST | RT | UT | Total | LT | ST | RT | UT | Total | Str. Tot. | Gr. Tot. |
| 1600-1700 | 13 | 0 | 64 | 0 | 77 | 0 | 0 | 0 | 0 | 0 | 77 | 53 | 88 | 1 | 0 | 142 | 0 | 150 | 29 | 0 | 179 | 321 | 398 |

Comments:

Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All schools open to in-person classes; however, all restaurants, gyms and entertainment venues open to vaccinated residents only. School buses comprise 22.31% of the heavy vehicle traffic. Light snow until approximately 0830 with little accumulation. Traffic was not affected.

Notes:

- Includes all vehicle types except bicycles, electric bicycles, and electric scooters.
- When expansion and AADT factors are applied, the results will differ slightly due to rounding.



Turning Movement Count

Summary Report

Including AM and PM Peak Hours

All Vehicles Except Bicycles



Bridge Street (CR-12) & Matheson Street Crysler, ON

Survey Date: Tuesday, February 15, 2022 **Start Time:** 0700 **AADT Factor:** 1.0
Weather AM: Light snow -20° C **Survey Duration:** 4 Hrs. **Survey Hours:** 0700-0900 & 1600-1800
Weather PM: Clear -10° C **Surveyor(s):** T. Carmody

| Time Period | Matheson St. | | | | | N/A | | | | | Bridge St. (CR-12) | | | | | Bridge St. (CR-12) | | | | | | | |
|---------------|--------------|----------|-----------|----------|-----------|-----------|----------|----------|----------|----------|--------------------|----------|------------|----------|----------|--------------------|----------|------------|-----------|----------|------------|--------------|-------------|
| | Eastbound | | | | | Westbound | | | | | Northbound | | | | | Southbound | | | | | | | |
| | LT | ST | RT | UT | E/B Tot | LT | ST | RT | UT | W/B Tot | Street Total | LT | ST | RT | UT | N/B Tot | LT | ST | RT | UT | S/B Tot | Street Total | Grand Total |
| 0700-0800 | 12 | 0 | 7 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 143 | 0 | 0 | 143 | 0 | 65 | 3 | 0 | 68 | 211 | 230 |
| 0800-0900 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 83 | 0 | 0 | 84 | 0 | 62 | 2 | 0 | 64 | 148 | 149 |
| 1600-1700 | 8 | 0 | 3 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 11 | 4 | 78 | 0 | 0 | 82 | 0 | 177 | 9 | 0 | 186 | 268 | 279 |
| 1700-1800 | 2 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 59 | 0 | 0 | 61 | 0 | 150 | 13 | 0 | 163 | 224 | 228 |
| Totals | 23 | 0 | 12 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 35 | 7 | 363 | 0 | 0 | 370 | 0 | 454 | 27 | 0 | 481 | 851 | 886 |

Equivalent 12 & 24-hour Vehicle Volumes Including the Annual Average Daily Traffic (AADT) Factor
Applicable to the Day and Month of the Turning Movement Count

Expansion factors are applied exclusively to standard weekday 8-hour turning movement counts conducted during the hours of 0700h - 1000h, 1130h - 1330h and 1500h - 1800h

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Equivalent 12-hour vehicle volumes. These volumes are calculated by multiplying the 8-hour totals by the 8 → 12 expansion factor of 1.39 | | | | | | | | | | | | | | | | | | | | | | | |
| Equ. 12 Hr | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Average daily 12-hour vehicle volumes. These volumes are calculated by multiplying the equivalent 12-hour totals by the AADT factor of: 1.0 | | | | | | | | | | | | | | | | | | | | | | | |
| AADT 12-hr | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 24-Hour AADT. These volumes are calculated by multiplying the average daily 12-hour vehicle volumes by the 12 → 24 expansion factor of 1.31 | | | | | | | | | | | | | | | | | | | | | | | |
| AADT 24 Hr | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

AADT and expansion factors provided by the City of Ottawa

| | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|----|----|----|----|-------|----|----|----|----|-------|--|----|-----|----|----|-------|----|----|----|----|-------|-----------|----------|
| AM Peak Hour Factor → 0.86 | | | | | | | | | | | Highest Hourly Vehicle Volume Between 0700h & 0900h | | | | | | | | | | | | |
| AM Peak Hr | LT | ST | RT | UT | Total | LT | ST | RT | UT | Total | Str. Tot. | LT | ST | RT | UT | Total | LT | ST | RT | UT | Total | Str. Tot. | Gr. Tot. |
| 0700-0800 | 12 | 0 | 7 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 143 | 0 | 0 | 143 | 0 | 65 | 3 | 0 | 68 | 211 | 230 |

| | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|----|----|----|----|-------|----|----|----|----|-------|--|----|----|----|----|-------|----|-----|----|----|-------|-----------|----------|
| PM Peak Hour Factor → 0.93 | | | | | | | | | | | Highest Hourly Vehicle Volume Between 1600h & 1800h | | | | | | | | | | | | |
| PM Peak Hr | LT | ST | RT | UT | Total | LT | ST | RT | UT | Total | Str. Tot. | LT | ST | RT | UT | Total | LT | ST | RT | UT | Total | Str. Tot. | Gr. Tot. |
| 1600-1700 | 8 | 0 | 3 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 11 | 4 | 78 | 0 | 0 | 82 | 0 | 177 | 9 | 0 | 186 | 268 | 279 |

Comments:

Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All schools open to in-person classes; however, all restaurants, gyms and entertainment venues open to vaccinated residents only. School buses comprise 22.22% of the heavy vehicle traffic and 100% of the heavy vehicle traffic to and from Matheson Street. Light snow until approximately 0830 with little accumulation. Traffic was not affected. There were neither pedestrian crossings nor cyclists observed.

Notes:

1. Includes all vehicle types except bicycles, electric bicycles, and electric scooters.
2. When expansion and AADT factors are applied, the results will differ slightly due to rounding.



