Bella Mesa North

Traffic Impact Study

Town of Castle Rock



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BELLA MESA NORTH

TRAFFIC IMPACT STUDY

1.0 Introduction

The Fox Tuttle Transportation Group has prepared this traffic impact study for the development of the Bella Mesa North project. The project proposes to develop a vacant site with single-family homes within the Founders Village community located in Castle Rock, Colorado. The property is located on the north side of Mitchell Street, northeast of Mesa Middle School and north of the existing Castlewood Ranch neighborhood. The project includes the extension of North Mitchell Street and Mitchell Street into the site to provide mobility and circulation through the new neighborhood. Access to the residential neighborhood will be located on these extended new roadways. The property will be developed over time with the assumed completion within the next five (5) years. **Figure 1** provides a vicinity map for the proposed project.

The purpose of this study is to assist in identifying potential traffic impacts within the study area as a result of constructing Bella Mesa North. The traffic study addresses existing, short-term (Year 2030), and long-term (Year 2045) peak hour intersection conditions in the study area with and without the project-generated traffic. The information contained in this study is anticipated to be used by the Town of Castle Rock staff in identifying any intersection or roadway deficiencies and potential improvements for the build-out condition and long-term future scenarios. This study focused on the weekday AM and PM peak hours which represents the periods of highest trip generation for the proposed use and adjacent street traffic. The study is consistent with the requirements of the Town of Castle Rock's *Transportation Design Criteria Manual (April 2023)*. The following supporting documents were reviewed and incorporated into this analysis as appropriate:

- *Town of Castle Rock Transportation Master Plan*. Felsburg Holt & Ullevig. October 2017.
- *Bella Mesa Transportation Impact Analysis*. Aldridge Transportation Consultants, LLC. June 2014.
- *Villages at Castle Rock Traffic Impact Analysis and Transportation Plan*. Aldridge Transportation Consultants, LLC. March 1998.

- *Castle Rock Transit Feasibility Study*. Felsburg Holt & Ullevig and Fehr & Peers. October 2020.

2.0 Project Description

The Bella Mesa North project plans to develop 293± acres of vacant land located northeast of the Mesa Middle School, the Bella Mesa neighborhood, and the Castlewood Ranch neighborhood with an internal roadway network that is pedestrian and bicyclist friendly. The proposed land use plan includes 525 single-family homes, consistent with the adjacent community and the most recent annexation agreement for this property and the land use type/size from the *Bella Mesa Transportation Impact Analysis* (June 2014). The Bella Mesa North project will have access to Mikelson Boulevard via North Mitchell Street and via Mitchell Street which circulate through the existing adjacent neighborhoods.

For the purpose of this traffic study, it was assumed that Sunset Point will be completed by Year 2030. Internally, local streets will be constructed to provide the most beneficial access into and around the site, linking to existing roadway infrastructure and multi-modal facilities. The planning areas and access are provided on **Figure 2**.

3.0 Study Considerations

3.1 Data Collection

Intersection turning movement volumes were collected in December 2024 at seven (7) existing intersections during the weekday AM and PM peak hours, including pedestrians and bicyclists. Daily traffic volumes were also collected on Mikelson Boulevard west of North Mitchell Street and on North Mitchell Street north of Mikelson Boulevard. The existing traffic volumes, intersection geometry, and traffic control are illustrated on **Figure 3**. Count data sheets are provided in the **Appendix**.

Historic traffic volumes and future projections on the study roadways were gathered from Colorado Department of Transportation's (CDOT) Transportation Data Management System (TDMS) and CDOT's Online Transportation Information System (OTIS).

A previous version of this analysis dated July 2022 was completed prior to improvements the Town made to Ridge Road and Plum Creek Parkway. These improvements have shifted travel patterns within the area as indicated by the December 2024 traffic counts. July 2022 traffic counts were used at the intersection

of Enderud Boulevard and SH-86 instead of the December 2024 traffic counts at the request of Town staff because of concern that nearby construction may have shifted travel patterns in the December 2024 counts.

3.2 Evaluation Methodology

The traffic operations analysis addressed the signalized and unsignalized intersection operations using the procedures and methodologies set forth by the *Highway Capacity Manual (HCM)*[1]. Existing peak hour factors (PHF) by approach and peak hour were applied to the study intersections for the existing and future scenarios. Study intersections were evaluated using Synchro software (v12).

3.3 Level of Service Capacity Analysis

A Level of Service analysis was conducted to determine the existing and future performance of the study area intersections and accesses to determine the most appropriate intersection traffic controls and auxiliary lanes for future conditions.

To measure and describe the operational status of the study intersections, transportation engineers and planners commonly use a grading system referred to as "Level of Service" (LOS) that is defined by the *HCM.* LOS characterizes the operational conditions of an intersections traffic flow, ranging from LOS A (indicating very good, free flow operations) and LOS F (indicating congested and sometimes oversaturated conditions). These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with traveling through the intersections. The intersection LOS is represented as a delay in seconds per vehicle for the intersection as a whole and for each turning movement.

Typically, LOS A through C is considered to be acceptable for the overall intersection operations and LOS D overall during peak hours is acceptable. Individual movements may be allowed to fall to LOS E depending on the circumstances, such as a low-volume, side-street approach to an arterial or a protected-only, and/or signalized left-turn movement. Criteria contained in the *HCM* was applied for these analyses in order to determine peak hour LOS for each scenario. A more detailed discussion of LOS methodology is contained in the **Appendix** for reference.

[1] Highway Capacity Manual, Highway Research Board Special Report 209, Transportation Research Board, National Research Council, 7th Edition (2022).

4.0 Existing Conditions

4.1 Roadways

The study area boundaries are based on the amount of traffic to be generated by the project and potential impact to the existing roadway network. The primary public roadways that serve the project site are discussed in the following text and illustrated on **Figure 1**.

Colorado Highway 86 is a two-lane state highway that provides regional access between I-25 to the west and I-70 to the east, with full-movement interchanges at both interstates. This roadway travels through the towns of Castle Rock, Franktown, Elizabeth, Kiowa, and into Limon. Within and near the study area, CO Highway 86 provides access to several residential suburban neighborhoods, rural neighborhoods, local and regional retail centers, and recreational areas. This highway has a posted speed limit of 55 miles per hour (mph) and serves approximately 18,700 to 20,000 vehicles per day (vpd) near the intersection with Founders Parkway.

Ridge Road is a two-lane, north-south, major arterial within the study area. Ridge Road parallels I-25 to the east and provides access through the Town of Castle Rock between the Outlet and Promenade shopping areas, through residential neighborhoods, and to the south end of the town limits. The posted speed limit is 45 mph within the study area. Ridge Road currently serves approximately 13,600 vpd south of CO Highway 86 (CDOT, Year 2024).

Enderud Boulevard is a four-lane collector street that extends from CO Highway 86 to Ridge Road. This roadway provides local access to the residents of the Founders Village community and to Founders Park. The posted speed limit is 35 mph. Enderud Boulevard serves approximately 9,245 vpd south of CO Highway 86 (CDOT, Year 2024).

Mikelson Boulevard is a four-lane collector street that circulates through the Founders Village community leading to several neighborhoods and two schools. This roadway connects from Enderud Boulevard to Ridge Road. The posted speed limit is 35 mph. Mikelson Boulevard serves approximately 4,700 vpd west of North Mitchell Street (count, Year 2024).

North Mitchell Street and Mitchell Street are north-south, residential roadways that provide access to several homes and schools. Mesa Middle School is located on North Mitchell Street and Flagstone Elementary School is located on Mitchell Street. North Mitchell Street is a four-lane roadway and Mitchell Street is a two-lane roadway. The posted speed limit is 35 mph on both

roadways. North Mitchell Street serves approximately 3,500 vpd north of Mikelson Boulevard (count, Year 2024).

Plum Creek Parkway is a four-lane arterial roadway that connects from Ridge Road and extends west past Interstate 25. Major intersections are controlled by a mixture of traffic signals and roundabouts. At Ridge Road, a roundabout exists to control traffic with two circulating lanes for eastbound traffic on Plum Creek Parkway, and a southbound right-turn bypass lane. The posted speed limit is 40 mph. Recent traffic counts were not available on Plum Creek Parkway near Ridge Road.

4.2 Intersections

The study area includes seven (7) existing intersections that are listed below with the current traffic control and were analyzed for existing and future background year traffic operations:

1. CO Highway 86 at Enderud Boulevard [signalized]
2. Enderud Boulevard at Mikelson Boulevard [side-street stop-control]
3. Ridge Road at Enderud Boulevard [roundabout]
4. Mikelson Boulevard at North Mitchell Street [roundabout]
5. Mikelson Boulevard at Millbridge Street/Mitchell Street [side-street stop-control]
6. Ridge Road at Mikelson Boulevard [side-street stop-control]
7. Ridge Road at Plum Creek Parkway [roundabout]

The existing lane configuration at each of the study locations is illustrated on **Figure 3**.

4.3 Pedestrian and Bicycle

Currently, there are sidewalks on the west side of Enderud Boulevard, north and east side of Mikelson Boulevard, north side of North Ridge Road, both sides of North Mitchell Street, and both sides of Mitchell Street. There are discontinuous sidewalks on the east side of Enderud Boulevard and the south and west side of Mikelson Boulevard. Along the north side of CO Highway 86 between Ridge Road/Founders Parkway and Enderud Boulevard, there is a circuitous multi-use path that leads to the McMurdo Gulch Trail.

Within Founders Village, there are several multi-use paths that wind throughout the open space. The Mitchell Creek Trail and the Powerline Trail lead to other recreational areas within and adjacent to the community.

There are on-street bike lanes along Enderud Boulevard and Mikelson Boulevard. Bikes are encouraged to travel on the multi-use paths and are permitted to travel within general purpose lanes or shoulders on roadways without designated bike lanes.

4.4 Transit

Currently, the Town of Castle Rock does not participate in the Regional Transportation District (RTD) for regional transit services and there is no local service available. The Town provides vouchers and funds for a taxi service and senior center transportation. In the recently published *Castle Rock Transit Feasibility Study (October 2020),* the Town evaluated the need for and implementation of transit to support their multimodal transportation goals. The study highlighted three (3) preferred operating models that would support the different transit demands of the community and would be beneficial to Sunset Point in the future.

4.5 Crash Analysis and Safety Recommendations

A review of the crash history at the intersection of CO Highway 86 and Enderud Boulevard was requested to understand if there are any existing crash patterns that could be intervened. Crash data from CDOT for Year 2023 was reviewed for crashes at the intersection. A total of six (6) crashes were reported at the intersection in the year of data reviewed. Of those, three (3) were rear-end crashes, two (2) broadside crashes, and one (1) approach turn crash. A review of the crash reports did not reveal a discernible pattern of crashes or common cause.

In addition to the CDOT crash data, the *Town of Castle Rock Transportation Safety Action Plan*[2] was reviewed for any pertinent safety recommendations at the study intersections. At the intersection of Enderud Boulevard and Ridge Road, the turn lane signage and markings are recommended for review. At the intersection of Mikelson Boulevard and Mitchell Street, recommendations are included for the previous side-street stop-control configuration that have since been addressed with the construction of a roundabout at the intersection. At the intersection of Mikelson Boulevard and Ridge Road, ensuring adequate visibility for vehicles and signage, and speed management are recommended to improve safety.

[2] *Town of Castle Rock Transportation Safety Action Plan*. January 2024.

4.6 Year 2024 Existing Intersection Capacity Analysis

The existing volumes, lane configuration, and traffic control are illustrated on **Figure 3**. The details of LOS for each movement are provided in **Table 1** and the 95th percentile queues are listed in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**. **All of the study intersections currently operate overall at LOS C or better in both peak hours.**

The following study intersections have movements that operate at LOS E/F during the one peak hour:

- ***#2 – Enderud Boulevard at Mikelson Boulevard:*** This side-street stop-controlled intersection currently operates overall at LOS B in the AM peak hour and LOS A in the PM peak hour; however, the westbound left-turn was calculated to operate at LOS F in the AM peak hour. This is most likely related to exiting school traffic from Mesa Middle School and Flagstone Elementary School that are in conflict with entering traffic on Enderud Boulevard. The 95th percentile queues for the westbound left-turn in the AM peak hour was estimated to extend approximately 85 feet (about 4 vehicles) which is within the existing storage length.

  Recommendations: No mitigation measures recommended. Delay is expected on side-street approaches on collector streets especially with a significant amount of school traffic. The long delay and queue were only discovered in the morning peak and volumes are not approaching signal warrants throughout the rest of the day.

5.0 Future Conditions

5.1 Annual Growth Factor and Future Volume Methodology

In order to forecast the future peak hour traffic volumes, several sources were reviewed and utilized, including the 20-year factors along study roadways provided by CDOT's traffic database, the *Town of Castle Rock Transportation Master Plan*, the *Villages at Castle Rock Traffic Impact Analysis and Transportation Plan*, and the *Bella Mesa Revised Transportation Impact Analysis*.

The CDOT 20-year factor on CO Highway 86 is 1.17, which equates to an annual growth rate of 0.79%. The forecasts in other planning documents indicated growth rates would range between 1.0% and 2.5% on CO Highway 86 and Ridge Road. According to the *Town of Castle Rock Transportation Master Plan* the future volumes along Enderud Boulevard were predicted to grow by 0.5% to 1.0%. These growth rates include the trips associated with the remaining dwelling units within Bella Mesa, including Sunset Point, and Sunstone Village. For the purpose of this traffic study, the background annual growth rates were as follows:

- North Mitchell Street, Mitchell Street, and Millbridge Street: 0%
- Enderud Boulevard and Mikelson Boulevard: 0.5%
- CO Highway 86: 1.0%
- Ridge Road: 1.5%

These annual growth rates were applied to the existing traffic volumes at the study intersections to estimate future short-term and long-term volumes.

The Year 2030 background volumes are summarized on **Figure 4** and the Year 2045 background volumes are summarized on **Figure 5**.

5.2 Year 2030 Background Intersection Capacity Analysis

The study area intersections were evaluated to determine baseline operations for the Year 2030 background scenario and to identify any capacity constraints associated with background traffic (refer to **Section 5.1** for growth assumptions). The background volumes, lane configuration, and traffic control are illustrated on **Figure 4**.

The intersection of Enderud Boulevard and Mikelson Boulevard is planned to be improved by Year 2030 with revised traffic control. The intersection was modeled with traffic signal control. It is understood that the Town is considering alternative intersection configurations such as a continuous green T-intersection. A continuous green T-intersection would have a continuous green signal phase for southbound through vehicles on Enderud Boulevard. The other movements at the intersection would be controlled with a traffic signal. Westbound left-turning vehicles on Mikelson Boulevard would turn into a barrier-separated acceleration lane to get up to speed before merging with southbound through vehicles on Enderud Boulevard. For this analysis, a full traffic signal was assumed at the intersection to be conservative; operations for a continuous green T-intersection and a full traffic signal are the same for all movements except for the continuous green through movement, which in this case would need to be stopped for safe

pedestrian crossings. The full traffic signal modeled in this analysis is conservative for vehicles and ensures a safe crossing for pedestrians across Enderud Boulevard.

The Level of Service criteria discussed previously was applied to the study area intersections to determine the impacts with the short-term background volumes. This analysis assumes the existing signal timing was still in place.

The results of the LOS calculations for each intersection and movement are provided in **Table 1** and the 95th percentile queues are listed in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

All of the study intersections are estimated to operate overall at LOS C or better in both peak hours.

An option to create a second northbound left-turn lane at the intersection of Enderud Boulevard and CO Highway 86 is presented for consideration. The northbound left-turn movement operates at LOS D or better in the Year 2030 background scenario, however the northbound left-turn queue is estimated to extend beyond the upstream right-in right-out intersection at N Stratton Avenue. An comparison of the option for a second northbound left-turn lane (to be created by reducing southbound Enderud Boulevard to one departure lane) is presented in **Table 1** and **Table 2**. Adding a second northbound left-turn lane without two continuous receiving lanes on CO Highway 86 may not be desired by the Town as the two lanes would merge to one using the existing acceleration lane for southbound right-turns, and lane utilization may be imbalanced for the two northbound left-turn lanes.

5.3 Year 2045 Planned Transportation Network

This traffic study assumes that some of the study roadways will be widen by Year 2045 background, as listed in the Town's *Transportation Master Plan.* If the future scenarios were evaluated with the existing roadway network, then it would be difficult to compare intersection operates when many of the intersections will be altered due to future volumes, capacity, and routing that are not associated with the project. The following roadway and intersection improvements were assumed to be completed by Year 2045:

- **CO Highway 86** – Widen from two lanes to four lanes.
- **Ridge Road** – Widen from two lanes to four lanes north of Plum Creek Parkway, improve as two lane minor arterial south of Plum Creek Parkway. This is assumed to include the addition of a southbound left-turn deceleration lane on Ridge Road at Mikelson Boulevard.

- **CO Highway 86 at Enderud Boulevard –** Accommodate the second through lane per direction on CO Highway 86 and adjust signal timing as necessary.

These assumed lane configuration in the long-term background condition are shown on **Figure 5**.

5.4 Year 2045 Background Intersection Capacity Analysis

The study area intersections were evaluated to determine baseline operations for the Year 2045 background scenario and to identify any capacity constraints associated with background traffic in the long-term scenario (refer to **Section 5.1** for growth assumptions). The long-term background volumes, lane configuration, and traffic control are illustrated on **Figure 5**.

The Level of Service criteria discussed previously was applied to the study area intersections to determine the impacts with the long-term background volumes. The analysis assumed the signal timing at all signalized intersections would be adjusted to accommodate the additional lanes and change in traffic volumes.

The results of the LOS calculations for each intersection and movement are provided in **Table 1** and the 95th percentile queues are listed in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

All of the study intersections were estimated to operate overall at LOS C or better in both peak hours. The following intersections or movements were calculated to begin operating at LOS E/F in one or both peak hour in Year 2045 background as described below:

- ***#1 – CO Highway 86 at Enderud Boulevard:*** This signalized intersection was estimated to continue to operate overall at LOS C in both peak hours. The northbound left-turn was calculated to begin operating at LOS E in the AM peak hour. The 95th percentile queues for the northbound left-turn in the AM peak hour was estimated to extend approximately 340 feet (about 14 vehicles).

  Recommendations: Consider reconfiguring the northbound approach of Enderud Boulevard to have dual northbound left-turn lanes. This can be achieved by reducing the southbound direction to one lane and moving the median to create a second northbound left-turn lane. The northbound left-turn movement is recommended to change from protected-permissive operation to protected only operation with the addition of the second left-turn lane to improve safety. Operations for the improved intersection configuration with dual northbound left-turn lanes are shown in **Table 1** and **Table 2**. With dual northbound left-turn lanes and protected-only left-turn

signal phasing, all movements operate acceptably in both peak hours and all queues are contained within available storage.

- ***#6 – Ridge Road at Mikelson Boulevard:*** This side-street stop-controlled intersection was estimated to continue to operate overall at LOS A in both peak hours. The westbound left-turn was calculated to operate at LOS E in the PM peak hour due to high southbound left-turn volumes that limit the gaps for the westbound left-turn. The 95th percentile queues for the westbound left-turn in the PM peak hour was estimated to extend approximately 25 feet (about 1 vehicle).

  Recommendations: Monitor safety and queues at this intersection as traffic grows to provide the appropriate solution. This intersection was identified in the *Bella Mesa Transportation Impact Analysis* as signalized with the buildout of Founders Village and signal warrants for the peak hour, 4-hour, and 8-hour were reviewed. The traffic volumes do not meet signal warrant thresholds.

6.0 Future Conditions with the Bella Mesa North Development

Bella Mesa North is anticipated to include 525 residential homes north of the Mesa Middle School. The site is planned to be developed over several years. For the purpose of this traffic study, it was assumed that the entire project will be complete in five (5) years.

6.1 Trip Generation

A trip generation estimate was performed to determine the traffic characteristics of the proposed density and land uses of the development. The trip rates contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*[3] were applied to estimate the traffic for the proposed land uses: ITE #210 "Single-family Detached Housing".

Table 3 provides the detailed trip generation estimates for the Bella Mesa North project (refer to the **Appendix**). The proposed project is expected to experience mostly new trips as discussed below:

Primary Trips. These trips are made specifically to visit the site and are considered "new" trips. Primary trips would not have been made if the proposed project did not exist. Therefore, this is the only trip type that increases the total number of trips made on a regional basis.

[3] *Trip Generation Manual, 11th Edition*, Institute of Transportation Engineers, 2021.

Non-Auto Trips. These trips are those that are completed by walking, biking, teleworking, or transit. It is anticipated there may be some non-auto trips, but for conservative purposes a non-auto reduction was not applied.

The Bella Mesa North project was estimated to generate approximately 4,951 daily trips with 368 trips in the AM peak hour and 494 trips in the PM peak hour.

6.2 Trip Distribution and Assignment

The estimated trip volumes were distributed onto the study area street network based on existing traffic characteristics, land uses, and traffic patterns in the area, previous traffic analysis in the area, as well as regional growth and future roadway infrastructure. The trip distributions were estimated based on distributions utilized for adjacent development and in the original traffic study.

The following distributions by land use type as listed below and presented on **Figure 6:**

- To/from the West via CO Highway 86/Fifth Street – 10%
- To/from the West via Plum Creek – 35%
- To/from the East via CO Highway 86 – 10%
- To/from the North via Ridge Road/Founders Parkway – 40%
- To/from the South via Ridge Road – 5%

Using these distribution assumptions, the projected site traffic was assigned to the study area roadway network for the weekday AM and PM peak hour periods during based on the most convenient route. The new site-generated trips for the study intersections are shown on **Figure 7**.