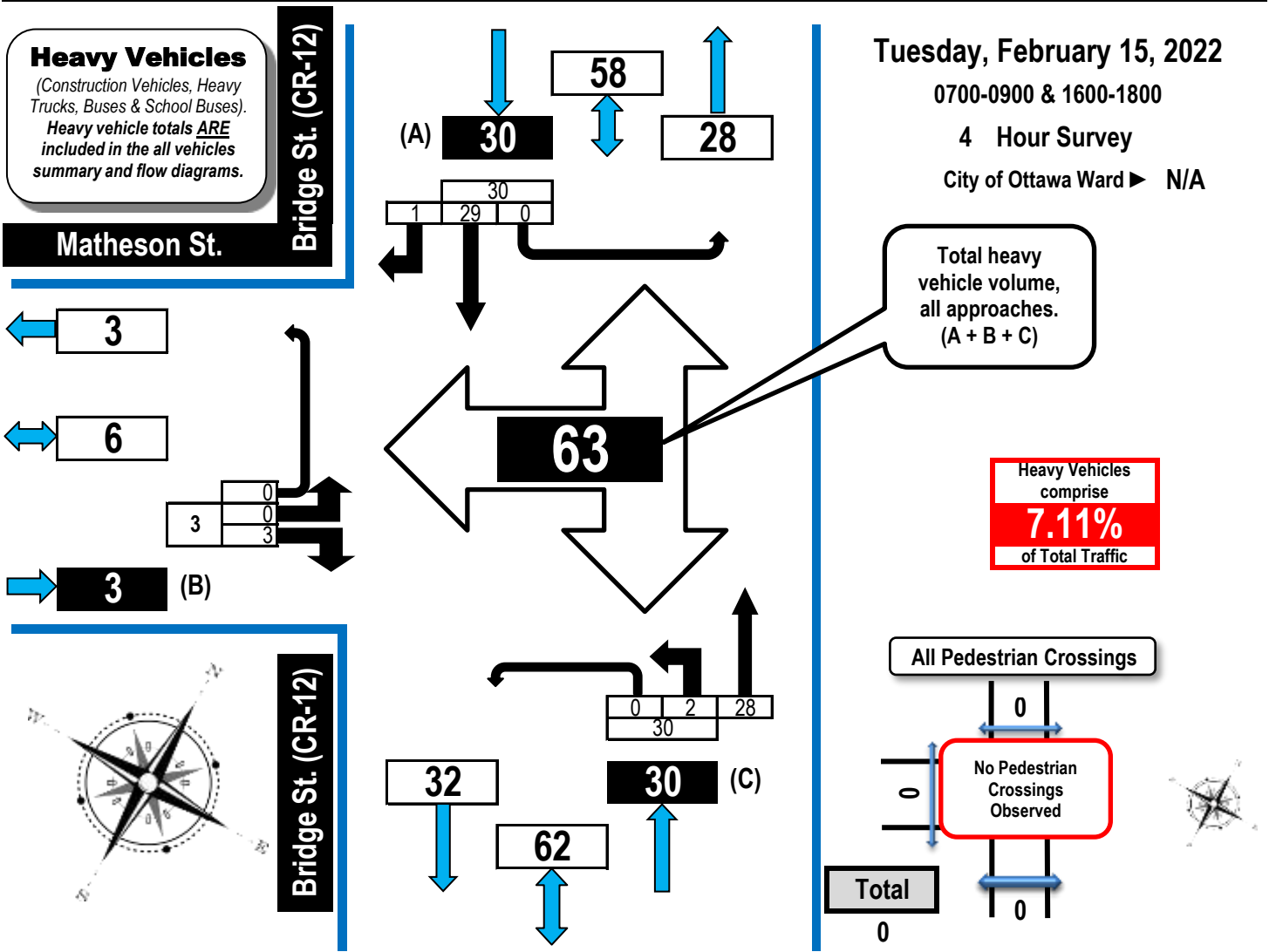
Turning Movement Count

Heavy Vehicle Summary (FHWA Class 4 to 13)

Flow Diagram



Bridge Street (CR-12) & Matheson Street Crysler, ON



| Time Period | Matheson St. Eastbound | | | | | N/A Westbound | | | | | Bridge St. (CR-12) Northbound | | | | | Bridge St. (CR-12) Southbound | | | | | |
|---------------|------------------------|----|----------|----------|----------|---------------|----|----|----|--------|-------------------------------|-----------|----|----------|-----------|-------------------------------|-----------|----------|----------|-----------|-----------|
| | LT | ST | RT | UT | EB Tot | LT | ST | RT | UT | WB Tot | LT | ST | RT | UT | NB Tot | LT | ST | RT | UT | SB Tot | GR Tot |
| 0700-0800 | 0 | | 2 | 0 | 2 | | | | | | 0 | 11 | | 0 | 11 | | 10 | 1 | 0 | 11 | 24 |
| 0800-0900 | 0 | | 0 | 0 | 0 | | | | | | 1 | 12 | | 0 | 13 | | 7 | 0 | 0 | 7 | 20 |
| 0900-1000 | 0 | | 0 | 0 | 0 | | | | | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 1130-1230 | 0 | | 0 | 0 | 0 | | | | | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 1230-1330 | 0 | | 0 | 0 | 0 | | | | | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 1500-1600 | 0 | | 0 | 0 | 0 | | | | | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 1600-1700 | 0 | | 1 | 0 | 1 | | | | | | 1 | 4 | | 0 | 5 | | 7 | 0 | 0 | 7 | 13 |
| 1700-1800 | 0 | | 0 | 0 | 0 | | | | | | 0 | 1 | | 0 | 1 | | 5 | 0 | 0 | 5 | 6 |
| Totals | 0 | | 3 | 0 | 3 | | | | | | 2 | 28 | | 0 | 30 | | 29 | 1 | 0 | 30 | 63 |

Comments:
Traffic count conducted during the SARS-CoV-2 (Covid-19) pandemic. All schools open to in-person classes; however, all restaurants, gyms and entertainment venues open to vaccinated residents only. School buses comprise 22.22% of the heavy vehicle traffic and 100% of the heavy vehicle traffic to and from Matheson Street. Light snow until approximately 0830 with little accumulation. Traffic was not affected. There were neither pedestrian crossings nor cyclists observed.