6.3 Proposed Roadway Network and Access

Access to the Bella Mesa North site is planned via extending North Mitchell Street and Mitchell Street to the north into the site. The main roadways connect to Mikelson Boulevard and all Bella Mesa North traffic will travel along this collector street to travel through and beyond the Founders Village community. Internally, collector and local streets will be constructed to provide the most beneficial access into and around the site with pedestrian and bicycle friendly amenities. The proposed access intersections to accommodate the project trip volume are illustrated on **Figure 2.**

6.4 Future Pedestrian and Bicycle Facilities

The Bella Mesa North project proposes to have sidewalks along the roadways to connect internally and externally to multi-modal facilities. Refer to the design plans for the locations, widths, and connections of the pedestrian and bicycle facilities associated with this project. On-street bike lanes have been installed on North Mitchell Street when it was widened to four lanes. These bike lanes will connect cyclists living in Bella Mesa to the bike lanes on Mikelson Boulevard.

6.5 Year 2030 Background + Project Intersection Capacity Analysis

This section discusses impacts associated with the addition of the Bella Mesa North development trips in the short-term scenario. The site-generated volumes were added to the Year 2030 background volumes and are illustrated on **Figure 8**. This figure also illustrates the necessary traffic control and lane configurations for all of the study intersections and proposed accesses. The recommended improvements in the Year 2030 background scenario were assumed to be implemented.

The results of the LOS calculations for each intersection and movement are provided in **Table 1** and the 95th percentile queues are listed in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

The majority of the study intersections are anticipated to operate similarly to the background conditions with the addition of the Bella Mesa project trips. The following intersections are anticipated to have one or more movements that begin to operate below LOS D with the additional project trips:

- ***#6 – Ridge Road and Mikelson Boulevard:*** This side-street stop-controlled intersection was estimated to continue to operate overall at LOS A in both peak hours. The westbound left-turn is estimated to begin operating at LOS E in the PM peak hour with the project trips. The 95th percentile queue is calculated to be one (1) vehicle.

  Recommendations: Side-street stop-controlled intersections may have periods of high delay for turning movements during peak times. This intersection should continue to be monitored for safety considerations. The 95th percentile queue for the left turn movement does not indicate a queueing issue. Volumes at the intersection are not reaching traffic signal warrants.

As in the Year 2030 background scenario, an option of two northbound left-turn lanes at Enderud Boulevard and CO Highway 86 is presented in **Table 1** and **Table 2**. The project-added trips can be

accommodated with all movements operating at LOS D or better in both the AM and PM peaks with and without the second northbound left-turn lane.

6.6 Year 2045 Background + Project Intersection Capacity Analysis

The site-generated volumes for Bella Mesa North project were added to the Year 2045 background volumes and are illustrated on **Figure 9**. This figure also illustrates the necessary traffic control and lane configurations for all of the study intersections. The recommended improvements in the previous scenarios were assumed to be implemented. The results of the LOS calculations for each intersection and movement are provided in **Table 1** and the 95th percentile queues are listed in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

The majority of the study intersections are anticipated to operate similarly to the background conditions with the addition of the Sunset Point project trips. The following intersections or movements were calculated to begin operating at LOS E/F in one or both peak hour in Year 2045 with the project-added trips as described below:

- ***#6 – Ridge Road and Mikelson Boulevard:*** This side-street stop-controlled intersection was estimated to continue to operate at LOS B overall in the AM peak and LOS A overall in the PM peak. The westbound left-turn is estimated to begin operating at LOS F in the PM peak hour with the project trips. The 95th percentile queue is calculated to be one (1) vehicle.

  Recommendations: Side-street stop-controlled intersections may have periods of high delay for turning movements during peak times. This intersection should continue to be monitored for safety considerations. The 95th percentile queue for the left turn movement does not indicate a queueing issue. Volumes at the intersection are not reaching traffic signal warrants.

As in the Year 2045 background scenario, the intersection of Enderud Boulevard and CO Highway 86 is shown analyzed with both one and two northbound left-turn lanes with the project-added trips. The option with two left-turn lanes assumes that protected-only signal phasing will be used for the northbound left-turn. All movements operate at LOS D or better with two northbound left-turn lanes. Queues are contained within available storage lengths for all movements for the option with two northbound left-turn lanes.

7.0 Queuing Analysis

A queuing analysis was performed to determine if the 95th percentile queues would be accommodated by the existing storage length, to determine the storage lengths for future auxiliary lanes, and if any of the queues would impact an upstream intersection/access. **Table 2** provides the existing and proposed storage lengths, as well as the 95th percentile queues for each existing and future scenario as calculated by Synchro (assuming each vehicle utilizes 25 feet of space). It should be noted that the 95th percentile queue length is a theoretical queue that is 1.65 standard deviations above the average queue length. In theory, the 95th percentile queue would be exceeded 5% of the time based on the average queue length, but it is also possible that a queue this long may not occur.

As shown in **Table 2**, the only queue that may exceed available storage is the northbound left-turn at Enderud Boulevard and CO Highway 86. The queue is expected to extend beyond the intersection at Enderud Boulevard and N Stratton Avenue in the Year 2030 background scenario during the AM peak. The project-added trips in Year 2030 extend the 95th percentile queue from about 12 vehicles to about 15 vehicles (an increase of 3 vehicles). With the project-added trips, the northbound left-turn queue is not expected to extend to Heritage Avenue. An option for adding a second northbound left-turn lane in Year 2030 is presented in **Table 1** and **Table 2**, however the addition of a second northbound left-turn lane may not be desired by the Town without two continuous through lanes on CO Highway 86. The two northbound left-turn lanes would merge using the existing acceleration lane for southbound right-turns and therefore may have imbalanced lane utilization.

In Year 2045, the addition of a second through lane on CO Highway 86 enables adding a second northbound left-turn lane. Signal phasing was assumed to change to protected-only for the northbound dual left-turn lanes. A queue comparison of the single northbound left-turn lane and dual northbound left-turn lane configuration is shown in **Table 2**. The northbound left-turn queue is calculated to not reach the intersection of N Stratton Avenue with the dual northbound left-turn lanes, with and without the project-added trips. When the second left-turn lane is added, Enderud Boulevard is recommended to reduce to one southbound receiving lane at the intersection with CO Highway 86 and the median reconfigured to create the second northbound left-turn lane. The median reconfiguration should provide enough storage to accommodate the anticipated queue length at the intersection.

8.0 Conclusions

The Bella Mesa North development project proposes to develop up to 525 single-family homes within the Founders Village community. The currently vacant property is located where North Michell Street currently ends and northeast of Mesa Middle School. The project includes the extension of North Mitchell Street and Mitchell Street into the site which connect to Mikelson Boulevard. Bella Mesa North will be developed over time with the assumed completion with the next five (5) years. Internally, local streets will be constructed to provide the most beneficial access into and around the site for people driving, walking, and biking.

The Bella Mesa North project was estimated to generate approximately 4,951 daily trips with 368 trips in the AM peak hour and 494 trips in the PM peak hour at full build-out. **It was determined that the proposed roadway system can adequately accommodate the projected traffic volumes for buildout conditions with some suggested improvements.** The proposed background and project-related mitigation measures are shown on **Figure 8** (Year 2030) and **Figure 9** (Year 2045). The proposed lengths of auxiliary lanes are listed in **Table 2**.

The following recommendations should be considered:

Background Conditions (Non-Project Related):

- **CO Highway 86** – Widen from two lanes to four lanes per the Town's *Transportation Master Plan*.
- **Ridge Road** – Improve as a two lane arterial south of Plum Creek Parkway. Add southbound left turn deceleration lane at Mikelson Boulevard.
- **CO Highway 86 at Enderud Boulevard –** Accommodate the second through lane per direction on CO Highway 86 and adjust signal timing as necessary. Remove one southbound departure lane on Enderud Boulevard to add a second northbound left-turn lane and adjust signal phasing to protected-only for the dual northbound left-turn with the widening of CO Highway 86.
- **Enderud Boulevard at Mikelson Boulevard –** Signalize. Note the AM peak hour is the only time period that meets a signal warrant in the short-term and long-term scenarios. Typically, the 4-hour and 8-hour MUTCD warrants are typically required to be met to consider signalization, and these are not anticipated to be met with project build out in the long-term. It is understood that the Town is considering alternative intersection configurations such as a continuous green T-

intersection. The full traffic signal modeled in this analysis is conservative for vehicles and ensures a safe crossing for pedestrians across Enderud Boulevard.

Project Conditions:

- **North Mitchell Street:** Extend north into the Bella Mesa North development. Work with the existing residents and Town to ensure the speeds on this roadway are reduced/mitigated and safety is increased with the growth in traffic, particularly adjacent to the school.
- **Mitchell Street:** Extend north into the Bella Mesa North development. Work with the existing residents and Town to ensure the speeds on this roadway are reduced and safety is increased with the growth in traffic.
- **CO Highway 86 at Enderud Boulevard:** Adjust signal timing to balance for demand.

Note that the traffic study provides technical information and evaluates the need for transportation mitigation as traffic grows, but it does not address infrastructure commitments or obligations of the Bella Mesa North project.

Tables and Figures:

Table 1 – Peak Hour Intersection LOS Summary for Existing Intersections
Table 2 – Peak Hour Estimated 95th Percentile Queue Lengths
Table 3 –Trip Generation Summary

Figure 1 – Vicinity Map
Figure 2 – Site Plan
Figure 3 – Existing Traffic Volumes
Figure 4 – Year 2030 Background Traffic Volumes
Figure 5 – Year 2045 Background Traffic Volumes
Figure 6 – Site Trip Distribution
Figure 7 – Site-Generated New Trips
Figure 8 – Year 2030 Background + Project Traffic Volumes
Figure 9 – Year 2045 Background + Project Traffic Volumes

Bella Mesa North Traffic Impact Study

Table 1 - Peak Hour Intersection Level of Service Summary

Intersection and Lanes Groups	2024 Existing				2030 Background				2030 Bkgrd + Project				2045 Background				2045 Bkgrd + Project			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
STOP SIGN CONTROL																				
2. Enderud Blvd. at Mikelson Blvd.	**13**	**B**	**7**	**A**																
Westbound Left	*43*	**E**	*17*	*C*	*Refer to Signal*				*Refer to Signal*				*Refer to Signal*				*Refer to Signal*			
Westbound Right	*14*	*B*	*10*	*A*																
Southbound Left	*9*	*A*	*8*	*A*																
5. Mikelson Blvd. at Millbridge Ave./Mitchell St.	**3**	**A**	**5**	**A**	**3**	**A**	**3**	**A**	**3**	**A**	**3**	**A**	**3**	**A**	**3**	**A**	**3**	**A**	**3**	**A**
Eastbound Left+Through+Right	*12*	*B*	*0*	*A*	*11*	*B*	*0*	*A*	*11*	*B*	*0*	*A*	*11*	*B*	*0*	*A*	*12*	*B*	*0*	*A*
Westbound Left+Through+Right	*13*	*B*	*14*	*B*	*11*	*B*	*11*	*B*	*13*	*B*	*13*	*B*	*12*	*B*	*12*	*B*	*13*	*B*	*14*	*B*
Northbound Left	*0*	*A*	*0*	*A*	*0*	*A*	*0*	*A*	*0*	*A*	*0*	*A*	*0*	*A*	*0*	*A*	*0*	*A*	*0*	*A*
Southbound Left	*8*	*A*	*8*	*A*	*8*	*A*	*8*	*A*	*8*	*A*	*8*	*A*	*8*	*A*	*8*	*A*	*8*	*A*	*8*	*A*
6. Ridge Rd & Mikelson Blvd	**9**	**A**	**8**	**A**	**9**	**A**	**8**	**A**	**10**	**A**	**9**	**A**	**9**	**A**	**8**	**A**	**11**	**B**	**9**	**A**
Westbound Left	*15*	*C*	*31*	*D*	*13*	*B*	*31*	*D*	*14*	*B*	*47*	**E**	*15*	*B*	*40*	**E**	*16*	*C*	*63*	**F**
Westbound Right	*12*	*B*	*10*	*B*	*11*	*B*	*10*	*A*	*12*	*B*	*10*	*B*	*13*	*B*	*10*	*B*	*14*	*B*	*11*	*B*
Southbound Left+Through	*8*	*A*	*8*	*A*	*8*	*A*	*8*	*A*	*8*	*A*	*9*	*A*								
Southbound Left													*8*	*A*	*9*	*A*	*1*	*A*	*9*	*A*
ROUNDABOUT																				
3. Enderud Blvd. at N. Ridge Rd.	**6**	**A**	**7**	**A**	**5**	**A**	**8**	**A**	**6**	**A**	**7**	**A**	**6**	**A**	**7**	**A**	**7**	**A**	**7**	**A**
Westbound	*7*	*A*	*6*	*A*	*7*	*A*	*7*	*A*	*8*	*A*	*6*	*A*	*8*	*A*	*6*	*A*	*10*	*B*	*7*	*A*
Northbound	*4*	*A*	*6*	*A*	*4*	*A*	*8*	*A*	*4*	*A*	*6*	*A*	*4*	*A*	*6*	*A*	*5*	*A*	*7*	*A*
Southbound	*4*	*A*	*7*	*A*	*4*	*A*	*9*	*A*	*4*	*A*	*7*	*A*	*4*	*A*	*7*	*A*	*4*	*A*	*8*	*A*
4. Mikelson Blvd. at N. Mitchell St.	**6**	**A**	**4**	**A**	**5**	**A**	**4**	**A**	**6**	**A**	**5**	**A**	**5**	**A**	**4**	**A**	**6**	**A**	**5**	**A**
Eastbound	*6*	*A*	*3*	*A*	*5*	*A*	*3*	*A*	*6*	*A*	*5*	*A*	*5*	*A*	*3*	*A*	*6*	*A*	*5*	*A*
Westbound	*6*	*A*	*4*	*A*	*5*	*A*	*4*	*A*	*5*	*A*	*5*	*A*	*5*	*A*	*4*	*A*	*6*	*A*	*5*	*A*
Southbound	*6*	*A*	*4*	*A*	*5*	*A*	*4*	*A*	*6*	*A*	*4*	*A*	*5*	*A*	*4*	*A*	*7*	*A*	*5*	*A*
7. Plum Creek Blvd at N. Ridge Rd.	**3**	**A**	**5**	**A**	**4**	**A**	**5**	**A**	**4**	**A**	**5**	**A**	**4**	**A**	**6**	**A**	**5**	**A**	**7**	**A**
Eastbound	*3*	*A*	*6*	*A*	*3*	*A*	*6*	*A*	*3*	*A*	*7*	*A*	*3*	*A*	*7*	*A*	*3*	*A*	*8*	*A*
Northbound	*5*	*A*	*6*	*A*	*5*	*A*	*2*	*A*	*6*	*A*	*7*	*A*	*6*	*A*	*8*	*A*	*7*	*A*	*9*	*A*
Southbound	*1*	*A*	*2*	*A*	*1*	*A*	*7*	*A*	*1*	*A*	*2*	*A*	*1*	*A*	*3*	*A*	*1*	*A*	*3*	*A*

Bella Mesa North Traffic Impact Study

Table 1 - Peak Hour Intersection Level of Service Summary

Intersection and Lanes Groups	2024 Existing				2030 Background				2030 Bkgrd + Project				2045 Background				2045 Bkgrd + Project			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SIGNAL CONTROL																				
1. CO 86 at Enderud Blvd.	**35**	**C**	**21**	**C**	**28**	**C**	**21**	**C**	**32**	**C**	**25**	**C**	**33**	**C**	**23**	**C**	**38**	**D**	**28**	**C**
Eastbound Left	23	C	13	B	17	B	12	B	19	B	12	B	17	B	12	B	19	B	12	B
Eastbound Through	28	C	22	C	20	C	21	C	22	C	22	C	20	B	24	C	22	C	24	C
Eastbound Right	30	C	20	C	22	C	19	B	24	C	26	C	21	C	20	C	24	C	26	C
Westbound Left	21	C	14	B	16	B	13	B	17	B	14	B	15	B	15	B	16	B	17	B
Westbound Through	37	D	19	B	26	C	17	B	28	C	17	B	27	C	19	B	30	C	19	B
Westbound Right	22	C	13	B	16	B	12	B	18	B	12	B	16	B	12	B	17	B	12	B
Northbound Left	44	D	25	C	39	D	32	C	48	D	42	D	59	E	37	D	77	E	55	D
Northbound Through	19	B	21	C	23	C	22	C	22	C	22	C	25	C	23	C	23	C	23	C
Northbound Right	22	C	22	C	26	C	24	C	25	C	24	C	28	C	25	C	27	C	25	C
Southbound Left	32	C	27	C	33	C	28	C	33	C	28	C	33	C	28	C	33	C	28	C
Southbound Through+Right	50	D	31	C	45	D	32	C	45	D	32	C	45	D	32	C	45	D	32	C
1. CO 86 at Enderud Blvd. Improved - Two NBL Lanes					**26**	**C**	**22**	**C**	**28**	**C**	**25**	**C**	**28**	**C**	**24**	**C**	**30**	**C**	**26**	**C**
Eastbound Left	*Not Analyzed*				14	B	12	B	15	B	13	B	15	B	12	B	16	B	13	B
Eastbound Through					17	B	21	C	18	B	23	C	17	B	23	C	19	B	25	C
Eastbound Right					18	B	20	B	20	B	28	C	18	B	20	B	21	C	28	C
Westbound Left					13	B	13	B	14	B	15	B	13	B	15	B	14	B	18	B
Westbound Through					20	C	17	B	22	C	18	B	23	C	19	B	25	C	20	B
Westbound Right					13	B	12	B	14	B	13	B	14	B	12	B	15	B	13	B
Northbound Left					39	D	35	D	40	D	36	D	44	D	40	D	46	D	41	D
Northbound Through					25	C	22	C	24	C	21	C	26	C	23	C	25	C	22	C
Northbound Right					29	C	24	C	28	C	23	C	30	C	25	C	29	C	24	C
Southbound Left					31	C	27	C	32	C	27	C	32	C	28	C	32	C	28	C
Southbound Through+Right					42	D	30	C	42	D	31	C	43	D	32	C	44	D	32	C
2. Enderud Blvd. at Mikelson Blvd.					**15**	**B**	**11**	**B**	**18**	**B**	**12**	**B**	**16**	**B**	**11**	**B**	**18**	**B**	**12**	**B**
Westbound Left	*Evaluated as Side-St Stop*				21	C	23	C	23	C	24	C	22	C	23	C	24	C	23	C
Westbound Right					21	C	21	C	23	C	18	B	21	C	20	C	25	C	17	B
Northbound Through+Right					12	B	8	A	14	B	12	B	13	B	8	A	14	B	12	B
Southbound Left					8	A	5	A	9	A	7	A	8	A	5	A	9	A	7	A
Southbound Right					5	A	3	A	6	A	4	A	5	A	3	A	6	A	4	A

Note: Delay represented in average seconds per vehicle.

Table 2 - Peak Hour 95th Percentile Queue Summary

Intersections and Lanes Groups	Existing Storage Length (Feet)	2024 Existing		2030 Background		2030 Bkgrd + Project		2045 Background		2045 Bkgrd + Project	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1. CO 86 at Enderud Blvd.		*Signalized*		*Signalized*		*Signalized*		*Signalized*		*Signalized*	
Eastbound Left	575'	*33'*	*28'*	*28'*	*27'*	*29'*	*27'*	*31'*	*28'*	*32'*	*28'*
Eastbound Through	-	*162'*	*290'*	*147'*	*273'*	*152'*	*280'*	*168'*	*334'*	*174'*	*334'*
Eastbound Right	360'	*33'*	*51'*	*46'*	*47'*	*51'*	*55'*	*46'*	*49'*	*51'*	*55'*
Westbound Left	370'	*66'*	*58'*	*55'*	*58'*	*61'*	*64'*	*58'*	*64'*	*64'*	*70'*
Westbound Through	-	*434'*	*217'*	*349'*	*220'*	*363'*	*220'*	*419'*	*264'*	*469'*	*264'*
Westbound Right	375'	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*
Northbound Left	265'	*243'*	*173'*	***291'***	*175'*	***372'***	*233'*	***340'***	*199'*	***420'***	*256'*
Northbound Through	-	*55'*	*21'*	*67'*	*22'*	*65'*	*22'*	*73'*	*27'*	*71'*	*27'*
Northbound Right	120'	*15'*	*7'*	*50'*	*12'*	*49'*	*17'*	*52'*	*15'*	*52'*	*20'*
Southbound Left	185'	*21'*	*13'*	*27'*	*14'*	*26'*	*14'*	*31'*	*18'*	*30'*	*18'*
Southbound Through+Right	-	*86'*	*47'*	*98'*	*52'*	*98'*	*52'*	*112'*	*55'*	*112'*	*55'*
1. CO 86 at Enderud Blvd. Improved - Two NBL Lanes				*Signalized*		*Signalized*		*Signalized*		*Signalized*	
Eastbound Left	575'	*Not Analyzed*		*28'*	*28'*	*28'*	*29'*	*30'*	*28'*	*31'*	*29'*
Eastbound Through	-			*144'*	*287'*	*147'*	*294'*	*165'*	*334'*	*168'*	*355'*
Eastbound Right	360'			*45'*	*50'*	*49'*	*58'*	*45'*	*49'*	*49'*	*56'*
Westbound Left	370'			*54'*	*60'*	*58'*	*69'*	*57'*	*64'*	*61'*	*74'*
Westbound Through	-			*343'*	*225'*	*349'*	*231'*	*410'*	*264'*	*418'*	*271'*
Westbound Right	375'			*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*
Northbound Left	265'			*172'*	*108'*	*200'*	*125'*	*182'*	*137'*	*231'*	*155'*
Northbound Through	-			*68'*	*22'*	*67'*	*21'*	*75'*	*27'*	*73'*	*27'*
Northbound Right	120'			*51'*	*12'*	*51'*	*17'*	*53'*	*15'*	*54'*	*19'*
Southbound Left	185'			*28'*	*14'*	*27'*	*14'*	*32'*	*18'*	*31'*	*17'*
Southbound Through+Right	-			*98'*	*52'*	*98'*	*52'*	*111'*	*55'*	*111'*	*55'*
2. Enderud Blvd. at Mikelson Blvd.		*Side-Street Stop*									
Westbound Left	-	*85'*	*20'*	*Not Applicable*		*Not Applicable*		*Not Applicable*		*Not Applicable*	
Westbound Right	-	*93'*	*25'*								
Southbound Left	170'	*25'*	*13'*								
2. Enderud Blvd. at Mikelson Blvd. [SIGNAL]				*Signalized [Improved]*		*Signalized [Improved]*		*Signalized [Improved]*		*Signalized [Improved]*	
Westbound Left	-	*Not Applicable*		*93'*	*56'*	*153'*	*95'*	*110'*	*58'*	*174'*	*98'*
Westbound Right	-			*36'*	*32'*	*33'*	*27'*	*35'*	*33'*	*34'*	*28'*
Northbound Through+Right	-			*27'*	*23'*	*33'*	*35'*	*31'*	*25'*	*35'*	*36'*
Southbound Left	170'			*71'*	*49'*	*104'*	*105'*	*85'*	*54'*	*112'*	*112'*
Southbound Through	-			*6'*	*8'*	*7'*	*11'*	*7'*	*9'*	*7'*	*12'*
3. Enderud Blvd. at N. Ridge Rd.		*Roundabout*		*Roundabout*		*Roundabout*		*Roundabout*		*Roundabout*	
Westbound	-	*50'*	*25'*	*50'*	*25'*	*75'*	*25'*	*75'*	*25'*	*100'*	*50'*
Northbound	-	*25'*	*25'*	*0'*	*50'*	*25'*	*25'*	*25'*	*25'*	*25'*	*25'*
Southbound	300'	*0'*	*50'*	*0'*	*100'*	*0'*	*50'*	*0'*	*50'*	*25'*	*75'*
4. Mikelson Blvd. at N. Mitchell St.		*Roundabout*		*Roundabout*		*Roundabout*		*Roundabout*		*Roundabout*	
Eastbound	-	*50'*	*0'*	*25'*	*0'*	*25'*	*25'*	*25'*	*0'*	*50'*	*25'*
Westbound	-	*25'*	*0'*	*25'*	*0'*	*25'*	*0'*	*25'*	*0'*	*25'*	*25'*
Southbound	-	*50'*	*25'*	*25'*	*0'*	*50'*	*25'*	*25'*	*0'*	*50'*	*25'*