Turning Movement Count

Summary, AM and PM Peak Hour

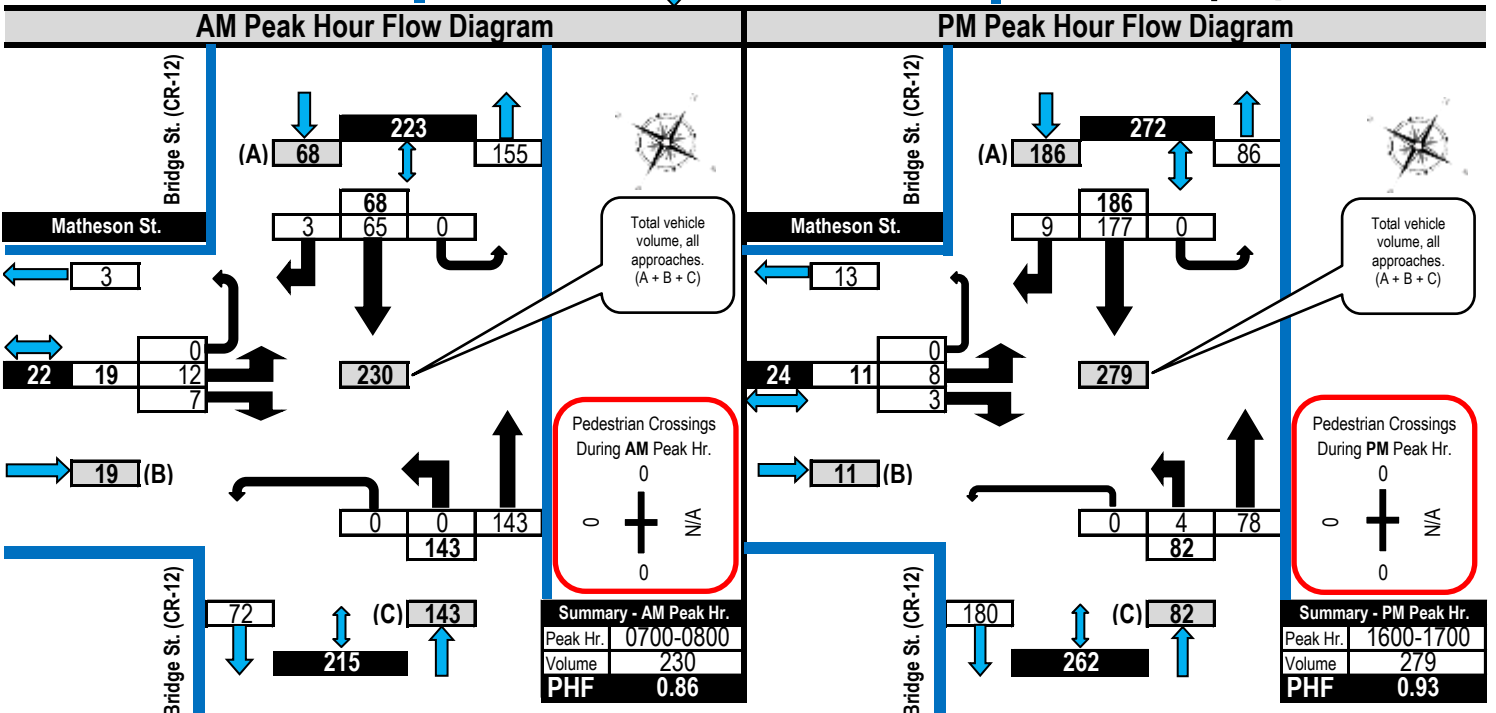
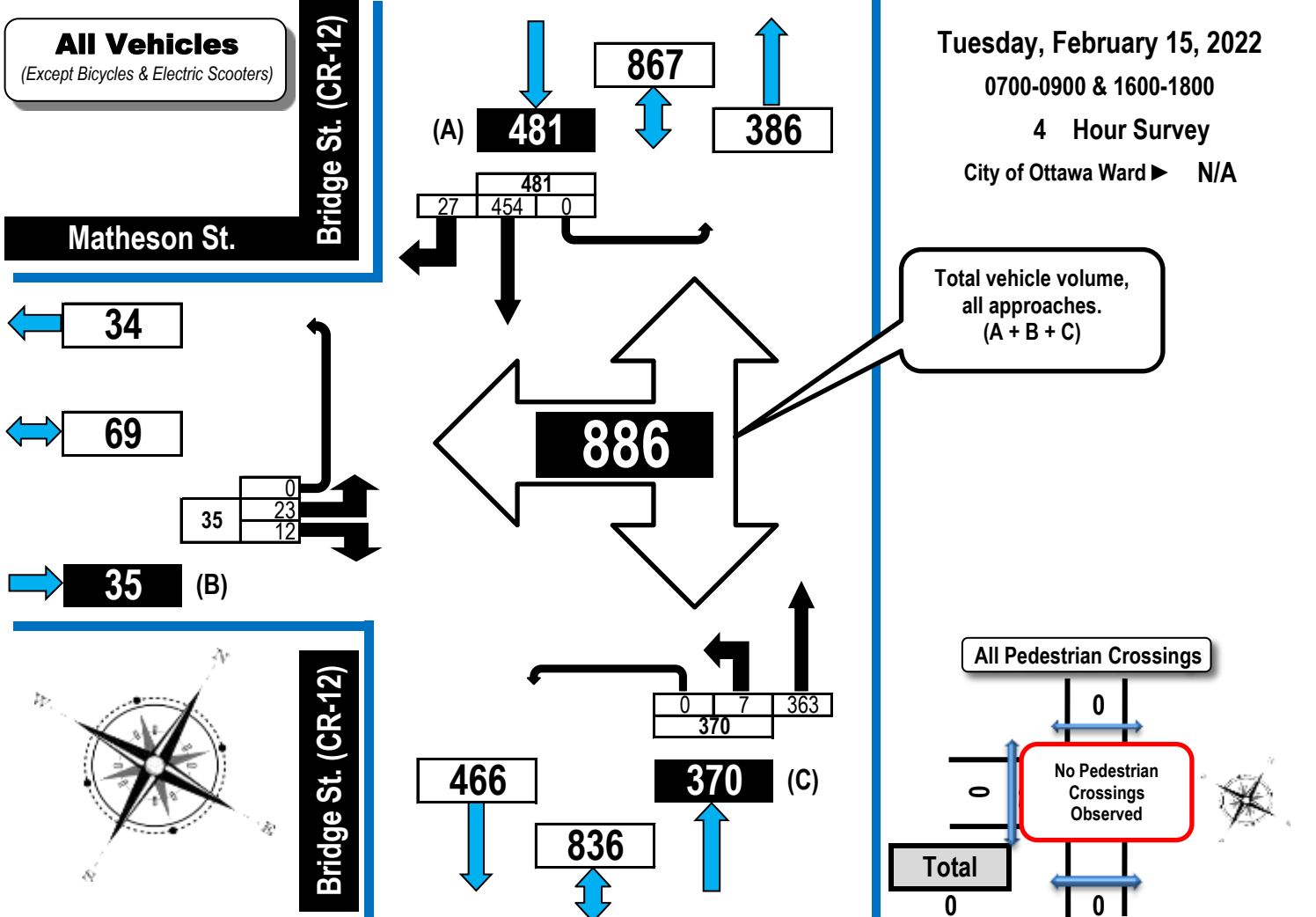
Flow Diagrams

All Vehicles Except Bicycles



Bridge Street (CR-12) & Matheson Street

Crysler, ON



Appendix B

Detailed Synchro Reports

HCM 6th TWSC
 3: Charles Street & County Road 12

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 10 | 0 | 24 | 0 | 0 | 1 | 36 | 110 | 0 | 1 | 72 | 12 |
| Future Vol, veh/h | 10 | 0 | 24 | 0 | 0 | 1 | 36 | 110 | 0 | 1 | 72 | 12 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 0 | 26 | 0 | 0 | 1 | 39 | 120 | 0 | 1 | 78 | 13 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|-------|---|---|
| Conflicting Flow All | 286 | 285 | 85 | 298 | 291 | 120 | 91 | 0 | 0 | 120 | 0 | 0 |
| Stage 1 | 87 | 87 | - | 198 | 198 | - | - | - | - | - | - | - |
| Stage 2 | 199 | 198 | - | 100 | 93 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 666 | 624 | 974 | 654 | 619 | 931 | 1504 | - | - | 1468 | - | - |
| Stage 1 | 921 | 823 | - | 804 | 737 | - | - | - | - | - | - | - |
| Stage 2 | 803 | 737 | - | 906 | 818 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 651 | 606 | 974 | 623 | 601 | 931 | 1504 | - | - | 1468 | - | - |
| Mov Cap-2 Maneuver | 651 | 606 | - | 623 | 601 | - | - | - | - | - | - | - |
| Stage 1 | 895 | 822 | - | 781 | 716 | - | - | - | - | - | - | - |
| Stage 2 | 780 | 716 | - | 881 | 817 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|-----|-----|-----|
| HCM Control Delay, s | 9.4 | 8.9 | 1.8 | 0.1 |
| HCM LOS | A | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1504 | - | - | 850 | 931 | 1468 | - | - |
| HCM Lane V/C Ratio | 0.026 | - | - | 0.043 | 0.001 | 0.001 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | - | 9.4 | 8.9 | 7.5 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.1 | 0 | 0 | - | - |