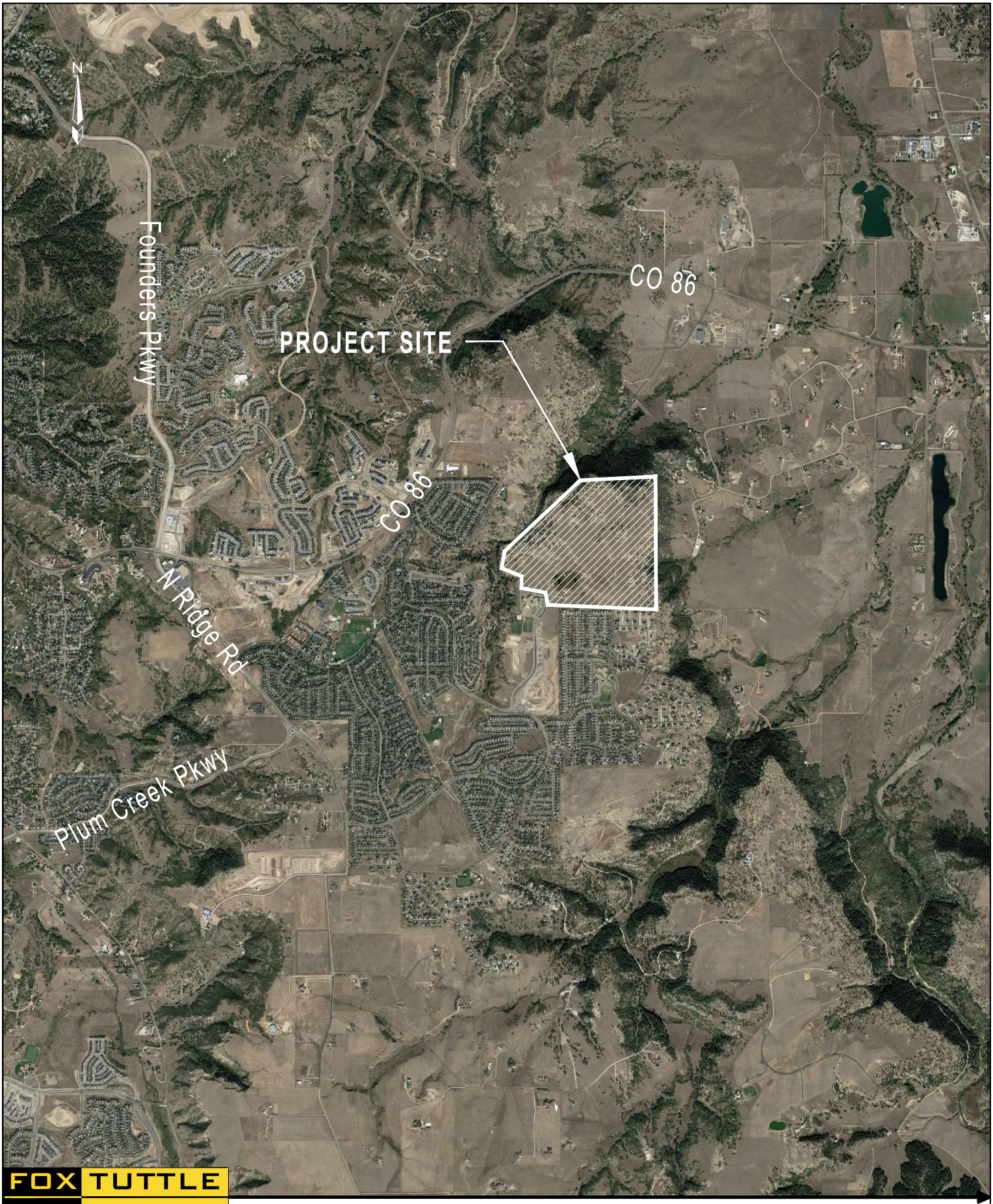
Table 2 - Peak Hour 95th Percentile Queue Summary

Intersections and Lanes Groups	Existing Storage Length (Feet)	2024 Existing		2030 Background		2030 Bkgrd + Project		2045 Background		2045 Bkgrd + Project	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
5. Mikelson Blvd. at Millbridge Ave./Mitchell St.		*Side-Street Stop*		*Side-Street Stop*		*Side-Street Stop*		*Side-Street Stop*		*Side-Street Stop*	
Eastbound Left+Through+Right	-	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*
Westbound Left+Through+Right	-	*20'*	*40'*	*13'*	*13'*	*20'*	*23'*	*15'*	*18'*	*23'*	*25'*
Northbound Left	250'	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*
Southbound Left	230'	*0'*	*3'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*3'*
6. Ridge Rd & Mikelson Blvd		*Side-Street Stop*		*Side-Street Stop*		*Side-Street Stop*		*Side-Street Stop*		*Side-Street Stop*	
Westbound Left	-	*3'*	*8'*	*3'*	*8'*	*3'*	*10'*	*3'*	*8'*	*3'*	*13'*
Westbound Right	-	*68'*	*38'*	*53'*	*30'*	*80'*	*40'*	*70'*	*35'*	*103'*	*48'*
Southbound Left+Through	-	*18'*	*35'*	*13'*	*35'*	*15'*	*48'*				
Southbound Left	435' (incl. 150' taper)							*15'*	*40'*	*18'*	*55'*
Southbound Through	-	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*	*0'*
7. Plum Creek Pkwy & Ridge Rd		*Roundabout*		*Roundabout*		*Roundabout*		*Roundabout*		*Roundabout*	
Eastbound	-	*0'*	*25'*	*0'*	*25'*	*0'*	*50'*	*0'*	*50'*	*0'*	*75'*
Northbound	-	*25'*	*25'*	*25'*	*25'*	*50'*	*50'*	*50'*	*50'*	*50'*	*75'*
Southbound	-	*0'*	*25'*	*0'*	*25'*	*0'*	*25'*	*0'*	*25'*	*0'*	*25'*

Table 3 - Trip Generation Summary

Land Use	Size	Unit	Non-Auto Factor	Average Daily Trips				AM Peak Hour Trips				PM Peak Hour Trips			
				Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
ITE#210: Single-Family Detached Housing	525	Dwelling Units	1.00	9.43	4,951	2,476	2,475	0.70	368	96	272	0.94	494	311	183
Total Trips					***4,951***	***2,476***	***2,475***		***368***	***96***	***272***		***494***	***311***	***183***

Source : ITE Trip Generation 11th Edition, 2021.



FOX TUTTLE
TRANSPORTATION GROUP

BELLA MESA NORTH TRAFFIC IMPACT STUDY

VICINITY MAP

FT Project # 24098	Original Scale NTS	Date 6/26/2025	Drawn by SKK	Figure # 1

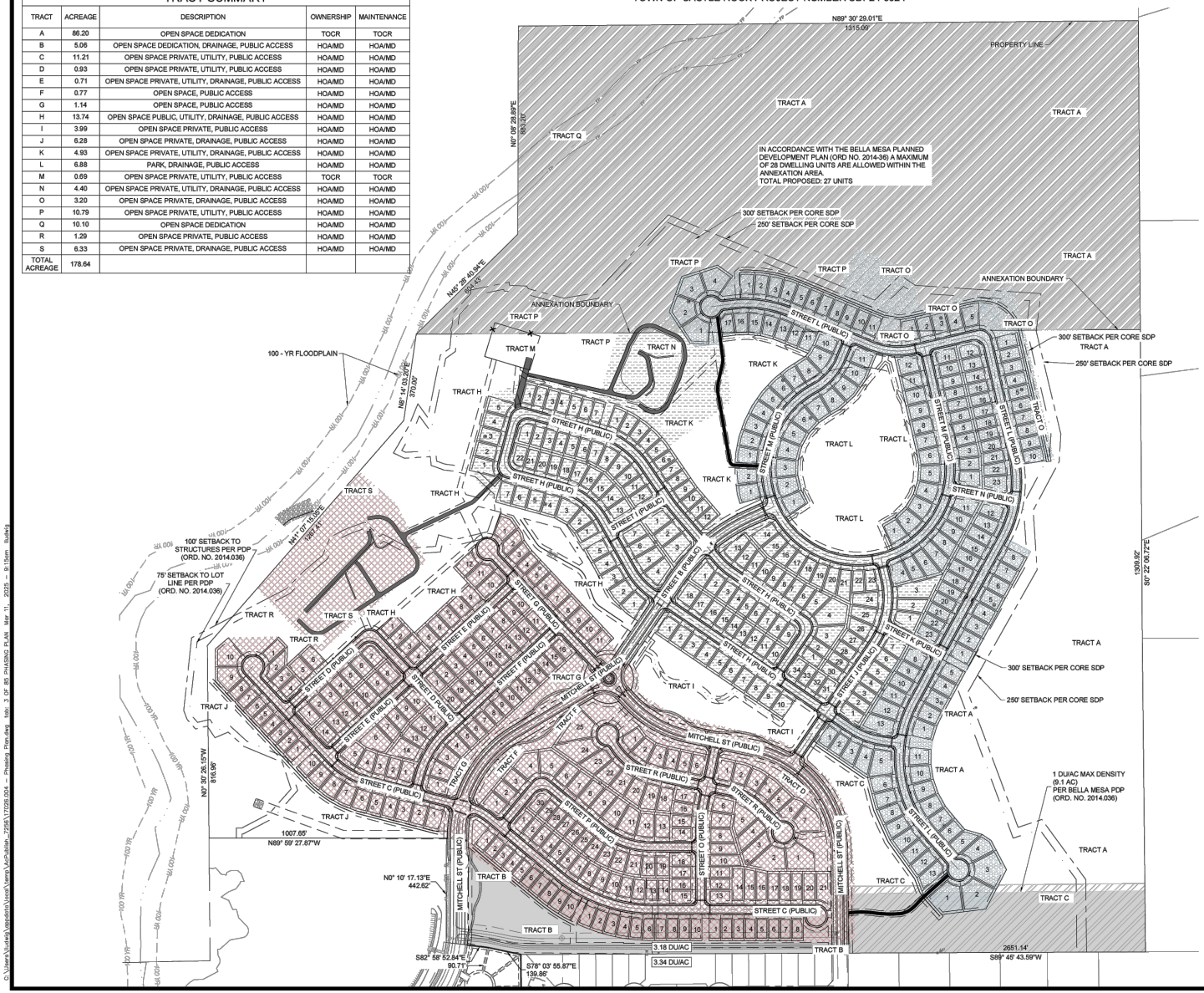
SITE DEVELOPMENT PLAN

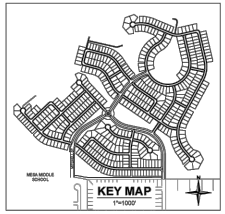
BELLA MESA NORTH

LOCATED IN THE PORTIONS OF THE SOUTHWEST QUARTER SECTION 4, THE SOUTHEAST QUARTER OF SECTION 5, THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 8, AND THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 9, TOWNSHIP 8 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN AND A PORTION OF THE EAST HALF OF SECTION 6, TOWNSHIP 8 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, TOWN OF CASTLE ROCK, COUNTY OF DOUGLAS, STATE OF COLORADO.
TOWN OF CASTLE ROCK PROJECT NUMBER SDP24-0024

TRACT SUMMARY

TRACT	ACREAGE	DESCRIPTION	OWNERSHIP	MAINTENANCE
A	86.20	OPEN SPACE DEDICATION	TOCR	TOCR
B	5.06	OPEN SPACE DEDICATION, DRAINAGE, PUBLIC ACCESS	HOA/MD	HOA/MD
C	11.21	OPEN SPACE PRIVATE, UTILITY, PUBLIC ACCESS	HOA/MD	HOA/MD
D	0.93	OPEN SPACE PRIVATE, UTILITY, PUBLIC ACCESS	HOA/MD	HOA/MD
E	0.71	OPEN SPACE PRIVATE, UTILITY, DRAINAGE, PUBLIC ACCESS	HOA/MD	HOA/MD
F	0.77	OPEN SPACE, PUBLIC ACCESS	HOA/MD	HOA/MD
G	1.14	OPEN SPACE, PUBLIC ACCESS	HOA/MD	HOA/MD
H	13.74	OPEN SPACE PUBLIC, UTILITY, DRAINAGE, PUBLIC ACCESS	HOA/MD	HOA/MD
I	3.99	OPEN SPACE PRIVATE, PUBLIC ACCESS	HOA/MD	HOA/MD
J	6.28	OPEN SPACE PRIVATE, DRAINAGE, PUBLIC ACCESS	HOA/MD	HOA/MD
K	4.93	OPEN SPACE PRIVATE, UTILITY, DRAINAGE, PUBLIC ACCESS	HOA/MD	HOA/MD
L	6.88	PARK, DRAINAGE, PUBLIC ACCESS	HOA/MD	HOA/MD
M	0.69	OPEN SPACE PRIVATE, UTILITY, PUBLIC ACCESS	TOCR	TOCR
N	4.40	OPEN SPACE PRIVATE, UTILITY, DRAINAGE, PUBLIC ACCESS	HOA/MD	HOA/MD
O	3.20	OPEN SPACE PRIVATE, DRAINAGE, PUBLIC ACCESS	HOA/MD	HOA/MD
P	10.79	OPEN SPACE PRIVATE, UTILITY, PUBLIC ACCESS	HOA/MD	HOA/MD
Q	10.10	OPEN SPACE DEDICATION	HOA/MD	HOA/MD
R	1.29	OPEN SPACE PRIVATE, PUBLIC ACCESS	HOA/MD	HOA/MD
S	6.33	OPEN SPACE PRIVATE, DRAINAGE, PUBLIC ACCESS	HOA/MD	HOA/MD
TOTAL ACREAGE	178.64			





PHASE 1: 230 LOTS
PHASE 2: 137 LOTS
PHASE 3: 158 LOTS
ADJACENT DENSITY CALCULATION AREA
ANNEXATION AREA

PHASE 1	
BLOCK NUMBER	NUMBER OF LOTS
1	10
2	10
3	6
4	14
5	12
6	11
7	20
8	14
9	16
10	10
11	10
12	8
13	25
14	6
15	7
16	21
17	30

PHASE 2	
BLOCK NUMBER	NUMBER OF LOTS
20	7
23	3
24	34
25	18
26	10
27	5
28	7
29	5
30	7
31	12
32	22
33	7

PHASE 3	
BLOCK NUMBER	NUMBER OF LOTS
18	13
19	11
20	6
21	5
22	8
23	20
35	17
36	4
37	11
38	5
39	10
40	23
41	12
42	11

STREET NAMES

PHASE 1	PHASE 2	PHASE 3
-STREET C	-STREET B	-STREET H*
-STREET D	-STREET H*	STREET K*
-STREET E	-STREET I	-STREET L
-STREET F	-STREET J	-STREET M*
-STREET G	-STREET K*	-STREET N
-STREET O	-STREET M*	
-STREET P		
-STREET R		
-MITCHELL ST		

1. PHASES CAN BE BUILT IN ANY ORDER AS LONG AS THE REQUIRED INFRASTRUCTURE FOR THAT PHASE INCLUDING DOWNSTREAM FACILITIES IS CONSTRUCTED AND MEETS ALL TOWN OF CASTLE ROCK DESIGN CRITERIA.
2. IF PHASING BOUNDARIES CHANGE, A FIELD CHANGE ORDER IDENTIFYING THE SPECIFIC CHANGES MADE ALONG WITH UPDATED OPINION OF COSTS WILL BE SUBMITTED FOR TOWN REVIEW AND APPROVAL.
3. ALL UTILITIES SHALL BE TERMINATED PER TOWN OF CASTLE ROCK CRITERIA AT THE LIMITS OF EACH RESPECTIVE PHASE. ADDITIONAL FIRE HYDRANTS OR TEMPORARY ACCESS ROAD TURN-AROUND AREAS SHALL BE INSTALLED AS REQUIRED BY TOWN OF CASTLE ROCK FIRE DEPARTMENT TO MEET LIFE SAFETY REQUIREMENTS.
4. EACH PHASE SHALL BE INDEPENDENTLY SUSTAINABLE.
5. AT THE TIME OF INFRASTRUCTURE CONSTRUCTION, PHYSICAL MARKERS IDENTIFYING THE LOCATION OF A; WATER AND SANITARY LATERALS SHALL BE INSTALLED. PRIOR TO ROADWAY CONSTRUCTION, THE LOCATION OF WATER AND SANITARY SEWER SERVICE LINES FOR EACH LOT SHALL BE VERIFIED BY CONTRACTOR.
6. ROAD CLOSED SIGNS AND BARRICADES THAT MEET ALL TOWN OF CASTLE ROCK CRITERIA SHALL BE INSTALLED WHERE ROADS TEMPORARILY END AT PHASE LINES.
7. INSTALLATION OF CONTROL MEASURES THAT MEET THE TOWN OF CASTLE ROCK TESC CRITERIA WILL BE REQUIRED TO CONTROL SEDIMENT TRANSPORT WITHIN, AND AT THE PERIMETER OF EACH PHASE CONSTRUCTED.
8. STREETS SHOWN IN THE PHASING CHART ABOVE WITH AN ASTERISKS ARE BEING CONSTRUCTED IN MORE THAN ONE PHASE OF THE CONSTRUCTION.

N

0 100 200 400
SCALE: 1" = 200'

Redland
WHERE GREAT PLACES BEGIN
Landscape Architecture
Land Planning
Civil Engineering
Construction Management
720.283.6783
REDLAND.COM

NOT FOR CONSTRUCTION

NO.	DATE	NOTES
1	12.05.2024	FIRST SUBMITTAL TO TOWN

PROJECT NO: 17855.004

BELLA MESA NORTH
SITE DEVELOPMENT PLAN
PHASING PLAN

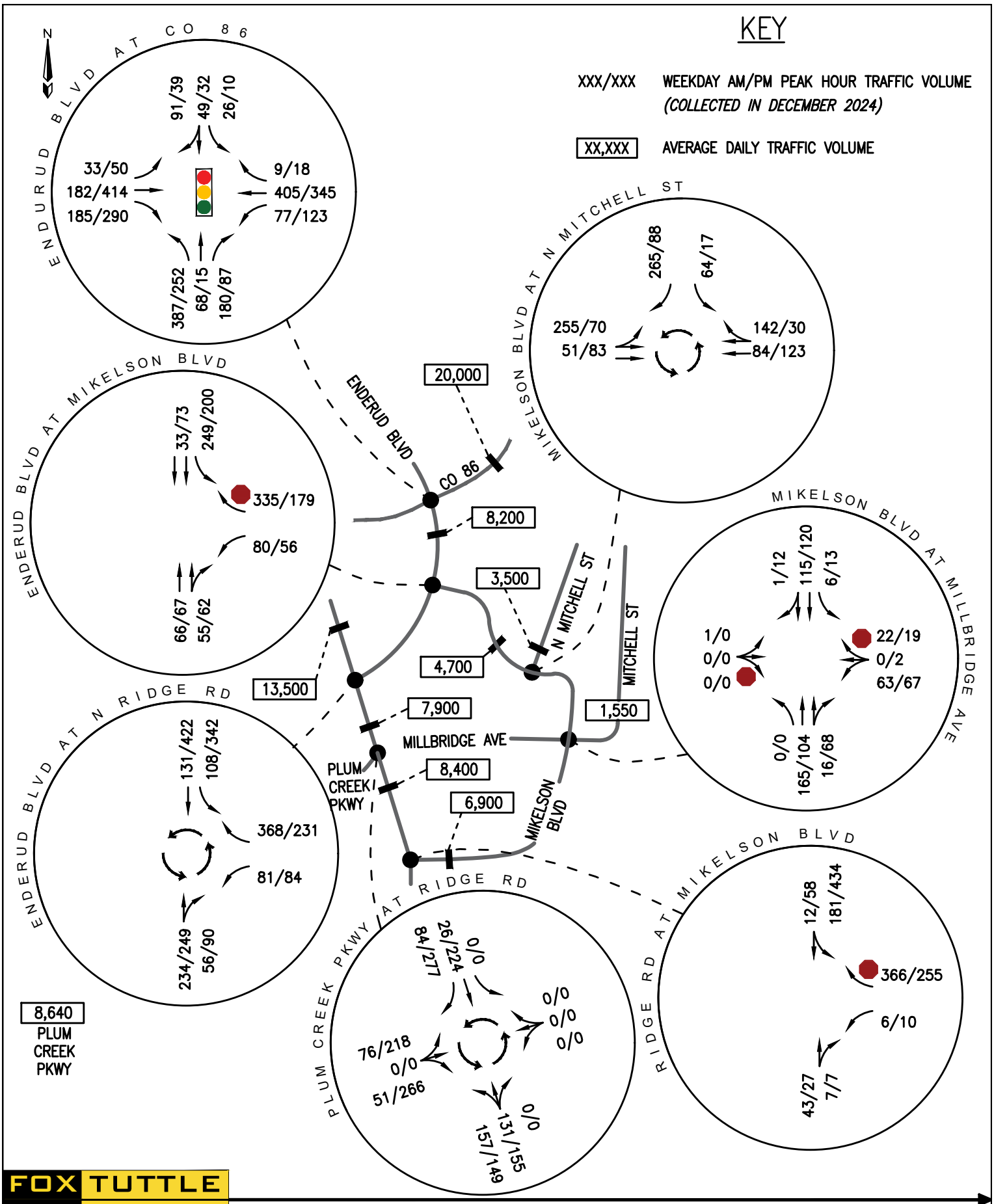
SHEET
3 OF 87

C:\Users\Vlunberg\Vantage\Vincent Vlamm\ArcPro\Bella - 7256\17255.004 - Phasing Plan.dwg tabs: 3 OF 85 PHASING PLAN Mar 11, 2025 - 8:15pm lbunberg

FOX TUTTLE
TRANSPORTATION GROUP

BELLA MESA NORTH TRAFFIC IMPACT STUDY
SITE PLAN

FT Project #	24098	Original Scale	NTS	Date	6/27/2025	Drawn by	SKK	Figure #	2

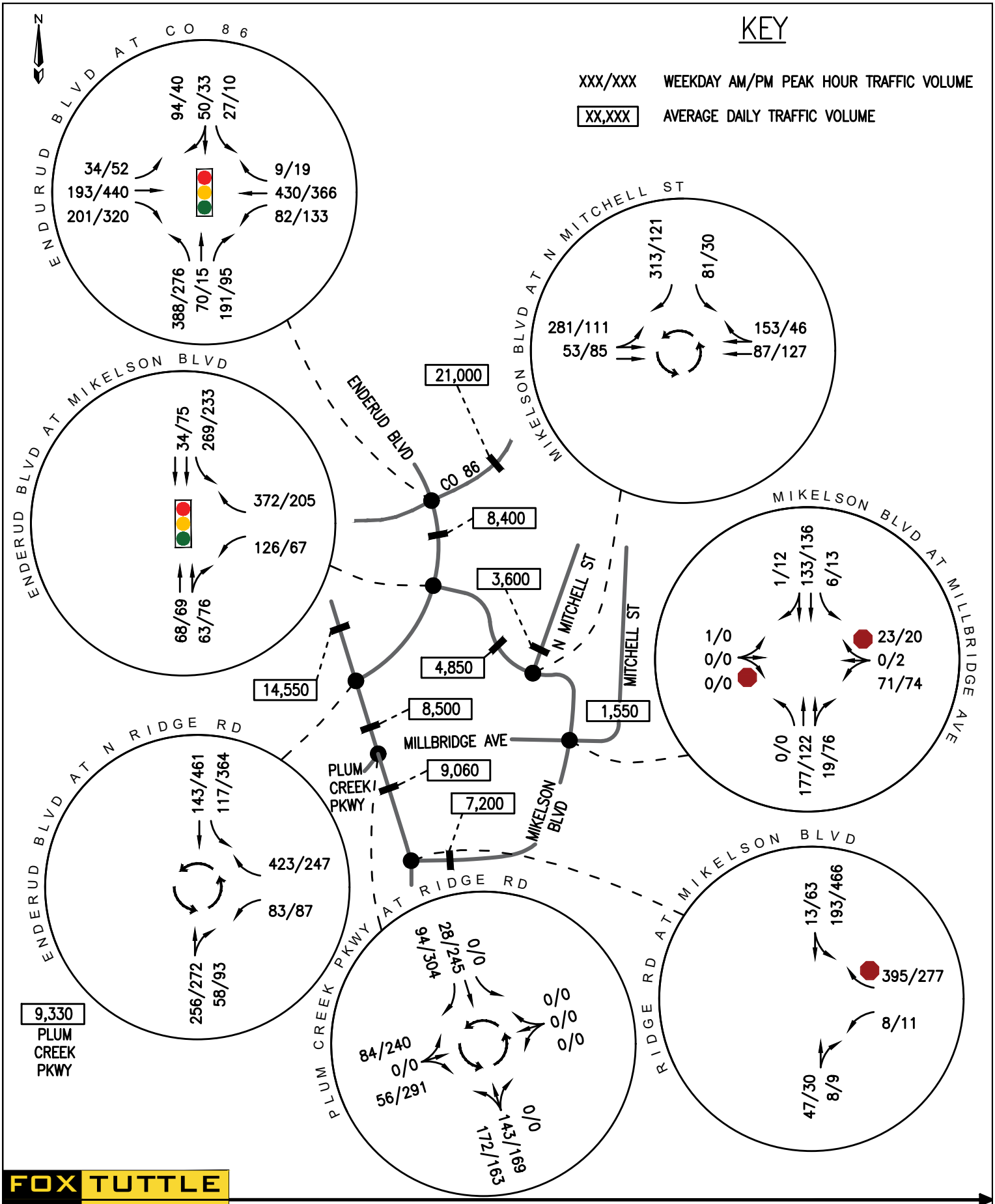


FOX TUTTLE
TRANSPORTATION GROUP

BELLA MESA NORTH TRAFFIC IMPACT STUDY

EXISTING TRAFFIC VOLUMES

FT Project #	24098	Original Scale	NTS	Date	6/27/2025	Drawn by	SKK	Figure #	3

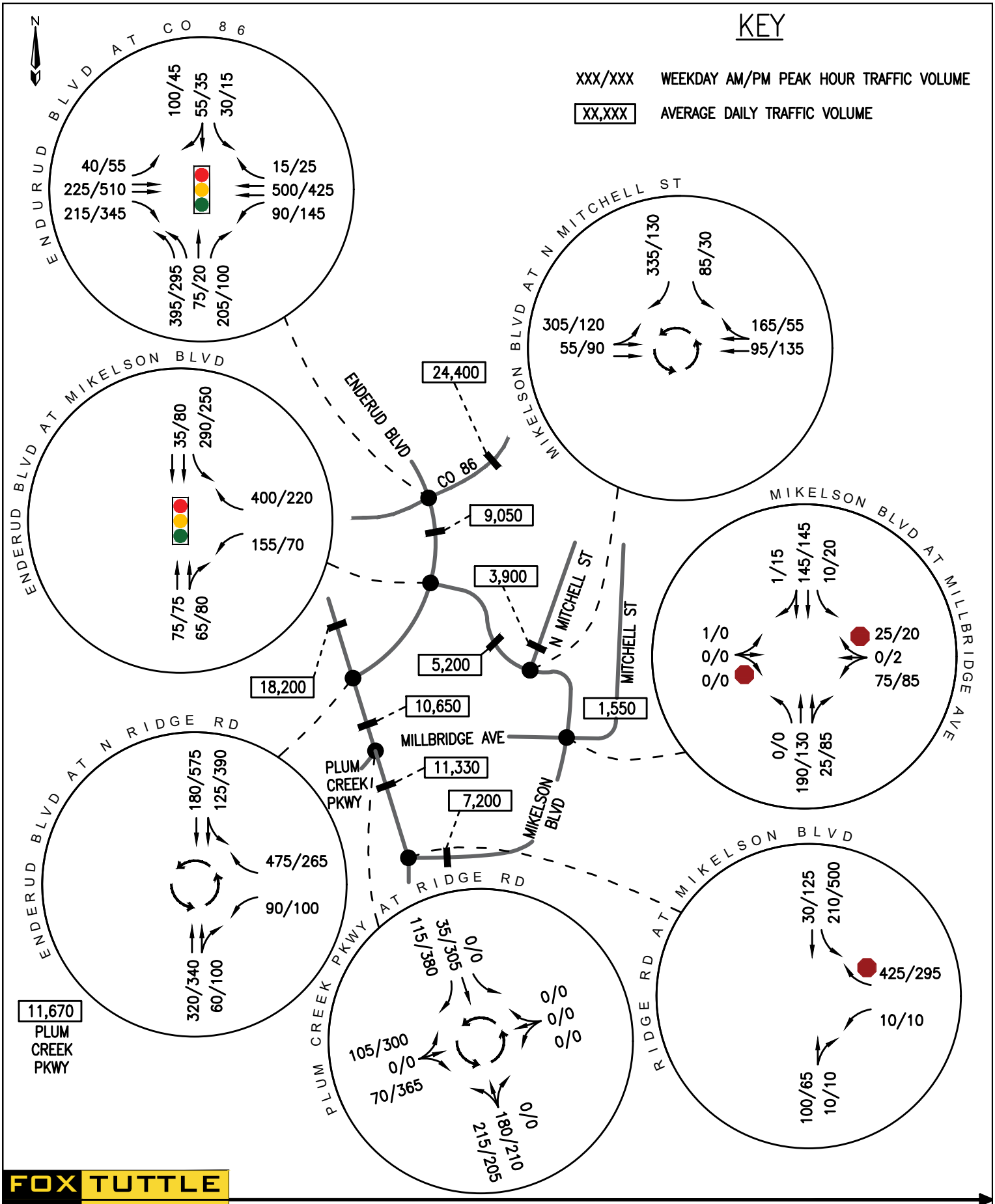


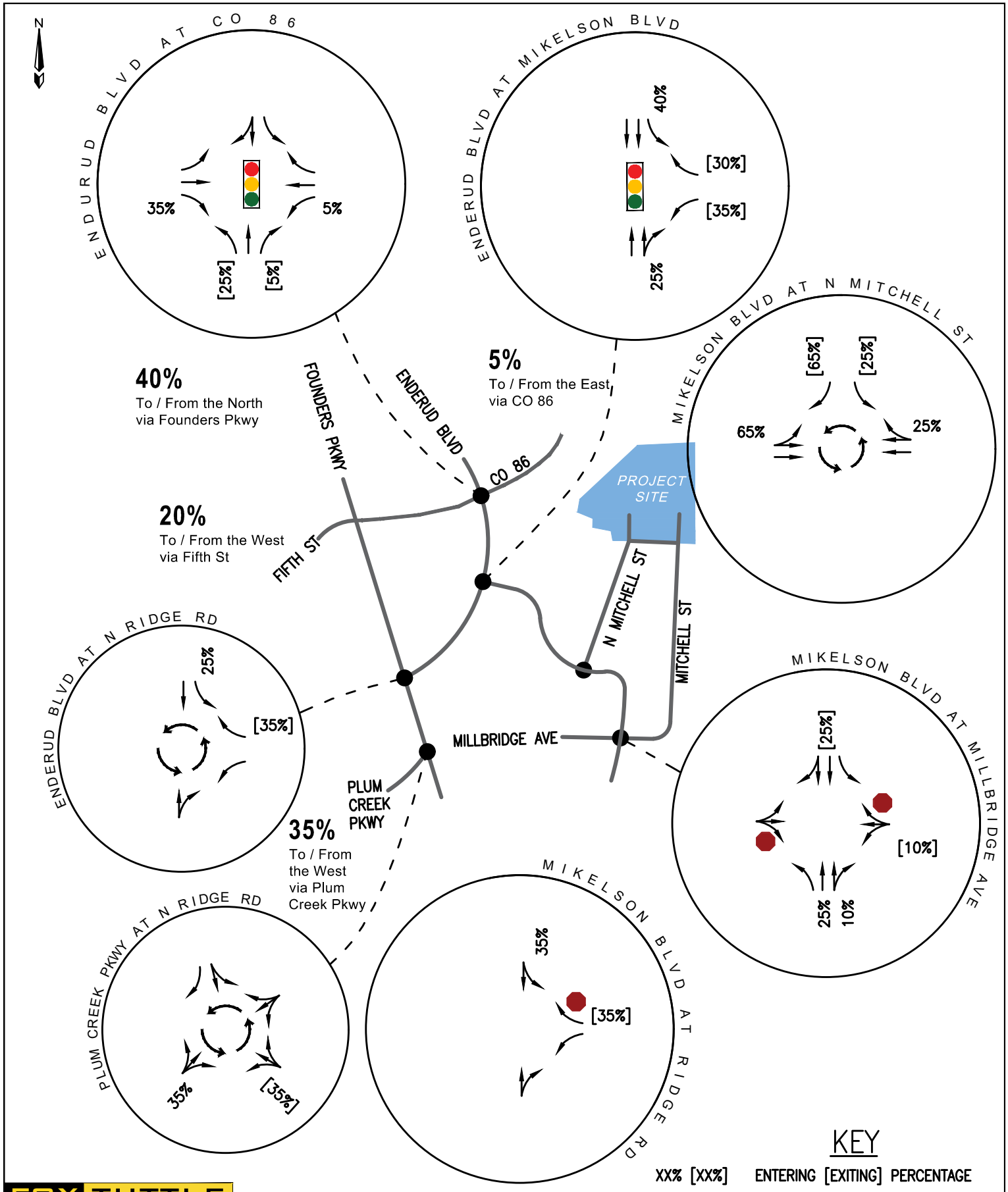
FOX TUTTLE
TRANSPORTATION GROUP

BELLA MESA NORTH TRAFFIC IMPACT STUDY

YEAR 2030 BACKGROUND TRAFFIC VOLUMES

FT Project #	24098	Original Scale	NTS	Date	6/27/2025	Drawn by	SKK	Figure #	4


KEY
XXX/XXX WEEKDAY AM/PM PEAK HOUR TRAFFIC VOLUME
XX,XXX AVERAGE DAILY TRAFFIC VOLUME
N
ENDERUD BLVD AT CO 86
100/45
55/35
30/15
40/55
225/510
215/345
15/25
500/425
90/145
395/295
75/20
205/100
MIKELSON BLVD AT N MITCHELL ST
335/130
85/30
305/120
55/90
165/55
95/135
ENDERUD BLVD AT MIKELSON BLVD
35/80
290/250
400/220
155/70
75/75
65/80
MIKELSON BLVD AT MILLBRIDGE AVE
1/15
145/145
10/20
1/0
0/0
0/0
25/20
0/2
75/85
0/0
190/130
25/85
ENDERUD BLVD AT N RIDGE RD
180/575
125/390
475/265
90/100
320/340
60/100
PLUM CREEK PKWY AT RIDGE RD
115/380
35/305
0/0
0/0
0/0
0/0
105/300
0/0
70/365
0/0
180/210
215/205
RIDGE RD AT MIKELSON BLVD
30/125
210/500
425/295
10/10
100/65
10/10
ENDERUD BLVD
CO 86
24,400
9,050
3,900
5,200
18,200
10,650
11,330
7,200
N MITCHELL ST
MITCHELL ST
1,550
MILLBRIDGE AVE
PLUM CREEK PKWY
MIKELSON BLVD
11,670
PLUM CREEK PKWY
FOX TUTTLE
TRANSPORTATION GROUP
BELLA MESA NORTH TRAFFIC IMPACT STUDY
YEAR 2045 BACKGROUND TRAFFIC VOLUMES
FT Project # 24098
Original Scale NTS
Date 6/27/2025
Drawn by SKK
Figure # 5

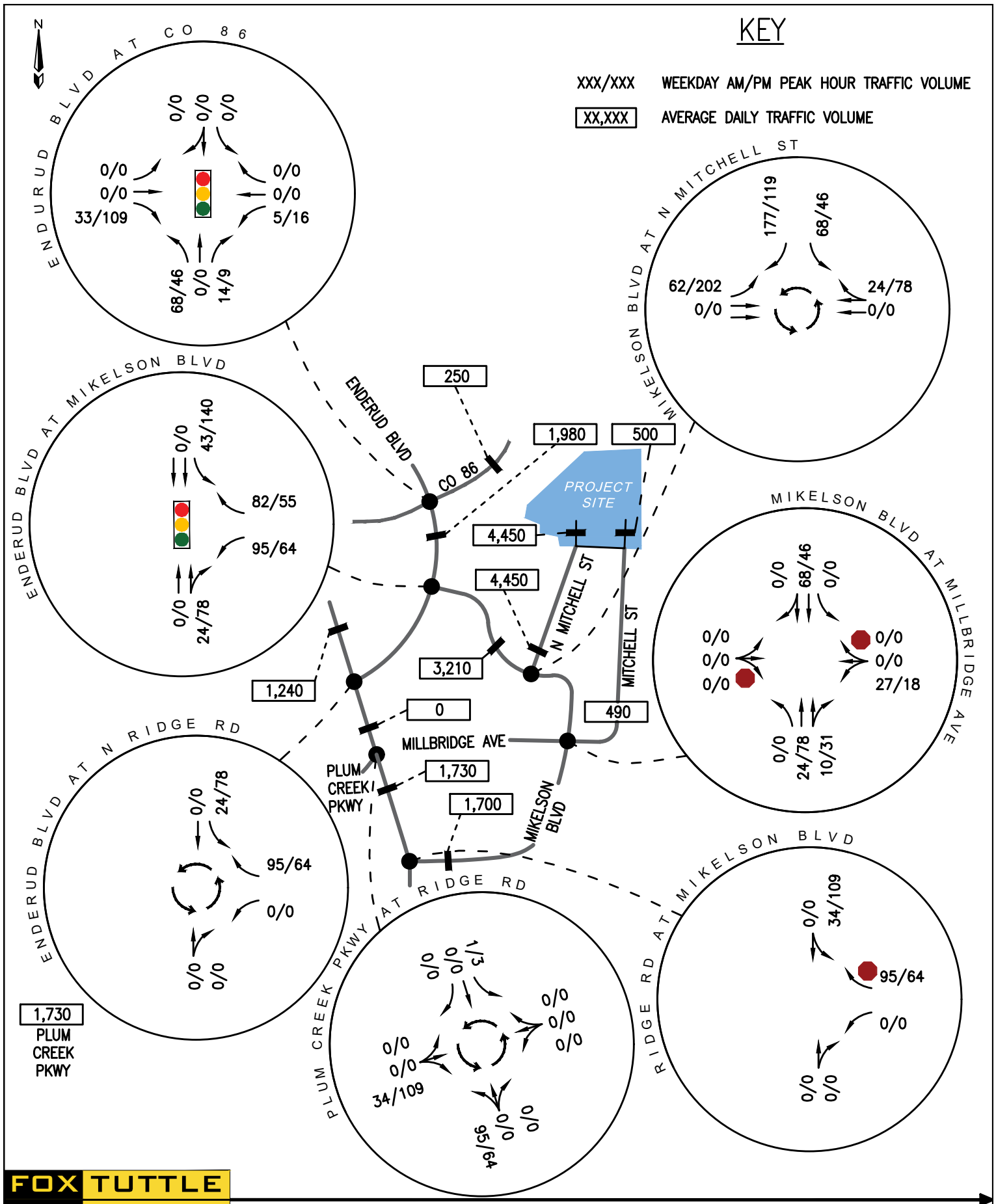


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BELLA MESA NORTH TRAFFIC IMPACT STUDY