HCM 6th TWSC
7: County Road 12 & Matheson Street

03-29-2022

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 12 | 7 | 0 | 143 | 65 | 3 |
| Future Vol, veh/h | 12 | 7 | 0 | 143 | 65 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 8 | 0 | 155 | 71 | 3 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 228 | 73 | 74 | 0 | 0 |
| Stage 1 | 73 | - | - | - | - |
| Stage 2 | 155 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |
| Pot Cap-1 Maneuver | 760 | 989 | 1526 | - | - |
| Stage 1 | 950 | - | - | - | - |
| Stage 2 | 873 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 760 | 989 | 1526 | - | - |
| Mov Cap-2 Maneuver | 760 | - | - | - | - |
| Stage 1 | 950 | - | - | - | - |
| Stage 2 | 873 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 9.4 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|------|-----|-------|-----|-----|
| Capacity (veh/h) | 1526 | - | 831 | - | - |
| HCM Lane V/C Ratio | - | - | 0.025 | - | - |
| HCM Control Delay (s) | 0 | - | 9.4 | - | - |
| HCM Lane LOS | A | - | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

HCM 6th TWSC
 3: Charles Street & County Road 12

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 13 | 0 | 31 | 0 | 0 | 1 | 46 | 140 | 0 | 1 | 92 | 15 |
| Future Vol, veh/h | 13 | 0 | 31 | 0 | 0 | 1 | 46 | 140 | 0 | 1 | 92 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 0 | 34 | 0 | 0 | 1 | 50 | 152 | 0 | 1 | 100 | 16 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 363 | 362 | 108 | 379 | 370 | 152 | 116 | 0 | 0 | 152 | 0 | 0 |
| Stage 1 | 110 | 110 | - | 252 | 252 | - | - | - | - | - | - | - |
| Stage 2 | 253 | 252 | - | 127 | 118 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 593 | 565 | 946 | 579 | 560 | 894 | 1473 | - | - | 1429 | - | - |
| Stage 1 | 895 | 804 | - | 752 | 698 | - | - | - | - | - | - | - |
| Stage 2 | 751 | 698 | - | 877 | 798 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 575 | 544 | 946 | 542 | 539 | 894 | 1473 | - | - | 1429 | - | - |
| Mov Cap-2 Maneuver | 575 | 544 | - | 542 | 539 | - | - | - | - | - | - | - |
| Stage 1 | 862 | 803 | - | 724 | 672 | - | - | - | - | - | - | - |
| Stage 2 | 722 | 672 | - | 845 | 797 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|-----|-----|
| HCM Control Delay, s | 9.8 | 9 | 1.9 | 0.1 |
| HCM LOS | A | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1473 | - | - | 795 | 894 | 1429 | - | - |
| HCM Lane V/C Ratio | 0.034 | - | - | 0.06 | 0.001 | 0.001 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | - | 9.8 | 9 | 7.5 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.2 | 0 | 0 | - | - |

HCM 6th TWSC
7: County Road 12 & Matheson Street

03-29-2022

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 15 | 9 | 0 | 183 | 83 | 4 |
| Future Vol, veh/h | 15 | 9 | 0 | 183 | 83 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 10 | 0 | 199 | 90 | 4 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 291 | 92 | 94 | 0 | 0 |
| Stage 1 | 92 | - | - | - | - |
| Stage 2 | 199 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |
| Pot Cap-1 Maneuver | 700 | 965 | 1500 | - | - |
| Stage 1 | 932 | - | - | - | - |
| Stage 2 | 835 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 700 | 965 | 1500 | - | - |
| Mov Cap-2 Maneuver | 700 | - | - | - | - |
| Stage 1 | 932 | - | - | - | - |
| Stage 2 | 835 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 9.8 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|------|-----|-------|-----|-----|
| Capacity (veh/h) | 1500 | - | 780 | - | - |
| HCM Lane V/C Ratio | - | - | 0.033 | - | - |
| HCM Control Delay (s) | 0 | - | 9.8 | - | - |
| HCM Lane LOS | A | - | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

HCM 6th TWSC
 3: Charles Street & County Road 12

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 13 | 0 | 31 | 0 | 0 | 1 | 46 | 148 | 0 | 1 | 92 | 15 |
| Future Vol, veh/h | 13 | 0 | 31 | 0 | 0 | 1 | 46 | 148 | 0 | 1 | 92 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 0 | 34 | 0 | 0 | 1 | 50 | 161 | 0 | 1 | 100 | 16 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 372 | 371 | 108 | 388 | 379 | 161 | 116 | 0 | 0 | 161 | 0 | 0 |
| Stage 1 | 110 | 110 | - | 261 | 261 | - | - | - | - | - | - | - |
| Stage 2 | 262 | 261 | - | 127 | 118 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 585 | 559 | 946 | 571 | 553 | 884 | 1473 | - | - | 1418 | - | - |
| Stage 1 | 895 | 804 | - | 744 | 692 | - | - | - | - | - | - | - |
| Stage 2 | 743 | 692 | - | 877 | 798 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 567 | 538 | 946 | 534 | 532 | 884 | 1473 | - | - | 1418 | - | - |
| Mov Cap-2 Maneuver | 567 | 538 | - | 534 | 532 | - | - | - | - | - | - | - |
| Stage 1 | 862 | 803 | - | 716 | 666 | - | - | - | - | - | - | - |
| Stage 2 | 715 | 666 | - | 845 | 797 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|-----|-----|-----|
| HCM Control Delay, s | 9.9 | 9.1 | 1.8 | 0.1 |
| HCM LOS | A | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1473 | - | - | 790 | 884 | 1418 | - | - |
| HCM Lane V/C Ratio | 0.034 | - | - | 0.061 | 0.001 | 0.001 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | - | 9.9 | 9.1 | 7.5 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.2 | 0 | 0 | - | - |