TRIP DISTRIBUTION

FT Project # 24098	Original Scale NTS	Date 6/27/2025	Drawn by SKK	Figure # 6

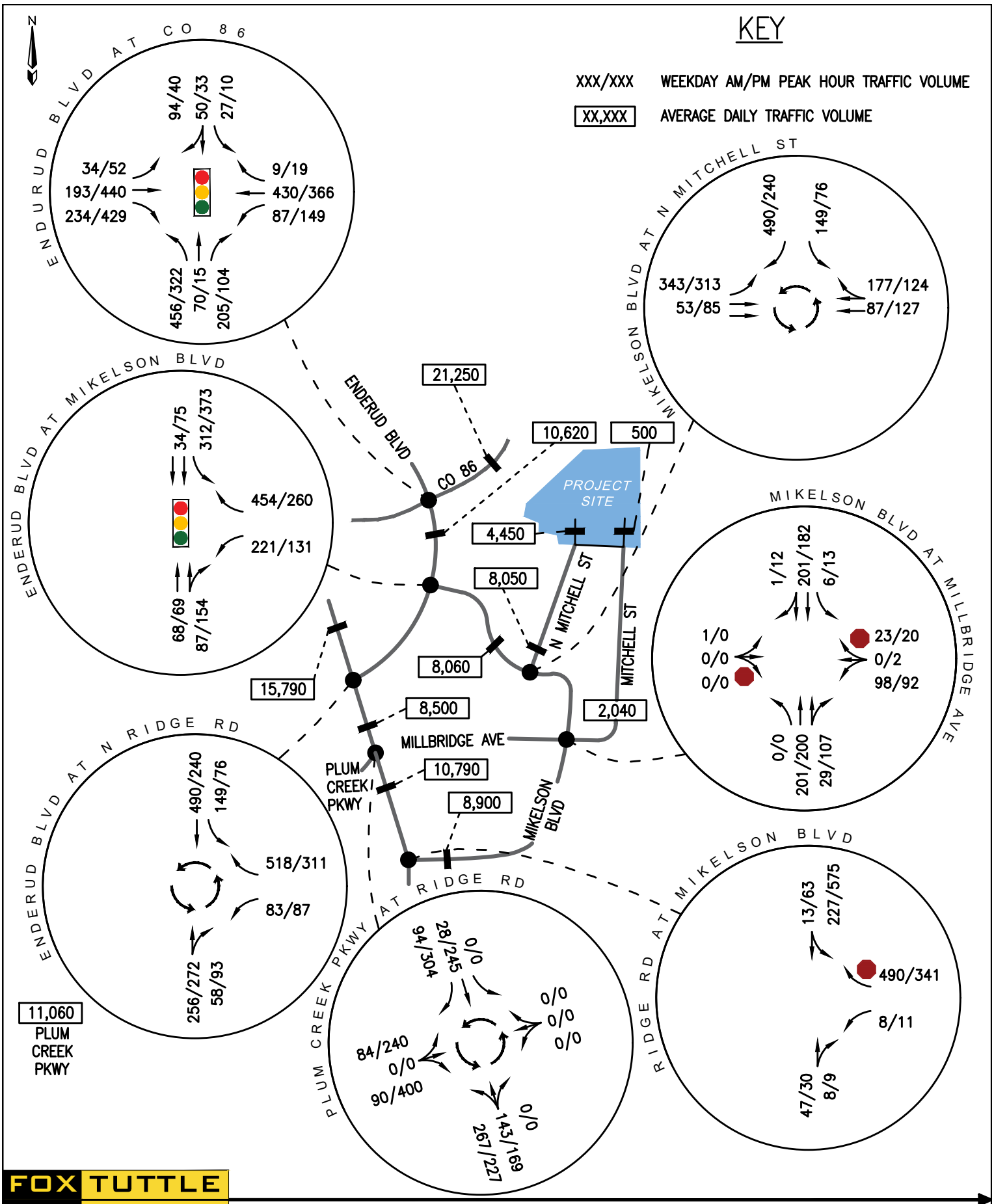


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TRANSPORTATION GROUP

BELLA MESA NORTH TRAFFIC IMPACT STUDY

SITE-GENERATED TRAFFIC VOLUMES

FT Project # 24098	Original Scale NTS	Date 6/27/2025	Drawn by SKK	Figure # 7

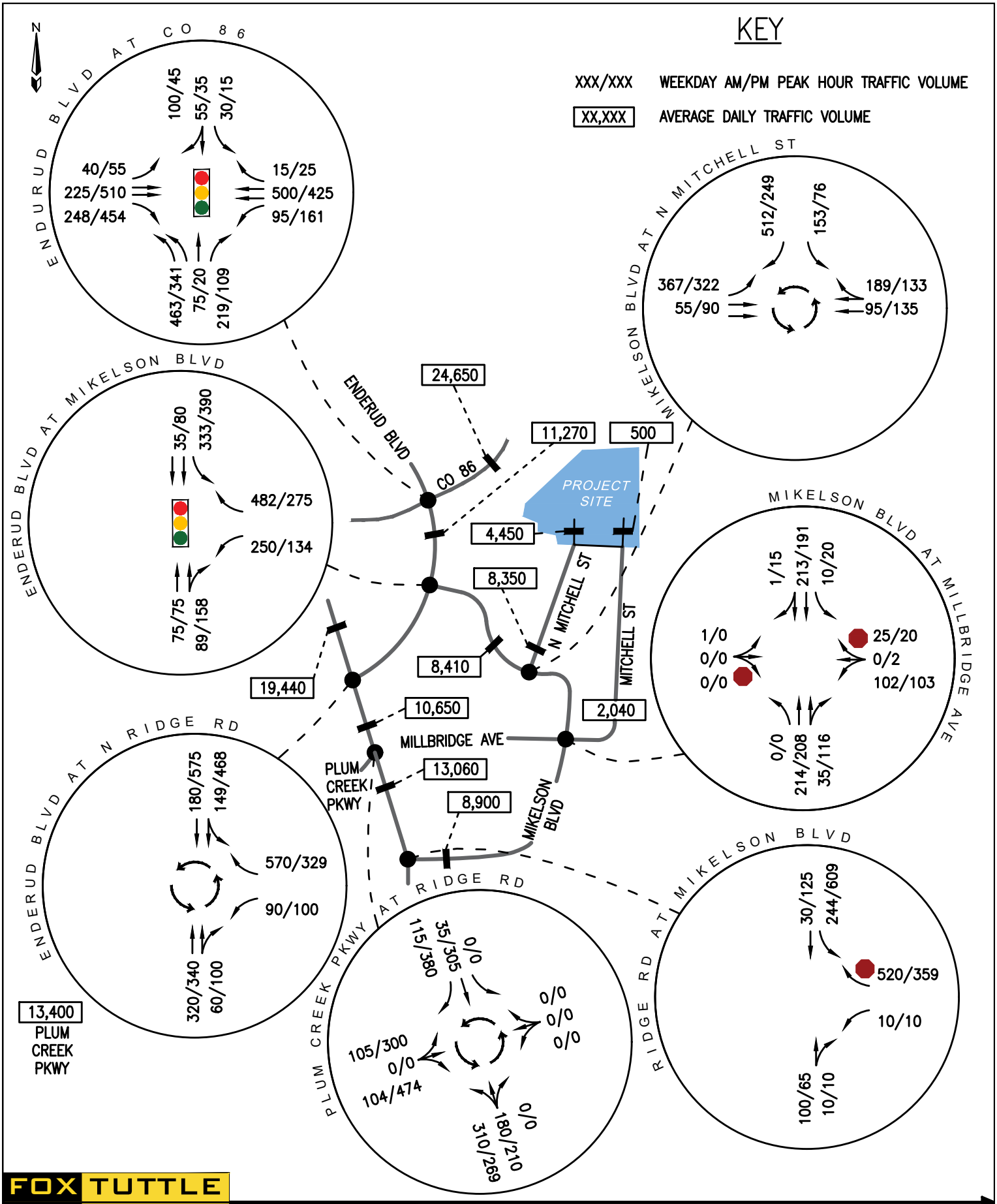


FOX TUTTLE
TRANSPORTATION GROUP

BELLA MESA NORTH TRAFFIC IMPACT STUDY

YEAR 2030 BACKGROUND + SITE-GENERATED TRAFFIC VOLUMES

FT Project #	24098	Original Scale	NTS	Date	6/27/2025	Drawn by	SKK	Figure #	8



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TRANSPORTATION GROUP

BELLA MESA NORTH TRAFFIC IMPACT STUDY

YEAR 2045 BACKGROUND + SITE-GENERATED TRAFFIC VOLUMES

FT Project #	24098	Original Scale	NTS	Date	6/27/2025	Drawn by	SKK	Figure #	9

Appendix:

Level of Service Definitions

Existing Traffic Data

Intersection Capacity Worksheets

Level of Service Definitions

LEVEL OF SERVICE DEFINITIONS

In rating roadway and intersection operating conditions with existing or future traffic volumes, "Levels of Service" (LOS) A through F are used, with LOS A indicating very good operation and LOS F indicating poor operation. Levels of service at signalized and unsignalized intersections are closely associated with vehicle delays experienced in seconds per vehicle. More complete level of service definitions and delay data for signal and stop sign controlled intersections are contained in the following table for reference.

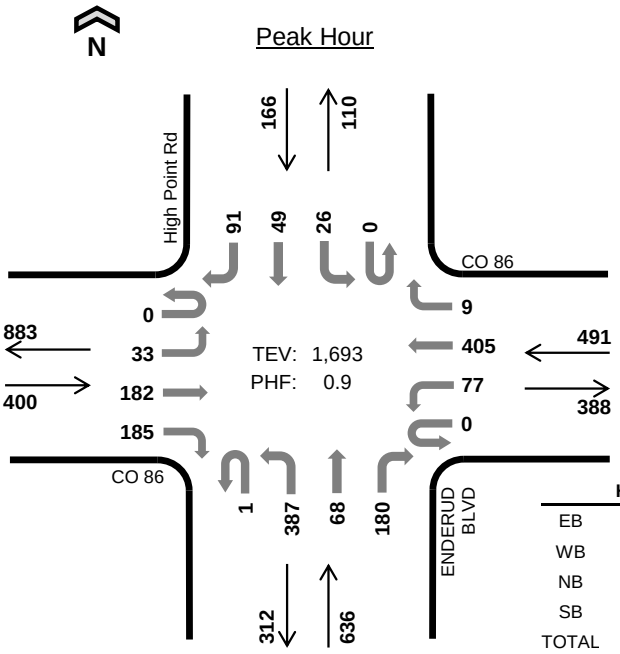
Level of Service Rating	Delay in seconds per vehicle *(a)*		Definition
	Signalized	Unsignalized	
A	0.0 to 10.0	0.0 to 10.0	Low vehicular traffic volumes; primarily free flow operations. Density is low and vehicles can freely maneuver within the traffic stream. Drivers are able to maintain their desired speeds with little or no delay.
B	10.1 to 20.0	10.1 to 15.0	Stable vehicular traffic volume flow with potential for some restriction of operating speeds due to traffic conditions. Vehicle maneuvering is only slightly restricted. The stopped delays are not bothersome and drivers are not subject to appreciable tension.
C	20.1 to 35.0	15.1 to 25.0	Stable traffic operations, however the ability for vehicles to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail, but adverse signal coordination or longer vehicle queues cause delays along the corridor.
D	35.1 to 55.0	25.1 to 35.0	Approaching unstable vehicular traffic flow where small increases in volume could cause substantial delays. Most drivers are restricted in ability to maneuver and selection of travel speeds due to congestion. Driver comfort and convenience are low, but tolerable.
E	55.1 to 80.0	35.1 to 50.0	Traffic operations characterized by significant approach delays and average travel speeds of one-half to one-third the free flow speed. Vehicular flow is unstable and there is potential for stoppages of brief duration. High signal density, extensive vehicle queuing, or corridor signal progression/timing are the typical causes of vehicle delays at signalized corridors.
F	> 80.0	> 50.0	Forced vehicular traffic flow and operations with high approach delays at critical intersections. Vehicle speeds are reduced substantially, and stoppages may occur for short or long periods of time because of downstream congestion.

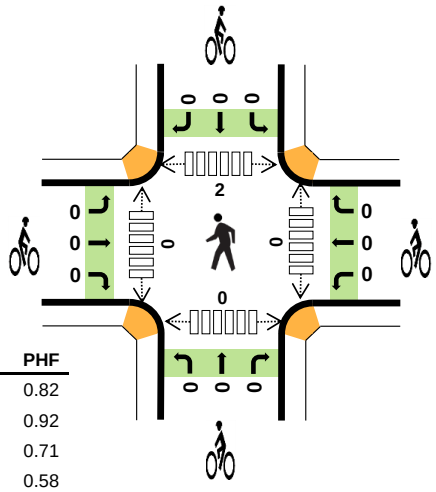
(a) Delay ranges based on Highway Capacity Manual (6th Edition, 2016) criteria.

Existing Traffic Data

ENDERUD BLVD
CO 86

Date: 01/04/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM





	HV %:	PHF
EB	3.5%	0.82
WB	3.5%	0.92
NB	1.1%	0.71
SB	0.0%	0.58
TOTAL	2.2%	0.90

Two-Hour Count Summaries

Interval Start		CO 86 Eastbound				CO 86 Westbound				ENDERUD BLVD Northbound				High Point Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		**0**	**4**	**51**	**67**	**0**	**19**	**98**	**0**	**0**	**93**	**17**	**49**	**0**	**8**	**35**	**28**	**469**	0
7:15 AM		**0**	**8**	**36**	**52**	**0**	**21**	**86**	**4**	**1**	**126**	**38**	**59**	**0**	**6**	**7**	**27**	**471**	0
7:30 AM		**0**	**12**	**49**	**37**	**0**	**14**	**114**	**2**	**0**	**106**	**11**	**45**	**0**	**6**	**3**	**18**	**417**	0
7:45 AM		**0**	**9**	**46**	**29**	**0**	**23**	**107**	**3**	**0**	**62**	**2**	**27**	**0**	**6**	**4**	**18**	**336**	**1,693**
8:00 AM		0	13	39	28	0	24	124	1	1	57	8	31	0	7	3	11	347	1,571
8:15 AM		0	8	56	28	0	15	75	3	0	83	4	32	0	1	6	15	326	1,426
8:30 AM		0	11	70	37	0	18	91	2	0	58	4	21	0	5	3	18	338	1,347
8:45 AM		0	8	63	33	1	14	92	5	0	50	12	17	0	2	9	13	319	1,330
Count Total		0	73	410	311	1	148	787	20	2	635	96	281	0	41	70	148	3,023	0
Peak Hour	**All**	**0**	**33**	**182**	**185**	**0**	**77**	**405**	**9**	**1**	**387**	**68**	**180**	**0**	**26**	**49**	**91**	**1,693**	**0**
	HV	**0**	**0**	**10**	**4**	**0**	**5**	**12**	**0**	**0**	**3**	**4**	**0**	**0**	**0**	**0**	**0**	**38**	**0**
	HV%	**-**	**0%**	**5%**	**2%**	**-**	**6%**	**3%**	**0%**	**0%**	**1%**	**6%**	**0%**	**-**	**0%**	**0%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**5**	**3**	**2**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**3**	**8**	**2**	**0**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**1**	**2**	**2**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
7:45 AM	**5**	**4**	**1**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
8:00 AM	4	8	1	0	*13*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	7	3	3	1	*14*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	3	3	3	0	*9*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	5	3	2	1	*11*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	33	34	16	2	*85*	0	0	0	0	*0*	0	0	2	0	*2*
Peak Hour	**14**	**17**	**7**	**0**	***38***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	***2***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	CO 86 Eastbound				CO 86 Westbound				ENDERUD BLVD Northbound				High Point Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**4**	**1**	**0**	**0**	**3**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**10**	0
7:15 AM	**0**	**0**	**1**	**2**	**0**	**3**	**5**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**13**	0
7:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	0
7:45 AM	**0**	**0**	**4**	**1**	**0**	**2**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**38**
8:00 AM	0	1	3	0	0	0	8	0	0	1	0	0	0	0	0	0	13	41
8:15 AM	0	1	3	3	0	1	2	0	0	2	0	1	0	0	0	1	14	42
8:30 AM	0	1	2	0	0	0	3	0	0	2	0	1	0	0	0	0	9	46
8:45 AM	0	1	4	0	0	0	2	1	0	2	0	0	0	0	0	1	11	47
Count Total	0	4	22	7	0	6	27	1	0	10	4	2	0	0	0	2	85	0
Peak Hour	**0**	**0**	**10**	**4**	**0**	**5**	**12**	**0**	**0**	**3**	**4**	**0**	**0**	**0**	**0**	**0**	**38**	**0**

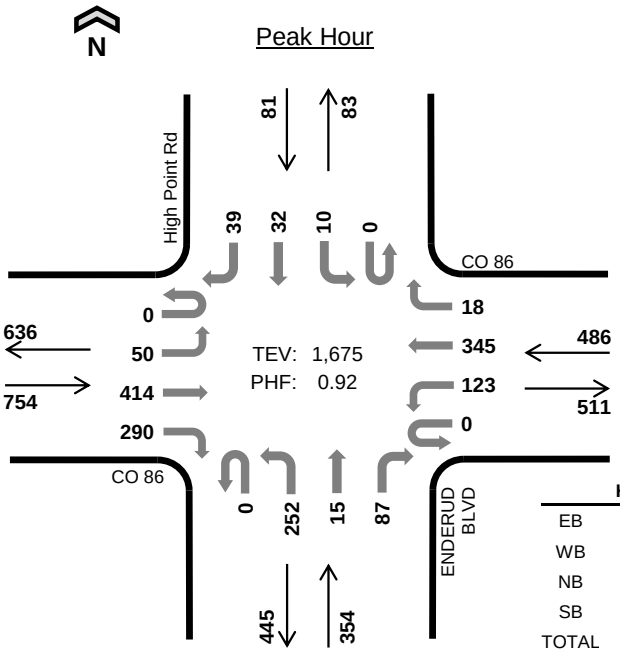
Two-Hour Count Summaries - Bikes

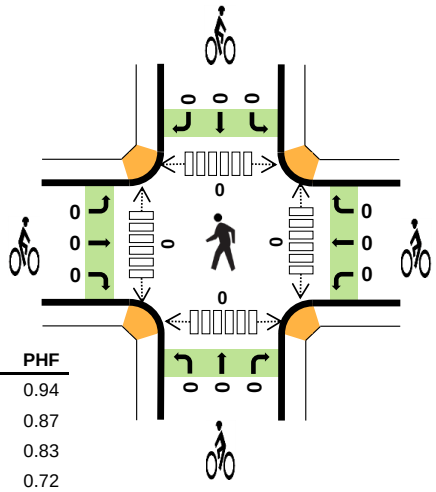
Interval Start	CO 86 Eastbound			CO 86 Westbound			ENDERUD BLVD Northbound			High Point Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

ENDERUD BLVD
CO 86

Date: 01/04/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV %:	PHF
EB	1.3%	0.94
WB	2.3%	0.87
NB	0.8%	0.83
SB	1.2%	0.72
TOTAL	1.5%	0.92

Two-Hour Count Summaries

Interval Start		CO 86 Eastbound				CO 86 Westbound				ENDERUD BLVD Northbound				High Point Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		**0**	**7**	**99**	**68**	**0**	**35**	**83**	**2**	**0**	**70**	**9**	**27**	**0**	**3**	**9**	**7**	**419**	0
4:15 PM		**0**	**15**	**108**	**73**	**0**	**38**	**94**	**7**	**0**	**68**	**1**	**24**	**0**	**1**	**12**	**15**	**456**	0
4:30 PM		**0**	**11**	**99**	**74**	**0**	**20**	**90**	**5**	**0**	**50**	**4**	**19**	**0**	**4**	**6**	**8**	**390**	0
4:45 PM		**0**	**17**	**108**	**75**	**0**	**30**	**78**	**4**	**0**	**64**	**1**	**17**	**0**	**2**	**5**	**9**	**410**	**1,675**
5:00 PM		0	19	111	80	0	19	98	6	0	35	3	11	0	2	5	4	393	1,649
5:15 PM		0	7	101	81	0	32	71	6	0	44	2	15	0	4	5	11	379	1,572
5:30 PM		0	20	100	80	0	27	53	4	0	39	3	16	0	1	8	15	366	1,548
5:45 PM		0	21	92	68	0	32	60	7	0	32	3	11	0	3	8	19	356	1,494
Count Total		0	117	818	599	0	233	627	41	0	402	26	140	0	20	58	88	3,169	0
Peak Hour	**All**	**0**	**50**	**414**	**290**	**0**	**123**	**345**	**18**	**0**	**252**	**15**	**87**	**0**	**10**	**32**	**39**	**1,675**	**0**
	HV	**0**	**2**	**7**	**1**	**0**	**0**	**10**	**1**	**0**	**2**	**0**	**1**	**0**	**0**	**1**	**0**	**25**	**0**
	HV%	**-**	**4%**	**2%**	**0%**	**-**	**0%**	**3%**	**6%**	**-**	**1%**	**0%**	**1%**	**-**	**0%**	**3%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**3**	**1**	**1**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**5**	**7**	**1**	**1**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**2**	**1**	**1**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	0	2	0	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	1	1	1	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	3	0	0	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	2	0	1	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	16	14	5	3	*38*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**10**	**11**	**3**	**1**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	CO 86 Eastbound				CO 86 Westbound				ENDERUD BLVD Northbound				High Point Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	0
4:15 PM	**0**	**1**	**4**	**0**	**0**	**0**	**7**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**14**	0
4:30 PM	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**25**
5:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	3	23
5:15 PM	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	3	12
5:30 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	4	12
5:45 PM	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	3	13
Count Total	0	3	12	1	0	0	13	1	0	4	0	1	0	2	1	0	38	0
Peak Hour	**0**	**2**	**7**	**1**	**0**	**0**	**10**	**1**	**0**	**2**	**0**	**1**	**0**	**0**	**1**	**0**	**25**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	CO 86 Eastbound			CO 86 Westbound			ENDERUD BLVD Northbound			High Point Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

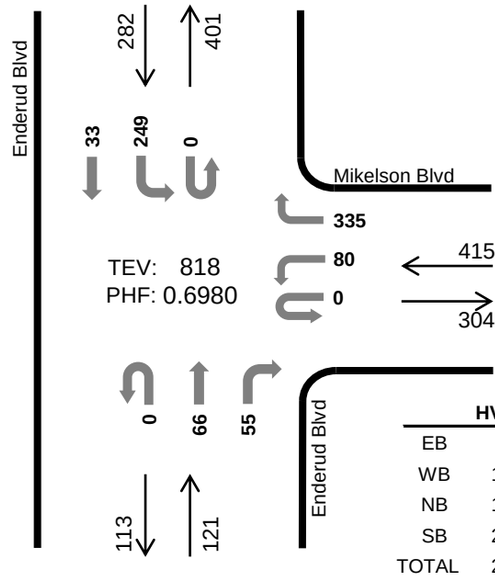
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Enderud Blvd
Mikelson Blvd

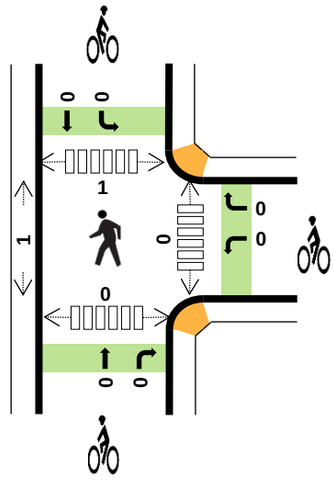
Date: 12/10/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV%	PHF
EB	--	--
WB	1%	0.62
NB	1%	0.64
SB	2%	0.71
TOTAL	2%	0.70



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Mikelson Blvd				Enderud Blvd				Enderud Blvd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	0	0	0	0	8	0	35	0	0	16	5	0	23	8	0	95	0
8:15 AM		0	0	0	0	0	10	0	67	0	0	17	9	0	49	7	0	159	0
8:30 AM		0	0	0	0	0	25	0	103	0	0	19	28	0	89	7	0	271	0
8:45 AM		0	0	0	0	0	37	0	130	0	0	14	13	0	88	11	0	293	818
Pk Hr	All	0	0	0	0	0	80	0	335	0	0	66	55	0	249	33	0	818	
	HV	0	0	0	0	0	0	0	6	0	0	0	1	0	7	0	0	14	
	HV%	-	-	-	-	-	0%	-	2%	-	-	0%	2%	-	3%	0%	-	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	1	0	1	*2*	0	0	0	0	*0*	0	1	1	0	*2*
8:30 AM	0	1	1	4	*6*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	4	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	6	1	7	*14*	0	0	0	0	*0*	0	1	1	0	*2*

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Count Summaries - All Vehicles

Interval Start	n/a				Mikelson Blvd				Enderud Blvd				Enderud Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	9	0	43	0	0	13	1	0	2	3	0	71	0
7:15 AM	0	0	0	0	0	4	0	19	0	0	11	2	0	5	10	0	51	0
7:30 AM	0	0	0	0	0	8	0	34	0	0	24	2	0	12	8	0	88	0
7:45 AM	0	0	0	0	0	5	0	40	0	0	10	7	0	18	7	0	87	297
8:00 AM	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**35**	**0**	**0**	**16**	**5**	**0**	**23**	**8**	**0**	**95**	**321**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**67**	**0**	**0**	**17**	**9**	**0**	**49**	**7**	**0**	**159**	**429**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**25**	**0**	**103**	**0**	**0**	**19**	**28**	**0**	**89**	**7**	**0**	**271**	**612**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**37**	**0**	**130**	**0**	**0**	**14**	**13**	**0**	**88**	**11**	**0**	**293**	**818**
Count Total	0	0	0	0	0	106	0	471	0	0	124	67	0	286	61	0	1,115	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**80**	**0**	**335**	**0**	**0**	**66**	**55**	**0**	**249**	**33**	**0**	**818**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**1**	**0**	**7**	**0**	**0**	**14**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**2%**	**-**	**-**	**0%**	**2%**	**-**	**3%**	**0%**	**-**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	2	3	*5*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**1**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**
8:30 AM	**0**	**1**	**1**	**4**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**4**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	7	3	11	*21*	0	0	0	0	*0*	0	1	1	0	*2*
Peak Hour	**0**	**6**	**1**	**7**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	**2**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Mikelson Blvd				Enderud Blvd				Enderud Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	2	0	5	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**7**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**9**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**6**	**10**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**14**
Count Total	0	0	0	0	0	0	0	7	0	0	1	2	0	8	3	0	21	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**1**	**0**	**7**	**0**	**0**	**14**	

Count Summaries - Bikes

Interval Start	n/a				Mikelson Blvd				Enderud Blvd				Enderud Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

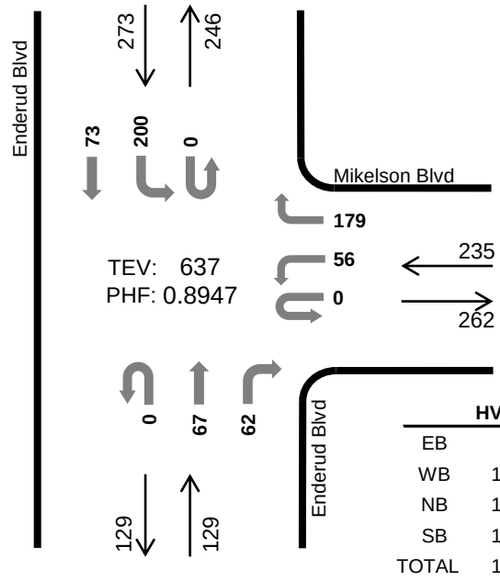
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Enderud Blvd
Mikelson Blvd

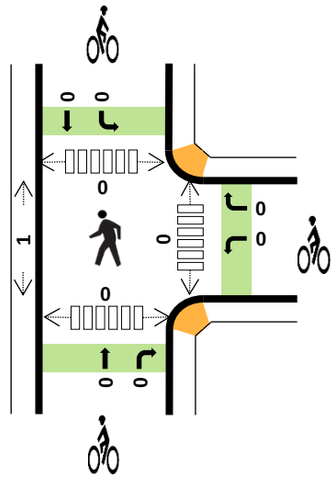
Date: 12/10/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM

N

Peak Hour



	HV%	PHF
EB	--	--
WB	1%	0.72
NB	1%	0.92
SB	1%	0.95
TOTAL	1%	0.89



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Mikelson Blvd				Enderud Blvd				Enderud Blvd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	25	0	57	0	0	16	18	0	43	18	0	177	0
4:15 PM		0	0	0	0	0	11	0	35	0	0	16	14	0	54	15	0	145	0
4:30 PM		0	0	0	0	0	13	0	58	0	0	21	14	0	51	21	0	178	0
4:45 PM		0	0	0	0	0	7	0	29	0	0	14	16	0	52	19	0	137	637
Pk Hr	All	0	0	0	0	0	56	0	179	0	0	67	62	0	200	73	0	637	
	HV	0	0	0	0	0	0	0	3	0	0	1	0	0	3	0	0	7	
	HV%	-	-	-	-	-	0%	-	2%	-	-	1%	0%	-	2%	0%	-	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
4:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	2	1	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	3	1	3	*7*	0	0	0	0	*0*	0	1	0	0	*1*

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Count Summaries - All Vehicles

Interval Start	n/a				Mikelson Blvd				Enderud Blvd				Enderud Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**25**	**0**	**57**	**0**	**0**	**16**	**18**	**0**	**43**	**18**	**0**	**177**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**35**	**0**	**0**	**16**	**14**	**0**	**54**	**15**	**0**	**145**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**58**	**0**	**0**	**21**	**14**	**0**	**51**	**21**	**0**	**178**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**29**	**0**	**0**	**14**	**16**	**0**	**52**	**19**	**0**	**137**	**637**
5:00 PM	0	0	0	0	0	10	0	28	0	0	15	15	0	46	20	0	134	594
5:15 PM	0	0	0	0	0	5	0	33	0	0	22	14	0	43	19	0	136	585
5:30 PM	0	0	0	0	0	10	0	20	0	0	15	25	0	50	25	0	145	552
5:45 PM	0	0	0	0	0	9	0	33	0	0	8	20	0	61	15	0	146	561
Count Total	0	0	0	0	0	90	0	293	0	0	127	136	0	400	152	0	1,198	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**56**	**0**	**179**	**0**	**0**	**67**	**62**	**0**	**200**	**73**	**0**	**637**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**7**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**2%**	**-**	**-**	**1%**	**0%**	**-**	**2%**	**0%**	**-**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	**0**	**1**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
4:30 PM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**2**	**1**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
5:15 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	4	2	4	*10*	0	0	0	0	*0*	0	2	0	0	*2*
Peak Hour	**0**	**3**	**1**	**3**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	**1**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Mikelson Blvd				Enderud Blvd				Enderud Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**4**	**7**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	7
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	0	0	0	0	0	4	0	0	1	1	0	4	0	0	10	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**7**	

Count Summaries - Bikes

Interval Start	n/a				Mikelson Blvd				Enderud Blvd				Enderud Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

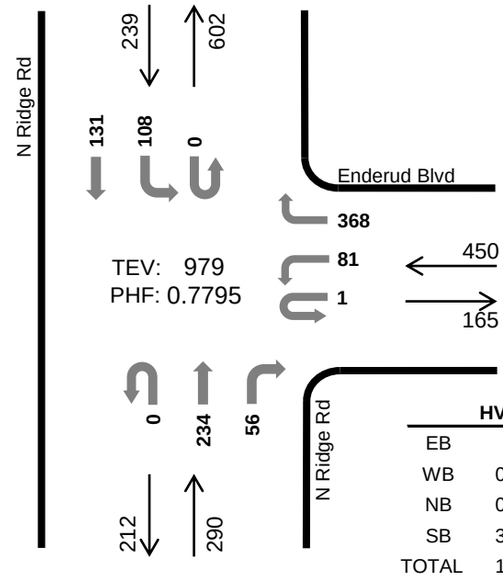
TJ Wethington
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N Ridge Rd
Enderud Blvd

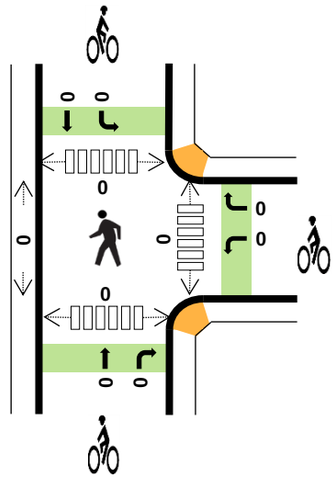
Date: 12/10/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV%	PHF
EB	--	--
WB	0%	0.80
NB	0%	0.75
SB	3%	0.78
TOTAL	1%	0.78



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Enderud Blvd				N Ridge Rd				N Ridge Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	0	0	0	0	10	0	72	0	0	39	13	0	16	28	0	178	0
8:15 AM		0	0	0	0	0	16	0	81	0	0	55	15	0	27	25	0	219	0
8:30 AM		0	0	0	0	1	21	0	109	0	0	59	12	0	35	31	0	268	0
8:45 AM		0	0	0	0	0	34	0	106	0	0	81	16	0	30	47	0	314	979
Pk Hr	All	0	0	0	0	1	81	0	368	0	0	234	56	0	108	131	0	979	
	HV	0	0	0	0	0	0	0	2	0	0	0	1	0	4	4	0	11	
	HV%	-	-	-	-	0%	0%	-	1%	-	-	0%	2%	-	4%	3%	-	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	0	0	0	3	*3*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	2	1	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	2	1	8	*11*	0	0	0	0	*0*	0	0	0	0	*0*

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Count Summaries - All Vehicles

Interval Start	n/a				Enderud Blvd				N Ridge Rd				N Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	11	0	59	0	0	43	2	0	7	12	0	134	0
7:15 AM	0	0	0	0	0	12	0	53	0	0	42	6	0	12	18	0	143	0
7:30 AM	0	0	0	0	2	11	0	64	0	0	46	11	0	15	11	0	160	0
7:45 AM	0	0	0	0	1	21	0	71	0	0	47	9	0	16	20	0	185	622
8:00 AM	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**72**	**0**	**0**	**39**	**13**	**0**	**16**	**28**	**0**	**178**	**666**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**81**	**0**	**0**	**55**	**15**	**0**	**27**	**25**	**0**	**219**	**742**
8:30 AM	**0**	**0**	**0**	**0**	**1**	**21**	**0**	**109**	**0**	**0**	**59**	**12**	**0**	**35**	**31**	**0**	**268**	**850**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**34**	**0**	**106**	**0**	**0**	**81**	**16**	**0**	**30**	**47**	**0**	**314**	**979**
Count Total	0	0	0	0	4	136	0	615	0	0	412	84	0	158	192	0	1,601	
Pk Hr All	**0**	**0**	**0**	**0**	**1**	**81**	**0**	**368**	**0**	**0**	**234**	**56**	**0**	**108**	**131**	**0**	**979**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**4**	**4**	**0**	**11**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**1%**	**-**	**-**	**0%**	**2%**	**-**	**4%**	**3%**	**-**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	2	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**0**	**0**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**2**	**1**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	5	1	10	*16*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**2**	**1**	**8**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Enderud Blvd				N Ridge Rd				N Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:30 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2	5
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**3**	**8**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	**9**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**4**	**11**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	**11**
Count Total	0	0	0	0	2	0	0	3	0	0	0	1	0	4	6	0	16	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**4**	**4**	**0**	**11**	

Count Summaries - Bikes

Interval Start	n/a				Enderud Blvd				N Ridge Rd				N Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

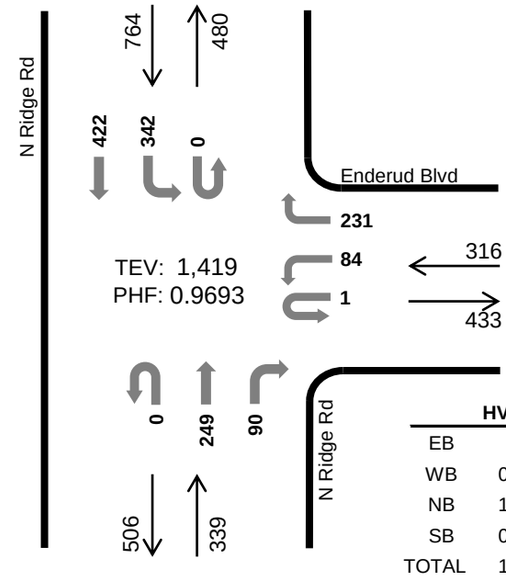
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N Ridge Rd
Enderud Blvd

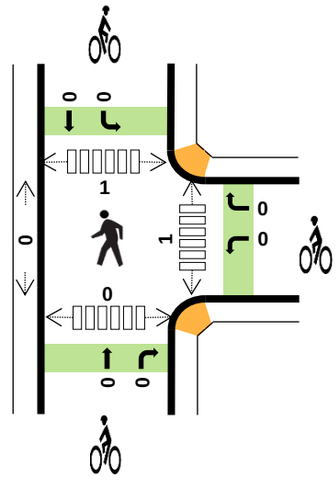
Date: 12/10/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM

N

Peak Hour



	HV%	PHF
EB	--	--
WB	0%	0.83
NB	1%	0.86
SB	0%	0.90
TOTAL	1%	0.97



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Enderud Blvd				N Ridge Rd				N Ridge Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	1	22	0	72	0	0	76	22	0	78	94	0	365	0
4:15 PM		0	0	0	0	0	21	0	51	0	0	61	15	0	98	115	0	361	0
4:30 PM		0	0	0	0	0	20	0	57	0	0	61	31	0	86	111	0	366	0
4:45 PM		0	0	0	0	0	21	0	51	0	0	51	22	0	80	102	0	327	1,419
Pk Hr	All	0	0	0	0	1	84	0	231	0	0	249	90	0	342	422	0	1,419	
	HV	0	0	0	0	0	1	0	0	0	0	3	2	0	0	2	0	8	
	HV%	-	-	-	-	0%	1%	-	0%	-	-	1%	2%	-	0%	0%	-	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	1	2	*3*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	1	3	0	*4*	0	0	0	0	*0*	1	0	0	0	*1*
4:30 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	1	0	*1*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	1	5	2	*8*	0	0	0	0	*0*	1	0	1	0	*2*

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Count Summaries - All Vehicles

Interval Start	n/a				Enderud Blvd				N Ridge Rd				N Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**1**	**22**	**0**	**72**	**0**	**0**	**76**	**22**	**0**	**78**	**94**	**0**	**365**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**51**	**0**	**0**	**61**	**15**	**0**	**98**	**115**	**0**	**361**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**57**	**0**	**0**	**61**	**31**	**0**	**86**	**111**	**0**	**366**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**51**	**0**	**0**	**51**	**22**	**0**	**80**	**102**	**0**	**327**	**1,419**
5:00 PM	0	0	0	0	0	11	0	52	0	0	59	27	0	92	104	0	345	1,399
5:15 PM	0	0	0	0	0	17	0	52	0	0	53	28	0	81	91	0	322	1,360
5:30 PM	0	0	0	0	1	15	0	46	0	0	52	18	0	98	84	0	314	1,308
5:45 PM	0	0	0	0	0	14	0	66	0	0	46	15	0	89	81	0	311	1,292
Count Total	0	0	0	0	2	141	0	447	0	0	459	178	0	702	782	0	2,711	
	All	**0**	**0**	**0**	**0**	**1**	**84**	**0**	**231**	**0**	**0**	**249**	**90**	**0**	**342**	**422**	**0**	**1,419**	
Pk Hr	**HV**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**2**	**0**	**8**	
	HV%	**-**	**-**	**-**	**-**	**0%**	**1%**	**-**	**0%**	**-**	**-**	**1%**	**2%**	**-**	**0%**	**0%**	**-**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	**0**	**0**	**1**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:15 PM	**0**	**1**	**3**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
4:30 PM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	1	1	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	2	8	3	*13*	0	0	0	0	*0*	1	0	1	0	*2*
Peak Hour	**0**	**1**	**5**	**2**	***8***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	**2**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Enderud Blvd				N Ridge Rd				N Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**4**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	6
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	3	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	5
Count Total	0	0	0	0	0	2	0	0	0	0	4	4	0	0	3	0	13	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**2**	**0**	**8**	

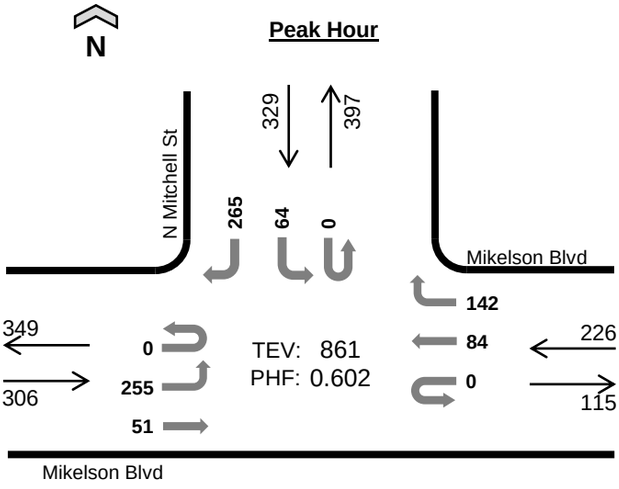
Count Summaries - Bikes

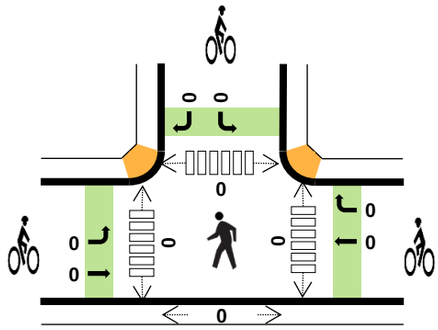
Interval Start	n/a				Enderud Blvd				N Ridge Rd				N Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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N Mitchell St
Mikelson Blvd

Date: 12/10/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV%	PHF
EB	2%	0.61
WB	2%	0.53
NB	--	--
SB	2%	0.57
TOTAL	2%	0.60

Peak Hour Count Summaries

Peak Hour Interval Start		Mikelson Blvd Eastbound				Mikelson Blvd Westbound				n/a Northbound				N Mitchell St Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	11	7	0	0	0	11	6	0	0	0	0	0	2	0	11	48	0
8:15 AM		0	48	8	0	0	0	16	19	0	0	0	0	0	8	0	47	146	0
8:30 AM		0	112	14	0	0	0	25	42	0	0	0	0	0	19	0	98	310	0
8:45 AM		0	84	22	0	0	0	32	75	0	0	0	0	0	35	0	109	357	861
Pk Hr	All	0	255	51	0	0	0	84	142	0	0	0	0	0	64	0	265	861	
	HV	0	5	1	0	0	0	0	4	0	0	0	0	0	2	0	5	17	
	HV%	-	2%	2%	-	-	-	0%	3%	-	-	-	-	-	3%	-	2%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	1	2	0	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	4	1	0	2	*7*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	1	0	3	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	6	4	0	7	*17*	0	0	0	0	*0*	0	0	0	0	*0*

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Count Summaries - All Vehicles

Interval Start	Mikelson Blvd				Mikelson Blvd				n/a				N Mitchell St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	7	0	0	0	19	1	0	0	0	0	0	1	0	15	44	0
7:15 AM	0	3	6	0	0	0	10	6	0	0	0	0	0	3	0	7	35	0
7:30 AM	0	2	10	0	0	0	12	4	0	0	0	0	0	1	0	13	42	0
7:45 AM	0	13	7	0	0	0	13	8	0	0	0	0	0	0	0	8	49	170
8:00 AM	**0**	**11**	**7**	**0**	**0**	**0**	**11**	**6**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**11**	**48**	**174**
8:15 AM	**0**	**48**	**8**	**0**	**0**	**0**	**16**	**19**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**47**	**146**	**285**
8:30 AM	**0**	**112**	**14**	**0**	**0**	**0**	**25**	**42**	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**98**	**310**	**553**
8:45 AM	**0**	**84**	**22**	**0**	**0**	**0**	**32**	**75**	**0**	**0**	**0**	**0**	**0**	**35**	**0**	**109**	**357**	**861**
Count Total	0	274	81	0	0	0	138	161	0	0	0	0	0	69	0	308	1,031	
Pk Hr All	**0**	**255**	**51**	**0**	**0**	**0**	**84**	**142**	**0**	**0**	**0**	**0**	**0**	**64**	**0**	**265**	**861**	
Pk Hr HV	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**17**	
Pk Hr HV%	**-**	**2%**	**2%**	**-**	**-**	**-**	**0%**	**3%**	**-**	**-**	**-**	**-**	**-**	**3%**	**-**	**2%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	**Total**	EB	WB	NB	SB	**Total**	E	W	N	S	**Total**
7:00 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**1**	**2**	**0**	**2**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**4**	**1**	**0**	**2**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**1**	**0**	**3**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	7	5	0	7	*19*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**6**	**4**	**0**	**7**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	Mikelson Blvd				Mikelson Blvd				n/a				N Mitchell St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
8:00 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**5**	**7**
8:30 AM	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**	**14**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**4**	**17**
Count Total	0	6	1	0	0	0	1	4	0	0	0	0	0	2	0	5	19	
Pk Hr Heavy	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**17**	

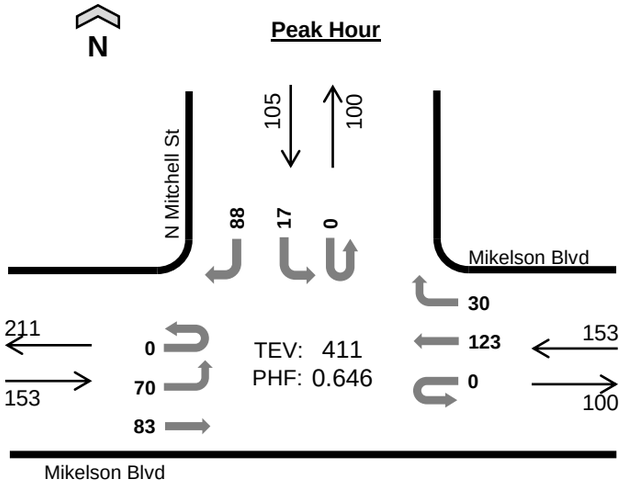
Count Summaries - Bikes

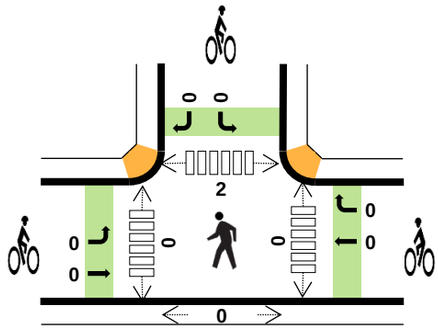
Interval Start	Mikelson Blvd				Mikelson Blvd				n/a				N Mitchell St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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N Mitchell St
Mikelson Blvd