HCM 6th TWSC
 7: County Road 12 & Matheson Street

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 15 | 0 | 9 | 27 | 0 | 47 | 0 | 230 | 8 | 19 | 102 | 4 |
| Future Vol, veh/h | 15 | 0 | 9 | 27 | 0 | 47 | 0 | 230 | 8 | 19 | 102 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 0 | 10 | 29 | 0 | 51 | 0 | 250 | 9 | 21 | 111 | 4 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | | Major2 | | | |
|----------------------|--------|-------|--------|-------|--------|-------|-------|---|--------|-------|---|---|
| Conflicting Flow All | 435 | 414 | 113 | 415 | 412 | 255 | 115 | 0 | 0 | 259 | 0 | 0 |
| Stage 1 | 155 | 155 | - | 255 | 255 | - | - | - | - | - | - | - |
| Stage 2 | 280 | 259 | - | 160 | 157 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 531 | 529 | 940 | 548 | 530 | 784 | 1474 | - | - | 1306 | - | - |
| Stage 1 | 847 | 769 | - | 749 | 696 | - | - | - | - | - | - | - |
| Stage 2 | 727 | 694 | - | 842 | 768 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 490 | 520 | 940 | 535 | 521 | 784 | 1474 | - | - | 1306 | - | - |
| Mov Cap-2 Maneuver | 490 | 520 | - | 535 | 521 | - | - | - | - | - | - | - |
| Stage 1 | 847 | 756 | - | 749 | 696 | - | - | - | - | - | - | - |
| Stage 2 | 680 | 694 | - | 819 | 755 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|------|----|-----|
| HCM Control Delay, s | 11.3 | 11.1 | 0 | 1.2 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1474 | - | - | 597 | 670 | 1306 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.044 | 0.12 | 0.016 | - | - |
| HCM Control Delay (s) | 0 | - | - | 11.3 | 11.1 | 7.8 | 0 | - |
| HCM Lane LOS | A | - | - | B | B | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.4 | 0 | - | - |

HCM 6th TWSC
8: County Road 12 & Gloss Street

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 28 | 0 | 17 | 27 | 0 | 47 | 0 | 154 | 8 | 19 | 92 | 0 |
| Future Vol, veh/h | 28 | 0 | 17 | 27 | 0 | 47 | 0 | 154 | 8 | 19 | 92 | 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 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 30 | 0 | 18 | 29 | 0 | 51 | 0 | 167 | 9 | 21 | 100 | 0 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 339 | 318 | 100 | 323 | 314 | 172 | 100 | 0 | 0 | 176 | 0 | 0 |
| Stage 1 | 142 | 142 | - | 172 | 172 | - | - | - | - | - | - | - |
| Stage 2 | 197 | 176 | - | 151 | 142 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 615 | 598 | 956 | 630 | 601 | 872 | 1493 | - | - | 1400 | - | - |
| Stage 1 | 861 | 779 | - | 830 | 756 | - | - | - | - | - | - | - |
| Stage 2 | 805 | 753 | - | 851 | 779 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 572 | 588 | 956 | 610 | 591 | 872 | 1493 | - | - | 1400 | - | - |
| Mov Cap-2 Maneuver | 572 | 588 | - | 610 | 591 | - | - | - | - | - | - | - |
| Stage 1 | 861 | 767 | - | 830 | 756 | - | - | - | - | - | - | - |
| Stage 2 | 758 | 753 | - | 821 | 767 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|------|--|----|--|-----|--|
| HCM Control Delay, s | 10.8 | | 10.3 | | 0 | | 1.3 | |
| HCM LOS | B | | B | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1493 | - | - | 674 | 754 | 1400 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.073 | 0.107 | 0.015 | - | - |
| HCM Control Delay (s) | 0 | - | - | 10.8 | 10.3 | 7.6 | 0 | - |
| HCM Lane LOS | A | - | - | B | B | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.2 | 0.4 | 0 | - | - |

HCM 6th TWSC
 3: Charles Street & County Road 12

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 16 | 0 | 39 | 0 | 0 | 2 | 59 | 187 | 0 | 2 | 117 | 20 |
| Future Vol, veh/h | 16 | 0 | 39 | 0 | 0 | 2 | 59 | 187 | 0 | 2 | 117 | 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 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 17 | 0 | 42 | 0 | 0 | 2 | 64 | 203 | 0 | 2 | 127 | 22 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|-------|---|---|
| Conflicting Flow All | 474 | 473 | 138 | 494 | 484 | 203 | 149 | 0 | 0 | 203 | 0 | 0 |
| Stage 1 | 142 | 142 | - | 331 | 331 | - | - | - | - | - | - | - |
| Stage 2 | 332 | 331 | - | 163 | 153 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 501 | 490 | 910 | 486 | 483 | 838 | 1432 | - | - | 1369 | - | - |
| Stage 1 | 861 | 779 | - | 682 | 645 | - | - | - | - | - | - | - |
| Stage 2 | 681 | 645 | - | 839 | 771 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 480 | 465 | 910 | 445 | 458 | 838 | 1432 | - | - | 1369 | - | - |
| Mov Cap-2 Maneuver | 480 | 465 | - | 445 | 458 | - | - | - | - | - | - | - |
| Stage 1 | 818 | 777 | - | 648 | 613 | - | - | - | - | - | - | - |
| Stage 2 | 645 | 613 | - | 798 | 769 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|-----|--|-----|--|-----|--|
| HCM Control Delay, s | 10.4 | | 9.3 | | 1.8 | | 0.1 | |
| HCM LOS | B | | A | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1432 | - | - | 722 | 838 | 1369 | - | - |
| HCM Lane V/C Ratio | 0.045 | - | - | 0.083 | 0.003 | 0.002 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | - | 10.4 | 9.3 | 7.6 | 0 | - |
| HCM Lane LOS | A | A | - | B | A | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.3 | 0 | 0 | - | - |

HCM 6th TWSC
7: County Road 12 & Matheson Street

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 20 | 0 | 11 | 27 | 0 | 47 | 0 | 280 | 8 | 19 | 124 | 5 |
| Future Vol, veh/h | 20 | 0 | 11 | 27 | 0 | 47 | 0 | 280 | 8 | 19 | 124 | 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 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 0 | 12 | 29 | 0 | 51 | 0 | 304 | 9 | 21 | 135 | 5 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | | Major2 | | | |
|----------------------|--------|-------|--------|-------|--------|-------|-------|---|--------|-------|---|---|
| Conflicting Flow All | 514 | 493 | 138 | 495 | 491 | 309 | 140 | 0 | 0 | 313 | 0 | 0 |
| Stage 1 | 180 | 180 | - | 309 | 309 | - | - | - | - | - | - | - |
| Stage 2 | 334 | 313 | - | 186 | 182 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 471 | 477 | 910 | 485 | 478 | 731 | 1443 | - | - | 1247 | - | - |
| Stage 1 | 822 | 750 | - | 701 | 660 | - | - | - | - | - | - | - |
| Stage 2 | 680 | 657 | - | 816 | 749 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 432 | 468 | 910 | 472 | 469 | 731 | 1443 | - | - | 1247 | - | - |
| Mov Cap-2 Maneuver | 432 | 468 | - | 472 | 469 | - | - | - | - | - | - | - |
| Stage 1 | 822 | 737 | - | 701 | 660 | - | - | - | - | - | - | - |
| Stage 2 | 632 | 657 | - | 791 | 736 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|------|----|----|
| HCM Control Delay, s | 12.2 | 11.8 | 0 | 1 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1443 | - | - | 531 | 609 | 1247 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.063 | 0.132 | 0.017 | - | - |
| HCM Control Delay (s) | 0 | - | - | 12.2 | 11.8 | 7.9 | 0 | - |
| HCM Lane LOS | A | - | - | B | B | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.2 | 0.5 | 0.1 | - | - |

HCM 6th TWSC
8: County Road 12 & Gloss Street

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 36 | 0 | 21 | 27 | 0 | 47 | 0 | 197 | 8 | 19 | 117 | 0 |
| Future Vol, veh/h | 36 | 0 | 21 | 27 | 0 | 47 | 0 | 197 | 8 | 19 | 117 | 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 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 39 | 0 | 23 | 29 | 0 | 51 | 0 | 214 | 9 | 21 | 127 | 0 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 413 | 392 | 127 | 400 | 388 | 219 | 127 | 0 | 0 | 223 | 0 | 0 |
| Stage 1 | 169 | 169 | - | 219 | 219 | - | - | - | - | - | - | - |
| Stage 2 | 244 | 223 | - | 181 | 169 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 549 | 544 | 923 | 560 | 547 | 821 | 1459 | - | - | 1346 | - | - |
| Stage 1 | 833 | 759 | - | 783 | 722 | - | - | - | - | - | - | - |
| Stage 2 | 760 | 719 | - | 821 | 759 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 508 | 535 | 923 | 539 | 538 | 821 | 1459 | - | - | 1346 | - | - |
| Mov Cap-2 Maneuver | 508 | 535 | - | 539 | 538 | - | - | - | - | - | - | - |
| Stage 1 | 833 | 746 | - | 783 | 722 | - | - | - | - | - | - | - |
| Stage 2 | 713 | 719 | - | 787 | 746 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|------|----|-----|
| HCM Control Delay, s | 11.6 | 10.9 | 0 | 1.1 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1459 | - | - | 609 | 689 | 1346 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.102 | 0.117 | 0.015 | - | - |
| HCM Control Delay (s) | 0 | - | - | 11.6 | 10.9 | 7.7 | 0 | - |
| HCM Lane LOS | A | - | - | B | B | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.3 | 0.4 | 0 | - | - |

HCM 6th TWSC
 3: Charles Street & County Road 12

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 13 | 0 | 64 | 0 | 0 | 0 | 53 | 88 | 1 | 0 | 150 | 29 |
| Future Vol, veh/h | 13 | 0 | 64 | 0 | 0 | 0 | 53 | 88 | 1 | 0 | 150 | 29 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 0 | 70 | 0 | 0 | 0 | 58 | 96 | 1 | 0 | 163 | 32 |




| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 392 | 392 | 179 | 427 | 408 | 97 | 195 | 0 | 0 | 97 | 0 | 0 |
| Stage 1 | 179 | 179 | - | 213 | 213 | - | - | - | - | - | - | - |
| Stage 2 | 213 | 213 | - | 214 | 195 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 567 | 544 | 864 | 538 | 533 | 959 | 1378 | - | - | 1496 | - | - |
| Stage 1 | 823 | 751 | - | 789 | 726 | - | - | - | - | - | - | - |
| Stage 2 | 789 | 726 | - | 788 | 739 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 548 | 520 | 864 | 478 | 510 | 959 | 1378 | - | - | 1496 | - | - |
| Mov Cap-2 Maneuver | 548 | 520 | - | 478 | 510 | - | - | - | - | - | - | - |
| Stage 1 | 787 | 751 | - | 754 | 694 | - | - | - | - | - | - | - |
| Stage 2 | 754 | 694 | - | 725 | 739 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|----|-----|----|
| HCM Control Delay, s | 10.1 | 0 | 2.9 | 0 |
| HCM LOS | B | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-----|------|-----|
| Capacity (veh/h) | 1378 | - | - | 787 | - | 1496 | - |
| HCM Lane V/C Ratio | 0.042 | - | - | 0.106 | - | - | - |
| HCM Control Delay (s) | 7.7 | 0 | - | 10.1 | 0 | 0 | - |
| HCM Lane LOS | A | A | - | B | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.4 | - | 0 | - |

HCM 6th TWSC
7: County Road 12 & Matheson Street

03-29-2022

| Intersection | | | | | | |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh | 0.5 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations |  | | |  |  | |
| Traffic Vol, veh/h | 8 | 3 | 4 | 78 | 177 | 9 |
| Future Vol, veh/h | 8 | 3 | 4 | 78 | 177 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 9 | 3 | 4 | 85 | 192 | 10 |

| Major/Minor | Minor2 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | 290 | 197 | 202 | 0 | - | 0 |
| Stage 1 | 197 | - | - | - | - | - |
| Stage 2 | 93 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 701 | 844 | 1370 | - | - | - |
| Stage 1 | 836 | - | - | - | - | - |
| Stage 2 | 931 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 699 | 844 | 1370 | - | - | - |
| Mov Cap-2 Maneuver | 699 | - | - | - | - | - |
| Stage 1 | 833 | - | - | - | - | - |
| Stage 2 | 931 | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 10 | 0.4 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1370 | - | 733 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.016 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | 10 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

HCM 6th TWSC
 3: Charles Street & County Road 12

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.2 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 17 | 0 | 82 | 0 | 0 | 0 | 68 | 112 | 1 | 0 | 191 | 37 |
| Future Vol, veh/h | 17 | 0 | 82 | 0 | 0 | 0 | 68 | 112 | 1 | 0 | 191 | 37 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 0 | 89 | 0 | 0 | 0 | 74 | 122 | 1 | 0 | 208 | 40 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 499 | 499 | 228 | 544 | 519 | 123 | 248 | 0 | 0 | 123 | 0 | 0 |
| Stage 1 | 228 | 228 | - | 271 | 271 | - | - | - | - | - | - | - |
| Stage 2 | 271 | 271 | - | 273 | 248 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 482 | 473 | 811 | 450 | 461 | 928 | 1318 | - | - | 1464 | - | - |
| Stage 1 | 775 | 715 | - | 735 | 685 | - | - | - | - | - | - | - |
| Stage 2 | 735 | 685 | - | 733 | 701 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 460 | 445 | 811 | 382 | 433 | 928 | 1318 | - | - | 1464 | - | - |
| Mov Cap-2 Maneuver | 460 | 445 | - | 382 | 433 | - | - | - | - | - | - | - |
| Stage 1 | 729 | 715 | - | 691 | 644 | - | - | - | - | - | - | - |
| Stage 2 | 691 | 644 | - | 652 | 701 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|----|----|----|
| HCM Control Delay, s | 10.9 | 0 | 3 | 0 |
| HCM LOS | B | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|------|-----|-----|
| Capacity (veh/h) | 1318 | - | - | 717 | - | 1464 | - | - |
| HCM Lane V/C Ratio | 0.056 | - | - | 0.15 | - | - | - | - |
| HCM Control Delay (s) | 7.9 | 0 | - | 10.9 | 0 | 0 | - | - |
| HCM Lane LOS | A | A | - | B | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.5 | - | 0 | - | - |