Date: 12/10/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV%	PHF
EB	1%	0.91
WB	1%	0.59
NB	--	--
SB	0%	0.49
TOTAL	0%	0.65

Peak Hour Count Summaries

Peak Hour Interval Start		Mikelson Blvd Eastbound				Mikelson Blvd Westbound				n/a Northbound				N Mitchell St Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		**0**	**20**	**20**	**0**	**0**	**0**	**55**	**10**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**46**	**159**	**0**
4:15 PM		**0**	**18**	**24**	**0**	**0**	**0**	**24**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**83**	**0**
4:30 PM		**0**	**17**	**18**	**0**	**0**	**0**	**29**	**9**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**19**	**97**	**0**
4:45 PM		**0**	**15**	**21**	**0**	**0**	**0**	**15**	**7**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**10**	**72**	**411**
Pk Hr	All	**0**	**70**	**83**	**0**	**0**	**0**	**123**	**30**	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**88**	**411**	
	HV	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	
	HV%	-	**0%**	**1%**	-	-	-	**1%**	**0%**	-	-	-	-	-	**0%**	-	**0%**	**0%**	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) E	W	N	S	Total
4:00 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	***2***
4:15 PM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Peak Hour	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	***2***

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Count Summaries - All Vehicles

Interval Start	Mikelson Blvd				Mikelson Blvd				n/a				N Mitchell St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**20**	**20**	**0**	**0**	**0**	**55**	**10**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**46**	**159**	0
4:15 PM	**0**	**18**	**24**	**0**	**0**	**0**	**24**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**83**	**0**
4:30 PM	**0**	**17**	**18**	**0**	**0**	**0**	**29**	**9**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**19**	**97**	**0**
4:45 PM	**0**	**15**	**21**	**0**	**0**	**0**	**15**	**7**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**10**	**72**	**411**
5:00 PM	0	10	25	0	0	0	19	4	0	0	0	0	0	3	0	8	69	321
5:15 PM	0	10	22	0	0	0	26	3	0	0	0	0	0	3	0	5	69	307
5:30 PM	0	18	29	0	0	0	13	4	0	0	0	0	0	0	0	7	71	281
5:45 PM	1	21	33	0	0	0	12	1	0	0	0	0	0	0	0	15	83	292
Count Total	1	129	192	0	0	0	193	42	0	0	0	0	0	23	0	123	703	
All	**0**	**70**	**83**	**0**	**0**	**0**	**123**	**30**	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**88**	**411**	
Pk Hr HV	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	
HV%	**-**	**0%**	**1%**	**-**	**-**	**-**	**1%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**0%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	**Total**	EB	WB	NB	SB	**Total**	E	W	N	S	**Total**
4:00 PM	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**
4:15 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	1	0	0	*2*	0	0	0	0	*0*	0	0	2	0	*2*
Peak Hour	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	**2**

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Count Summaries - Heavy Vehicles

Interval Start	Mikelson Blvd				Mikelson Blvd				n/a				N Mitchell St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	
Pk Hr Heavy	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	

Count Summaries - Bikes

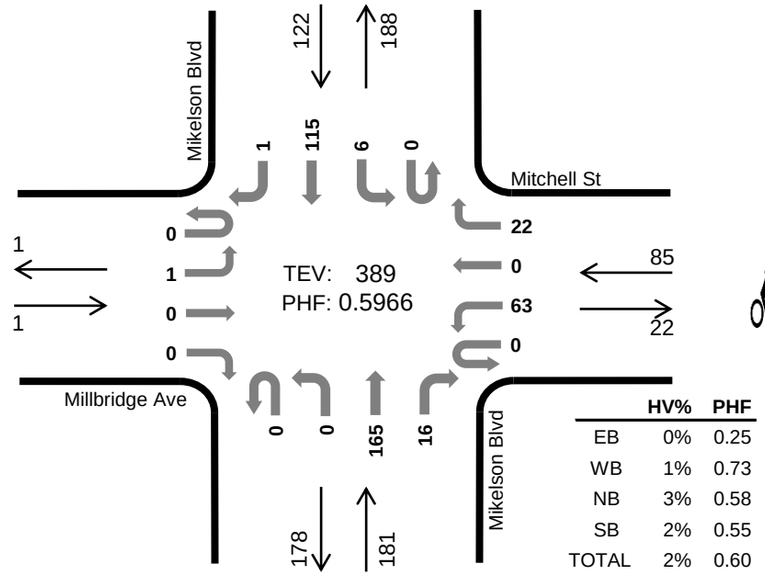
Interval Start	Mikelson Blvd				Mikelson Blvd				n/a				N Mitchell St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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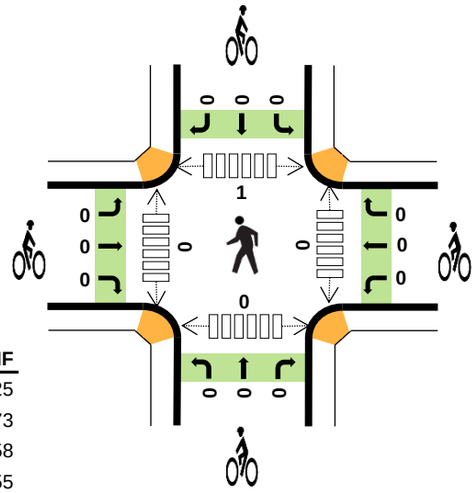
Mikelson Blvd
Mitchell St

Peak Hour

Date: 12/10/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV%	PHF
EB	0%	0.25
WB	1%	0.73
NB	3%	0.58
SB	2%	0.55
TOTAL	2%	0.60



Peak Hour Count Summaries

Peak Hour Interval Start		Millbridge Ave (Eastbound)				Mitchell St (Westbound)				Mikelson Blvd (Northbound)				Mikelson Blvd (Southbound)				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	0	0	0	0	8	0	3	0	0	17	3	0	2	14	0	47	0
8:15 AM		0	0	0	0	0	15	0	4	0	0	29	5	0	1	15	1	70	0
8:30 AM		0	0	0	0	0	21	0	5	0	0	44	5	0	1	33	0	109	0
8:45 AM		0	1	0	0	0	19	0	10	0	0	75	3	0	2	53	0	163	389
Pk Hr	All	0	1	0	0	0	63	0	22	0	0	165	16	0	6	115	1	389	
	HV	0	0	0	0	0	0	0	1	0	0	4	1	0	1	1	0	8	
	HV%	-	0%	-	-	-	0%	-	5%	-	-	2%	6%	-	17%	1%	0%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	0	0	2	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	1	1	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	1	0	*1*
Peak Hour	0	1	5	2	*8*	0	0	0	0	*0*	0	0	1	0	*1*

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Count Summaries - All Vehicles

Interval Start	Millbridge Ave				Mitchell St				Mikelson Blvd				Mikelson Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	2	0	10	0	2	0	0	6	0	0	0	3	0	23	0
7:15 AM	0	0	0	0	0	7	0	0	0	0	12	0	0	1	11	0	31	0
7:30 AM	0	0	0	0	0	15	0	1	0	0	10	3	0	2	5	0	36	0
7:45 AM	0	1	0	0	0	12	0	2	0	0	9	2	0	1	8	0	35	125
8:00 AM	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**3**	**0**	**0**	**17**	**3**	**0**	**2**	**14**	**0**	**47**	**149**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**4**	**0**	**0**	**29**	**5**	**0**	**1**	**15**	**1**	**70**	**188**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**5**	**0**	**0**	**44**	**5**	**0**	**1**	**33**	**0**	**109**	**261**
8:45 AM	**0**	**1**	**0**	**0**	**0**	**19**	**0**	**10**	**0**	**0**	**75**	**3**	**0**	**2**	**53**	**0**	**163**	**389**
Count Total	0	2	0	2	0	107	0	27	0	0	202	21	0	10	142	1	514	
Pk Hr All	**0**	**1**	**0**	**0**	**0**	**63**	**0**	**22**	**0**	**0**	**165**	**16**	**0**	**6**	**115**	**1**	**389**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	**1**	**0**	**1**	**1**	**0**	**8**	
Pk Hr HV%	**-**	**0%**	**-**	**-**	**-**	**0%**	**-**	**5%**	**-**	**-**	**2%**	**6%**	**-**	**17%**	**1%**	**0%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	0	*1*
8:00 AM	**0**	**0**	**2**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**1**	**1**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
Count Total	0	1	5	2	*8*	0	0	0	0	*0*	0	0	2	0	*2*
Peak Hour	**0**	**1**	**5**	**2**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	**1**

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Count Summaries - Heavy Vehicles

Interval Start	Millbridge Ave				Mitchell St				Mikelson Blvd				Mikelson Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**3**	**3**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	**6**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**7**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**8**
Count Total	0	0	0	0	0	0	0	1	0	0	4	1	0	1	1	0	8	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	**1**	**0**	**1**	**1**	**0**	**8**	

Count Summaries - Bikes

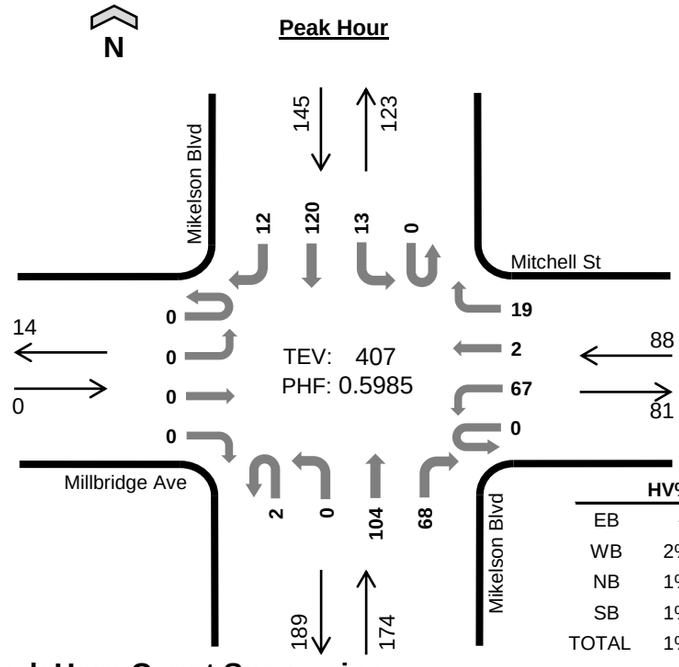
Interval Start	Millbridge Ave				Mitchell St				Mikelson Blvd				Mikelson Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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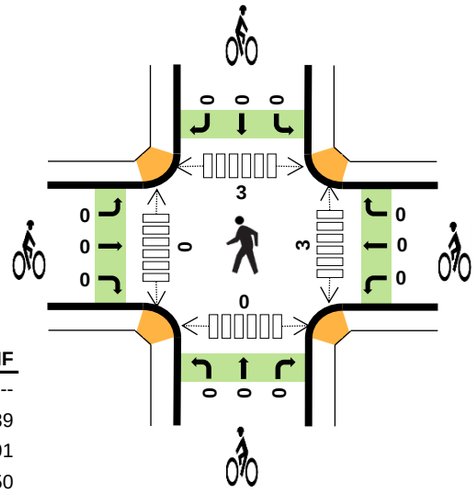
Mikelson Blvd
Mitchell St

Peak Hour

Date: 12/10/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV%	PHF
EB	--	--
WB	2%	0.39
NB	1%	0.91
SB	1%	0.50
TOTAL	1%	0.60



Peak Hour Count Summaries

Peak Hour Interval Start		Millbridge Ave (Eastbound)				Mitchell St (Westbound)				Mikelson Blvd (Northbound)				Mikelson Blvd (Southbound)				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		**0**	**0**	**0**	**0**	**0**	**42**	**2**	**12**	**1**	**0**	**24**	**16**	**0**	**6**	**59**	**8**	**170**	**0**
4:15 PM		**0**	**0**	**0**	**0**	**0**	**8**	**0**	**2**	**1**	**0**	**17**	**20**	**0**	**2**	**25**	**4**	**79**	**0**
4:30 PM		**0**	**0**	**0**	**0**	**0**	**11**	**0**	**2**	**0**	**0**	**29**	**18**	**0**	**2**	**18**	**0**	**80**	**0**
4:45 PM		**0**	**0**	**0**	**0**	**0**	**6**	**0**	**3**	**0**	**0**	**34**	**14**	**0**	**3**	**18**	**0**	**78**	**407**
Pk Hr	All	**0**	**0**	**0**	**0**	**0**	**67**	**2**	**19**	**2**	**0**	**104**	**68**	**0**	**13**	**120**	**12**	**407**	
	HV	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**5**	
	HV%	-	-	-	-	-	**3%**	**0%**	**0%**	**0%**	-	**2%**	**0%**	-	**0%**	**1%**	**0%**	**1%**	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	**0**	**2**	**0**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
4:15 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**2**	**0**	***3***
4:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:45 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	***2***
Peak Hour	**0**	**2**	**2**	**1**	***5***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**3**	**0**	***6***

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Count Summaries - All Vehicles

Interval Start	Millbridge Ave				Mitchell St				Mikelson Blvd				Mikelson Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**42**	**2**	**12**	**1**	**0**	**24**	**16**	**0**	**6**	**59**	**8**	**170**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**2**	**1**	**0**	**17**	**20**	**0**	**2**	**25**	**4**	**79**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**2**	**0**	**0**	**29**	**18**	**0**	**2**	**18**	**0**	**80**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**3**	**0**	**0**	**34**	**14**	**0**	**3**	**18**	**0**	**78**	**407**
5:00 PM	0	0	0	1	0	6	0	2	0	1	21	25	0	2	22	1	81	318
5:15 PM	0	0	0	1	0	6	0	4	0	0	28	12	0	0	14	0	65	304
5:30 PM	0	0	0	0	0	7	1	2	0	0	19	16	0	2	10	1	58	282
5:45 PM	0	0	0	1	0	6	0	1	0	0	18	13	0	2	11	2	54	258
Count Total	0	0	0	3	0	92	3	28	2	1	190	134	0	19	177	16	665	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**67**	**2**	**19**	**2**	**0**	**104**	**68**	**0**	**13**	**120**	**12**	**407**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**5**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**3%**	**0%**	**0%**	**0%**	**-**	**2%**	**0%**	**-**	**0%**	**1%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	**0**	**2**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
4:15 PM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**3**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**2**
5:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
5:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	2	2	2	*6*	0	0	0	0	*0*	5	0	3	0	*8*
Peak Hour	**0**	**2**	**2**	**1**	***5***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**3**	**0**	**6**

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Count Summaries - Heavy Vehicles

Interval Start	Millbridge Ave				Mitchell St				Mikelson Blvd				Mikelson Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	2	0	0	0	0	2	0	0	0	2	0	6	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**5**	

Count Summaries - Bikes

Interval Start	Millbridge Ave				Mitchell St				Mikelson Blvd				Mikelson Blvd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

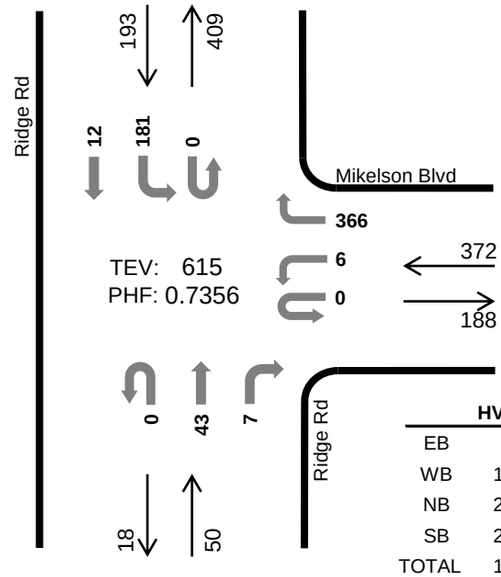
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Ridge Rd
Mikelson Blvd

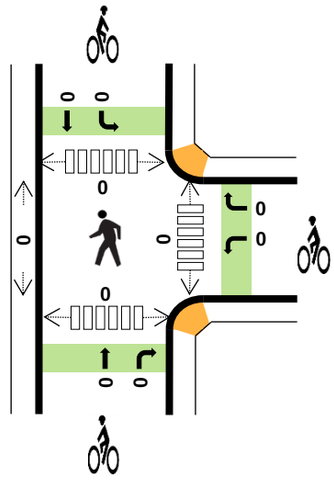
Date: 12/10/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour



	HV%	PHF
EB	--	--
WB	1%	0.76
NB	2%	0.69
SB	2%	0.65
TOTAL	1%	0.74



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Mikelson Blvd				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	0	0	0	0	1	0	68	0	0	10	2	0	30	1	0	112	0
8:15 AM		0	0	0	0	0	2	0	80	0	0	7	0	0	33	3	0	125	0
8:30 AM		0	0	0	0	0	1	0	98	0	0	16	2	0	47	5	0	169	0
8:45 AM		0	0	0	0	0	2	0	120	0	0	10	3	0	71	3	0	209	615
Pk Hr	All	0	0	0	0	0	6	0	366	0	0	43	7	0	181	12	0	615	
	HV	0	0	0	0	0	0	0	2	0	0	1	0	0	4	0	0	7	
	HV%	-	-	-	-	-	0%	-	1%	-	-	2%	0%	-	2%	0%	-	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	1	1	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	2	1	4	*7*	0	0	0	0	*0*	0	0	0	0	*0*

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Count Summaries - All Vehicles

Interval Start	n/a				Mikelson Blvd				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	51	0	0	13	0	0	12	1	0	77	0
7:15 AM	0	0	0	0	0	1	0	72	0	0	7	2	0	16	2	0	100	0
7:30 AM	0	0	0	0	0	0	0	52	0	0	6	0	0	17	3	0	78	0
7:45 AM	0	0	0	0	0	2	0	57	0	0	13	3	0	18	2	0	95	350
8:00 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**68**	**0**	**0**	**10**	**2**	**0**	**30**	**1**	**0**	**112**	**385**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**80**	**0**	**0**	**7**	**0**	**0**	**33**	**3**	**0**	**125**	**410**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**98**	**0**	**0**	**16**	**2**	**0**	**47**	**5**	**0**	**169**	**501**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**120**	**0**	**0**	**10**	**3**	**0**	**71**	**3**	**0**	**209**	**615**
Count Total	0	0	0	0	0	9	0	598	0	0	82	12	0	244	20	0	965	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**366**	**0**	**0**	**43**	**7**	**0**	**181**	**12**	**0**	**615**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**4**	**0**	**0**	**7**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**1%**	**-**	**-**	**2%**	**0%**	**-**	**2%**	**0%**	**-**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	**Total**	EB	WB	NB	SB	**Total**	E	W	N	S	**Total**
7:00 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**1**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**1**	**1**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	3	1	7	*11*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**2**	**1**	**4**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Mikelson Blvd				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	4
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**4**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**4**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**3**	**7**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**7**
Count Total	0	0	0	0	0	0	0	3	0	0	1	0	0	6	1	0	11	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**4**	**0**	**0**	**7**	

Count Summaries - Bikes

Interval Start	n/a				Mikelson Blvd				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

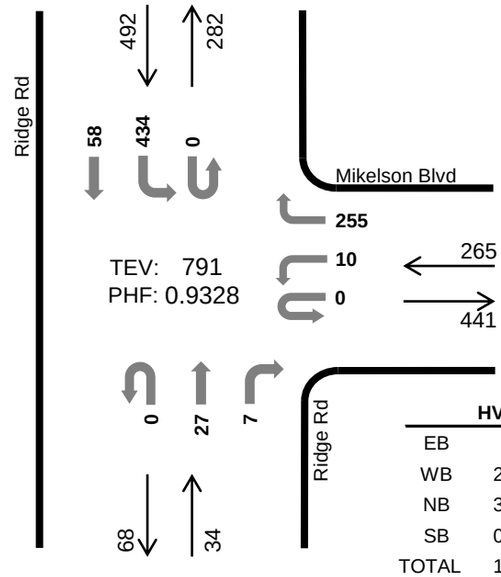
TJ Wethington
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Ridge Rd
Mikelson Blvd

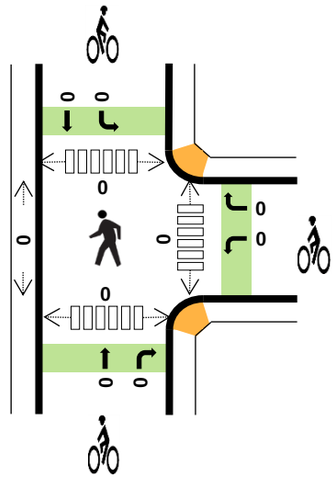
Date: 12/10/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM

N

Peak Hour



	HV%	PHF
EB	--	--
WB	2%	0.74
NB	3%	0.65
SB	0%	0.86
TOTAL	1%	0.93



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Mikelson Blvd				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	0	0	0	0	0	0	48	0	0	10	3	0	120	23	0	204	0
4:45 PM		0	0	0	0	0	3	0	75	0	0	2	1	0	108	3	0	192	0
5:00 PM		0	0	0	0	0	5	0	84	0	0	4	2	0	99	18	0	212	0
5:15 PM		0	0	0	0	0	2	0	48	0	0	11	1	0	107	14	0	183	791
Pk Hr	All	0	0	0	0	0	10	0	255	0	0	27	7	0	434	58	0	791	
	HV	0	0	0	0	0	0	0	4	0	0	1	0	0	0	0	0	5	
	HV%	-	-	-	-	-	0%	-	2%	-	-	4%	0%	-	0%	0%	-	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	3	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	4	1	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*