HCM 6th TWSC
7: County Road 12 & Matheson Street

03-29-2022

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.5 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 4 | 5 | 100 | 226 | 11 |
| Future Vol, veh/h | 10 | 4 | 5 | 100 | 226 | 11 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 4 | 5 | 109 | 246 | 12 |

| Major/Minor | Minor2 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | 371 | 252 | 258 | 0 | - | 0 |
| Stage 1 | 252 | - | - | - | - | - |
| Stage 2 | 119 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 630 | 787 | 1307 | - | - | - |
| Stage 1 | 790 | - | - | - | - | - |
| Stage 2 | 906 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 627 | 787 | 1307 | - | - | - |
| Mov Cap-2 Maneuver | 627 | - | - | - | - | - |
| Stage 1 | 787 | - | - | - | - | - |
| Stage 2 | 906 | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 10.5 | 0.4 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1307 | - | 666 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | 0.023 | - | - |
| HCM Control Delay (s) | 7.8 | 0 | 10.5 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

HCM 6th TWSC
 3: Charles Street & County road 12

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 17 | 0 | 82 | 0 | 0 | 0 | 68 | 139 | 1 | 0 | 191 | 37 |
| Future Vol, veh/h | 17 | 0 | 82 | 0 | 0 | 0 | 68 | 139 | 1 | 0 | 191 | 37 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 0 | 89 | 0 | 0 | 0 | 74 | 151 | 1 | 0 | 208 | 40 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 528 | 528 | 228 | 573 | 548 | 152 | 248 | 0 | 0 | 152 | 0 | 0 |
| Stage 1 | 228 | 228 | - | 300 | 300 | - | - | - | - | - | - | - |
| Stage 2 | 300 | 300 | - | 273 | 248 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 461 | 456 | 811 | 430 | 444 | 894 | 1318 | - | - | 1429 | - | - |
| Stage 1 | 775 | 715 | - | 709 | 666 | - | - | - | - | - | - | - |
| Stage 2 | 709 | 666 | - | 733 | 701 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 439 | 428 | 811 | 365 | 417 | 894 | 1318 | - | - | 1429 | - | - |
| Mov Cap-2 Maneuver | 439 | 428 | - | 365 | 417 | - | - | - | - | - | - | - |
| Stage 1 | 728 | 715 | - | 666 | 625 | - | - | - | - | - | - | - |
| Stage 2 | 666 | 625 | - | 652 | 701 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|----|-----|----|
| HCM Control Delay, s | 11 | 0 | 2.6 | 0 |
| HCM LOS | B | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|------|-----|-----|
| Capacity (veh/h) | 1318 | - | - | 708 | - | 1429 | - | - |
| HCM Lane V/C Ratio | 0.056 | - | - | 0.152 | - | - | - | - |
| HCM Control Delay (s) | 7.9 | 0 | - | 11 | 0 | 0 | - | - |
| HCM Lane LOS | A | A | - | B | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.5 | - | 0 | - | - |

HCM 6th TWSC
7: County Road 12 & Matheson Street

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 10 | 0 | 4 | 14 | 0 | 37 | 5 | 137 | 26 | 62 | 288 | 11 |
| Future Vol, veh/h | 10 | 0 | 4 | 14 | 0 | 37 | 5 | 137 | 26 | 62 | 288 | 11 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 0 | 4 | 15 | 0 | 40 | 5 | 149 | 28 | 67 | 313 | 12 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | | Major2 | | | |
|----------------------|--------|-------|--------|-------|--------|-------|-------|---|--------|-------|---|---|
| Conflicting Flow All | 646 | 640 | 319 | 628 | 632 | 163 | 325 | 0 | 0 | 177 | 0 | 0 |
| Stage 1 | 453 | 453 | - | 173 | 173 | - | - | - | - | - | - | - |
| Stage 2 | 193 | 187 | - | 455 | 459 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 385 | 393 | 722 | 395 | 398 | 882 | 1235 | - | - | 1399 | - | - |
| Stage 1 | 586 | 570 | - | 829 | 756 | - | - | - | - | - | - | - |
| Stage 2 | 809 | 745 | - | 585 | 566 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 350 | 368 | 722 | 374 | 373 | 882 | 1235 | - | - | 1399 | - | - |
| Mov Cap-2 Maneuver | 350 | 368 | - | 374 | 373 | - | - | - | - | - | - | - |
| Stage 1 | 583 | 536 | - | 825 | 752 | - | - | - | - | - | - | - |
| Stage 2 | 768 | 741 | - | 547 | 533 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | | | |
|----------------------|------|--|------|--|-----|--|-----|--|--|--|
| HCM Control Delay, s | 14.1 | | 11.1 | | 0.2 | | 1.3 | | | |
| HCM LOS | B | | B | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1235 | - | - | 410 | 642 | 1399 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 0.037 | 0.086 | 0.048 | - | - |
| HCM Control Delay (s) | 7.9 | 0 | - | 14.1 | 11.1 | 7.7 | 0 | - |
| HCM Lane LOS | A | A | - | B | B | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.3 | 0.2 | - | - |

HCM 6th TWSC
8: County road 12 & Gloss Street

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 0 | 0 | 14 | 0 | 37 | 29 | 100 | 26 | 62 | 228 | 1 |
| Future Vol, veh/h | 5 | 0 | 0 | 14 | 0 | 37 | 29 | 100 | 26 | 62 | 228 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 0 | 0 | 15 | 0 | 40 | 32 | 109 | 28 | 67 | 248 | 1 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 590 | 584 | 249 | 570 | 570 | 123 | 249 | 0 | 0 | 137 | 0 | 0 |
| Stage 1 | 383 | 383 | - | 187 | 187 | - | - | - | - | - | - | - |
| Stage 2 | 207 | 201 | - | 383 | 383 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 419 | 423 | 790 | 432 | 431 | 928 | 1317 | - | - | 1447 | - | - |
| Stage 1 | 640 | 612 | - | 815 | 745 | - | - | - | - | - | - | - |
| Stage 2 | 795 | 735 | - | 640 | 612 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 377 | 390 | 790 | 406 | 397 | 928 | 1317 | - | - | 1447 | - | - |
| Mov Cap-2 Maneuver | 377 | 390 | - | 406 | 397 | - | - | - | - | - | - | - |
| Stage 1 | 623 | 579 | - | 794 | 726 | - | - | - | - | - | - | - |
| Stage 2 | 741 | 716 | - | 605 | 579 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 14.7 | | 10.7 | | 1.5 | | 1.6 | |
| HCM LOS | B | | B | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1317 | - | - | 377 | 686 | 1447 | - | - |
| HCM Lane V/C Ratio | 0.024 | - | - | 0.014 | 0.081 | 0.047 | - | - |
| HCM Control Delay (s) | 7.8 | 0 | - | 14.7 | 10.7 | 7.6 | 0 | - |
| HCM Lane LOS | A | A | - | B | B | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | 0.3 | 0.1 | - | - |

HCM 6th TWSC
 3: Charles Street & County Road 12

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 21 | 0 | 104 | 0 | 0 | 0 | 86 | 170 | 2 | 0 | 244 | 47 |
| Future Vol, veh/h | 21 | 0 | 104 | 0 | 0 | 0 | 86 | 170 | 2 | 0 | 244 | 47 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 23 | 0 | 113 | 0 | 0 | 0 | 93 | 185 | 2 | 0 | 265 | 51 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 663 | 664 | 291 | 719 | 688 | 186 | 316 | 0 | 0 | 187 | 0 | 0 |
| Stage 1 | 291 | 291 | - | 372 | 372 | - | - | - | - | - | - | - |
| Stage 2 | 372 | 373 | - | 347 | 316 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 375 | 381 | 748 | 344 | 369 | 856 | 1244 | - | - | 1387 | - | - |
| Stage 1 | 717 | 672 | - | 648 | 619 | - | - | - | - | - | - | - |
| Stage 2 | 648 | 618 | - | 669 | 655 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 351 | 349 | 748 | 273 | 338 | 856 | 1244 | - | - | 1387 | - | - |
| Mov Cap-2 Maneuver | 351 | 349 | - | 273 | 338 | - | - | - | - | - | - | - |
| Stage 1 | 657 | 672 | - | 594 | 568 | - | - | - | - | - | - | - |
| Stage 2 | 594 | 567 | - | 568 | 655 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|----|-----|----|
| HCM Control Delay, s | 12.3 | 0 | 2.7 | 0 |
| HCM LOS | B | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-----|------|-----|
| Capacity (veh/h) | 1244 | - | - | 629 | - | 1387 | - |
| HCM Lane V/C Ratio | 0.075 | - | - | 0.216 | - | - | - |
| HCM Control Delay (s) | 8.1 | 0 | - | 12.3 | 0 | 0 | - |
| HCM Lane LOS | A | A | - | B | A | A | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.8 | - | 0 | - |

HCM 6th TWSC
 7: County Road 12/County Roas 12 & Matheson Street

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 13 | 0 | 5 | 14 | 0 | 37 | 7 | 165 | 26 | 62 | 350 | 15 |
| Future Vol, veh/h | 13 | 0 | 5 | 14 | 0 | 37 | 7 | 165 | 26 | 62 | 350 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 0 | 5 | 15 | 0 | 40 | 8 | 179 | 28 | 67 | 380 | 16 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | | Major2 | | | |
|----------------------|--------|-------|--------|-------|--------|-------|-------|---|--------|-------|---|---|
| Conflicting Flow All | 751 | 745 | 388 | 734 | 739 | 193 | 396 | 0 | 0 | 207 | 0 | 0 |
| Stage 1 | 522 | 522 | - | 209 | 209 | - | - | - | - | - | - | - |
| Stage 2 | 229 | 223 | - | 525 | 530 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 327 | 342 | 660 | 336 | 345 | 849 | 1163 | - | - | 1364 | - | - |
| Stage 1 | 538 | 531 | - | 793 | 729 | - | - | - | - | - | - | - |
| Stage 2 | 774 | 719 | - | 536 | 527 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 295 | 318 | 660 | 315 | 321 | 849 | 1163 | - | - | 1364 | - | - |
| Mov Cap-2 Maneuver | 295 | 318 | - | 315 | 321 | - | - | - | - | - | - | - |
| Stage 1 | 534 | 498 | - | 787 | 723 | - | - | - | - | - | - | - |
| Stage 2 | 731 | 713 | - | 498 | 494 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|------|-----|-----|
| HCM Control Delay, s | 15.9 | 11.9 | 0.3 | 1.1 |
| HCM LOS | C | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1163 | - | - | 349 | 579 | 1364 | - | - |
| HCM Lane V/C Ratio | 0.007 | - | - | 0.056 | 0.096 | 0.049 | - | - |
| HCM Control Delay (s) | 8.1 | 0 | - | 15.9 | 11.9 | 7.8 | 0 | - |
| HCM Lane LOS | A | A | - | C | B | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.2 | 0.3 | 0.2 | - | - |

HCM 6th TWSC
8: County Road 12 & Gloss Street

03-29-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 7 | 0 | 0 | 14 | 0 | 37 | 37 | 127 | 26 | 62 | 292 | 1 |
| Future Vol, veh/h | 7 | 0 | 0 | 14 | 0 | 37 | 37 | 127 | 26 | 62 | 292 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 8 | 0 | 0 | 15 | 0 | 40 | 40 | 138 | 28 | 67 | 317 | 1 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 704 | 698 | 318 | 684 | 684 | 152 | 318 | 0 | 0 | 166 | 0 | 0 |
| Stage 1 | 452 | 452 | - | 232 | 232 | - | - | - | - | - | - | - |
| Stage 2 | 252 | 246 | - | 452 | 452 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 352 | 364 | 723 | 363 | 371 | 894 | 1242 | - | - | 1412 | - | - |
| Stage 1 | 587 | 570 | - | 771 | 713 | - | - | - | - | - | - | - |
| Stage 2 | 752 | 703 | - | 587 | 570 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 313 | 331 | 723 | 338 | 337 | 894 | 1242 | - | - | 1412 | - | - |
| Mov Cap-2 Maneuver | 313 | 331 | - | 338 | 337 | - | - | - | - | - | - | - |
| Stage 1 | 566 | 537 | - | 743 | 687 | - | - | - | - | - | - | - |
| Stage 2 | 692 | 678 | - | 553 | 537 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|------|-----|-----|
| HCM Control Delay, s | 16.8 | 11.4 | 1.6 | 1.3 |
| HCM LOS | C | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1242 | - | - | 313 | 616 | 1412 | - | - |
| HCM Lane V/C Ratio | 0.032 | - | - | 0.024 | 0.09 | 0.048 | - | - |
| HCM Control Delay (s) | 8 | 0 | - | 16.8 | 11.4 | 7.7 | 0 | - |
| HCM Lane LOS | A | A | - | C | B | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.1 | 0.3 | 0.1 | - | - |