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Count Summaries - All Vehicles

Interval Start	n/a				Mikelson Blvd				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	9	0	30	0	0	11	1	0	88	14	0	153	0
4:15 PM	0	0	0	0	0	6	0	35	0	0	6	4	0	92	20	0	163	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**48**	**0**	**0**	**10**	**3**	**0**	**120**	**23**	**0**	**204**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**75**	**0**	**0**	**2**	**1**	**0**	**108**	**3**	**0**	**192**	**712**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**84**	**0**	**0**	**4**	**2**	**0**	**99**	**18**	**0**	**212**	**771**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**48**	**0**	**0**	**11**	**1**	**0**	**107**	**14**	**0**	**183**	**791**
5:30 PM	0	0	0	0	0	0	0	62	0	0	10	7	0	101	9	0	189	776
5:45 PM	0	0	0	0	0	1	0	56	0	0	7	6	0	93	11	0	174	758
Count Total	0	0	0	0	0	26	0	438	0	0	61	25	0	808	112	0	1,470	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**255**	**0**	**0**	**27**	**7**	**0**	**434**	**58**	**0**	**791**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**2%**	**-**	**-**	**4%**	**0%**	**-**	**0%**	**0%**	**-**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**3**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	4	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	9	3	0	*12*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**4**	**1**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Mikelson Blvd				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**6**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**6**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	6
Count Total	0	0	0	0	0	1	0	8	0	0	2	1	0	0	0	0	12	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	

Count Summaries - Bikes

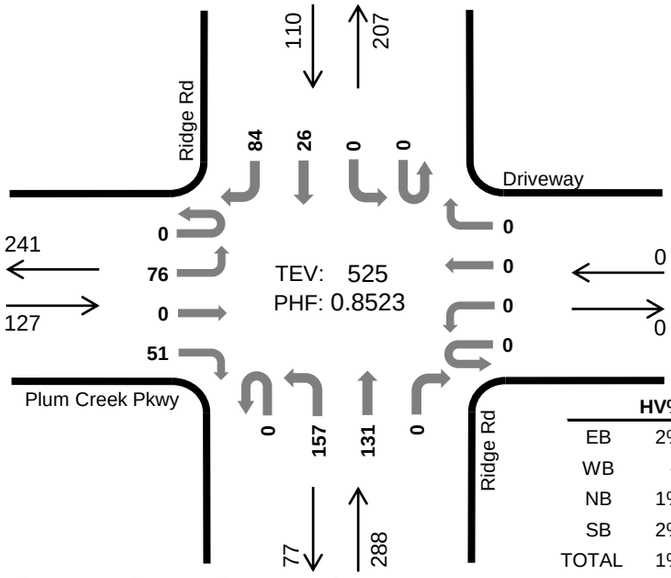
Interval Start	n/a				Mikelson Blvd				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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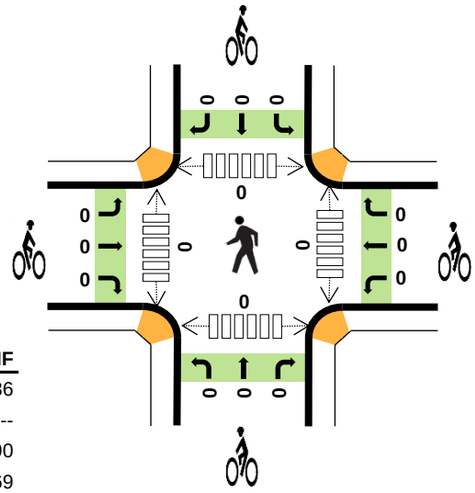
Ridge Rd
Driveway

Date: 12/10/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

Peak Hour



	HV%	PHF
EB	2%	0.86
WB	--	--
NB	1%	0.90
SB	2%	0.69
TOTAL	1%	0.85



Peak Hour Count Summaries

Peak Hour Interval Start		Plum Creek Pkwy (Eastbound)				Driveway (Westbound)				Ridge Rd (Northbound)				Ridge Rd (Southbound)				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	18	0	7	0	0	0	0	0	40	31	0	0	0	5	15	116	0
8:15 AM		0	16	0	15	0	0	0	0	0	42	33	0	0	0	5	21	132	0
8:30 AM		0	23	0	14	0	0	0	0	0	36	26	0	0	0	7	17	123	0
8:45 AM		0	19	0	15	0	0	0	0	0	39	41	0	0	0	9	31	154	525
Pk Hr	All	0	76	0	51	0	0	0	0	0	157	131	0	0	0	26	84	525	
	HV	0	0	0	2	0	0	0	0	0	1	2	0	0	0	1	1	7	
	HV%	-	0%	-	4%	-	-	-	-	-	1%	2%	-	-	-	4%	1%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	1	0	2	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	2	0	3	2	*7*	0	0	0	0	*0*	0	0	0	0	*0*

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Count Summaries - All Vehicles

Interval Start	Plum Creek Pkwy				Driveway				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	10	0	1	0	0	0	0	0	23	15	0	0	0	5	8	62	0
7:15 AM	0	9	0	4	0	0	0	0	0	37	27	0	0	0	4	10	91	0
7:30 AM	0	15	0	6	0	0	0	0	0	30	16	0	0	0	4	6	77	0
7:45 AM	0	13	0	9	0	0	0	0	0	39	37	0	0	0	6	18	122	352
8:00 AM	**0**	**18**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**40**	**31**	**0**	**0**	**0**	**5**	**15**	**116**	**406**
8:15 AM	**0**	**16**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**42**	**33**	**0**	**0**	**0**	**5**	**21**	**132**	**447**
8:30 AM	**0**	**23**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**36**	**26**	**0**	**0**	**0**	**7**	**17**	**123**	**493**
8:45 AM	**0**	**19**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**39**	**41**	**0**	**0**	**0**	**9**	**31**	**154**	**525**
Count Total	0	123	0	71	0	0	0	0	0	286	226	0	0	0	45	126	877	
Pk Hr All	**0**	**76**	**0**	**51**	**0**	**0**	**0**	**0**	**0**	**157**	**131**	**0**	**0**	**0**	**26**	**84**	**525**	
Pk Hr HV	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**1**	**1**	**7**	
Pk Hr HV%	**-**	**0%**	**-**	**4%**	**-**	**-**	**-**	**-**	**-**	**1%**	**2%**	**-**	**-**	**-**	**4%**	**1%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	2	0	0	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**1**	**0**	**2**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	5	0	5	3	*13*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**2**	**0**	**3**	**2**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	Plum Creek Pkwy				Driveway				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6
8:00 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**
8:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1**	**4**	**9**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	**7**
Count Total	0	3	0	2	0	0	0	0	0	3	2	0	0	0	1	2	13	
Pk Hr Heavy	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**1**	**1**	**7**	

Count Summaries - Bikes

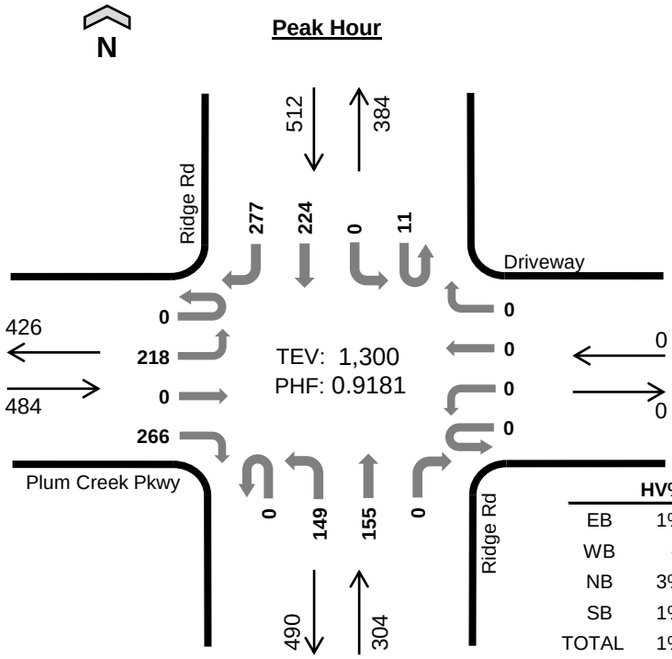
Interval Start	Plum Creek Pkwy				Driveway				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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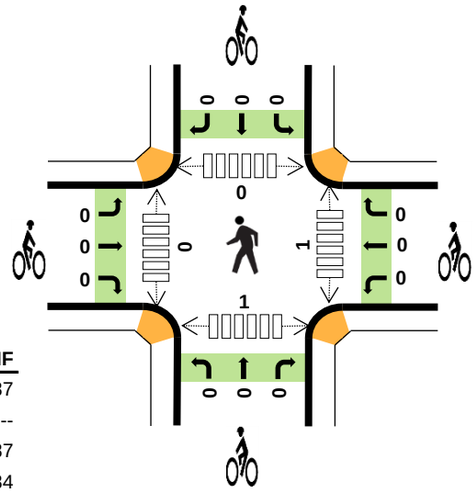
Ridge Rd
Driveway

Date: 12/10/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Peak Hour



	HV%	PHF
EB	1%	0.87
WB	--	--
NB	3%	0.87
SB	1%	0.84
TOTAL	1%	0.92



Peak Hour Count Summaries

Peak Hour Interval Start		Plum Creek Pkwy (Eastbound)				Driveway (Westbound)				Ridge Rd (Northbound)				Ridge Rd (Southbound)				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:45 PM		0	67	0	72	0	0	0	0	0	33	36	0	7	0	46	54	315	0
5:00 PM		0	51	0	54	0	0	0	0	0	41	46	0	3	0	39	72	306	0
5:15 PM		0	44	0	62	0	0	0	0	0	45	35	0	0	0	62	77	325	0
5:30 PM		0	56	0	78	0	0	0	0	0	30	38	0	1	0	77	74	354	1,300
Pk Hr	All	0	218	0	266	0	0	0	0	0	149	155	0	11	0	224	277	1,300	
	HV	0	3	0	2	0	0	0	0	0	6	3	0	0	0	1	3	18	
	HV%	-	1%	-	1%	-	-	-	-	-	4%	2%	-	0%	-	0%	1%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:45 PM	1	0	4	2	*7*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	1	0	0	2	*3*	0	0	0	0	*0*	1	0	0	1	*2*
5:15 PM	1	0	5	0	*6*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	2	0	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	5	0	9	4	*18*	0	0	0	0	*0*	1	0	0	1	*2*

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Count Summaries - All Vehicles

Interval Start	Plum Creek Pkwy				Driveway				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	38	0	35	0	0	0	0	0	54	44	0	1	0	41	64	277	0
4:15 PM	0	57	0	69	0	0	0	1	0	27	25	1	0	0	39	65	284	0
4:30 PM	0	62	0	61	0	0	0	1	0	45	31	0	1	0	47	97	345	0
4:45 PM	**0**	**67**	**0**	**72**	**0**	**0**	**0**	**0**	**0**	**33**	**36**	**0**	**7**	**0**	**46**	**54**	**315**	**1,221**
5:00 PM	**0**	**51**	**0**	**54**	**0**	**0**	**0**	**0**	**0**	**41**	**46**	**0**	**3**	**0**	**39**	**72**	**306**	**1,250**
5:15 PM	**0**	**44**	**0**	**62**	**0**	**0**	**0**	**0**	**0**	**45**	**35**	**0**	**0**	**0**	**62**	**77**	**325**	**1,291**
5:30 PM	**0**	**56**	**0**	**78**	**0**	**0**	**0**	**0**	**0**	**30**	**38**	**0**	**1**	**0**	**77**	**74**	**354**	**1,300**
5:45 PM	0	45	0	61	0	0	0	0	0	26	28	0	0	0	48	59	267	1,252
Count Total	0	420	0	492	0	0	0	2	0	301	283	1	13	0	399	562	2,473	
Pk Hr All	**0**	**218**	**0**	**266**	**0**	**0**	**0**	**0**	**0**	**149**	**155**	**0**	**11**	**0**	**224**	**277**	**1,300**	
Pk Hr HV	**0**	**3**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**3**	**0**	**0**	**0**	**1**	**3**	**18**	
Pk Hr HV%	**-**	**1%**	**-**	**1%**	**-**	**-**	**-**	**-**	**-**	**4%**	**2%**	**-**	**0%**	**-**	**0%**	**1%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	1	0	1	3	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	1	0	0	3	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	3	0	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**1**	**0**	**4**	**2**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**1**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**2**
5:15 PM	**1**	**0**	**5**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	10	0	10	10	*30*	0	0	0	0	*0*	1	0	0	1	*2*
Peak Hour	**5**	**0**	**9**	**4**	***18***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**1**	**2**

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Count Summaries - Heavy Vehicles

Interval Start	Plum Creek Pkwy				Driveway				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	2	5	0
4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2	4	0
4:30 PM	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
4:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**1**	**1**	**7**	**19**
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**17**
5:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**19**
5:30 PM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**18**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Count Total	0	5	0	5	0	0	0	0	0	7	3	0	0	0	3	7	30	
Pk Hr Heavy	**0**	**3**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**3**	**0**	**0**	**0**	**1**	**3**	**18**	

Count Summaries - Bikes

Interval Start	Plum Creek Pkwy				Driveway				Ridge Rd				Ridge Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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Location: Mikelson Blvd W/O N Mitchell St
Date Range: 12/11/2024 - 12/17/2024
Site Code: 01

Time	Wednesday 12/11/2024			Thursday 12/12/2024			Friday 12/13/2024			Saturday 12/14/2024			Sunday 12/15/2024			Monday 12/16/2024			Tuesday 12/17/2024			Mid-Week Average		
	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	5	2	7	6	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	2	8
1:00 AM	3	2	5	5	3	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	3	7
2:00 AM	2	4	6	2	5	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	7
3:00 AM	1	6	7	1	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6	7
4:00 AM	1	19	20	2	21	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	20	22
5:00 AM	8	54	62	11	56	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	55	65
6:00 AM	116	167	283	119	165	284	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	118	166	284
7:00 AM	**275**	**404**	**679**	**249**	**410**	**659**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**262**	**407**	**669**
8:00 AM	95	140	235	133	159	292	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	114	150	264
9:00 AM	67	161	228	82	147	229	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	154	229
10:00 AM	66	95	161	62	89	151	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64	92	156
11:00 AM	63	84	147	76	93	169	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70	89	158
12:00 PM	78	87	165	83	101	184	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81	94	175
1:00 PM	99	112	211	98	89	187	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99	101	199
2:00 PM	227	**229**	**456**	211	**229**	**440**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	219	**229**	**448**
3:00 PM	**232**	209	441	202	181	383	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	217	195	412
4:00 PM	183	228	411	173	216	389	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	178	222	400
5:00 PM	230	140	370	**240**	117	357	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**235**	129	364
6:00 PM	186	149	335	181	86	267	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	184	118	301
7:00 PM	140	178	318	123	133	256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	132	156	287
8:00 PM	98	42	140	61	40	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80	41	121
9:00 PM	44	27	71	46	31	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	29	74
10:00 PM	24	10	34	27	11	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	11	36
11:00 PM	9	4	13	11	4	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	4	14
Total	**2,252**	**2,553**	**4,805**	**2,204**	**2,394**	**4,598**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**2,228**	**2,474**	**4,702**
Percent	**47%**	**53%**		**48%**	**52%**		-	-		-	-		-	-		-	-		-	-		**47%**	**53%**	
AM Peak	07:00	07:00	07:00	07:00	07:00	07:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	07:00	07:00	07:00
Vol.	275	404	679	249	410	659	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	262	407	669
PM Peak	15:00	14:00	14:00	17:00	14:00	14:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17:00	14:00	14:00
Vol.	232	229	456	240	229	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	235	229	448

1. Mid-week average includes data between Tuesday and Thursday.

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Location: N Mitchell St N/O Mikelson Blvd
Date Range: 12/11/2024 - 12/17/2024
Site Code: 02

Time	Wednesday 12/11/2024			Thursday 12/12/2024			Friday 12/13/2024			Saturday 12/14/2024			Sunday 12/15/2024			Monday 12/16/2024			Tuesday 12/17/2024			Mid-Week Average		
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	1	1	2	4	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	4
1:00 AM	3	0	3	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0	2
2:00 AM	0	1	1	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	1
3:00 AM	1	2	3	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2
4:00 AM	1	9	10	1	11	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	10	11
5:00 AM	5	26	31	6	26	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	26	32
6:00 AM	141	117	258	139	125	264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140	121	261
7:00 AM	**359**	**377**	**736**	**345**	**381**	**726**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**352**	**379**	**731**
8:00 AM	47	80	127	56	88	144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	84	136
9:00 AM	38	71	109	44	77	121	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	74	115
10:00 AM	48	41	89	39	50	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	46	89
11:00 AM	34	52	86	42	54	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	53	91
12:00 PM	46	45	91	48	43	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47	44	91
1:00 PM	76	56	132	69	46	115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	73	51	124
2:00 PM	**232**	**201**	**433**	**225**	**184**	**409**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**229**	**193**	**421**
3:00 PM	154	182	336	110	147	257	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	132	165	297
4:00 PM	120	132	252	108	130	238	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	114	131	245
5:00 PM	176	99	275	147	68	215	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	162	84	245
6:00 PM	173	78	251	131	43	174	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152	61	213
7:00 PM	87	195	282	73	125	198	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80	160	240
8:00 PM	43	34	77	33	26	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	30	68
9:00 PM	28	22	50	24	24	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	23	49
10:00 PM	16	5	21	15	4	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	5	20
11:00 PM	4	0	4	4	2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	5
Total	**1,833**	**1,826**	**3,659**	**1,663**	**1,657**	**3,320**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1,748**	**1,742**	**3,490**
Percent	**50%**	**50%**		**50%**	**50%**		-	-		-	-		-	-		-	-		-	-		**50%**	**50%**	
AM Peak	07:00	07:00	07:00	07:00	07:00	07:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	07:00	07:00	07:00
Vol.	359	377	736	345	381	726	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	352	379	731
PM Peak	14:00	14:00	14:00	14:00	14:00	14:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14:00	14:00	14:00
Vol.	232	201	433	225	184	409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	229	193	421

1. Mid-week average includes data between Tuesday and Thursday.

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Intersection Capacity Worksheets: 2024 Existing

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	33	182	185	77	405	9	387	68	180	26	49
Future Volume (vph)	33	182	185	77	405	9	387	68	180	26	49
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6	4		4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	30.0	30.0	10.0	25.0
Total Split (s)	10.0	35.0	35.0	10.0	35.0	35.0	30.0	45.0	45.0	10.0	25.0
Total Split (%)	10.0%	35.0%	35.0%	10.0%	35.0%	35.0%	30.0%	45.0%	45.0%	10.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	34.1	29.3	29.3	35.1	31.3	31.3	42.8	37.2	37.2	18.2	13.2
Actuated g/C Ratio	0.38	0.32	0.32	0.39	0.34	0.34	0.47	0.41	0.41	0.20	0.15
v/c Ratio	0.17	0.39	0.36	0.21	0.71	0.02	0.92	0.12	0.32	0.14	0.69
Control Delay (s/veh)	18.8	28.3	5.4	19.0	35.8	0.0	42.8	19.4	3.8	17.9	34.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.8	28.3	5.4	19.0	35.8	0.0	42.8	19.4	3.8	17.9	34.6
LOS	B	C	A	B	D	A	D	B	A	B	C
Approach Delay (s/veh)		16.9			32.5			29.2			32.0
Approach LOS		B			C			C			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 90.9	
Natural Cycle: 85	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 27.5	Intersection LOS: C
Intersection Capacity Utilization 73.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

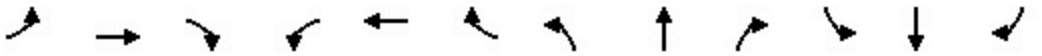




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	42	230	234	86	450	10	545	96	254	40	215
v/c Ratio	0.17	0.39	0.36	0.21	0.71	0.02	0.92	0.12	0.32	0.14	0.69
Control Delay (s/veh)	18.8	28.3	5.4	19.0	35.8	0.0	42.8	19.4	3.8	17.9	34.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.8	28.3	5.4	19.0	35.8	0.0	42.8	19.4	3.8	17.9	34.6
Queue Length 50th (ft)	14	106	0	30	240	0	240	38	0	13	73
Queue Length 95th (ft)	33	162	33	66	#434	0	243	55	15	21	86
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	130		120	185	
Base Capacity (vph)	251	588	658	418	634	647	602	836	852	285	432
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.39	0.36	0.21	0.71	0.02	0.91	0.11	0.30	0.14	0.50

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	182	185	77	405	9	387	68	180	26	49	91
Future Volume (veh/h)	33	182	185	77	405	9	387	68	180	26	49	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	42	230	234	86	450	10	545	96	254	40	75	140
Peak Hour Factor	0.79	0.79	0.79	0.90	0.90	0.90	0.71	0.71	0.71	0.65	0.65	0.65
Percent Heavy Veh, %	4	4	4	3	3	3	1	1	1	2	2	2
Cap, veh/h	234	568	480	355	597	505	587	726	615	297	90	168
Arrive On Green	0.04	0.31	0.31	0.05	0.32	0.32	0.27	0.39	0.39	0.03	0.15	0.15
Sat Flow, veh/h	1753	1841	1555	1767	1856	1570	1795	1885	1598	1781	581	1085
Grp Volume(v), veh/h	42	230	234	86	450	10	545	96	254	40	0	215
Grp Sat Flow(s),veh/h/ln	1753	1841	1555	1767	1856	1570	1795	1885	1598	1781	0	1667
Q Serve(g_s), s	1.5	9.3	11.5	3.1	20.4	0.4	22.9	3.1	10.9	1.8	0.0	11.8
Cycle Q Clear(g_c), s	1.5	9.3	11.5	3.1	20.4	0.4	22.9	3.1	10.9	1.8	0.0	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	234	568	480	355	597	505	587	726	615	297	0	257
V/C Ratio(X)	0.18	0.41	0.49	0.24	0.75	0.02	0.93	0.13	0.41	0.13	0.00	0.84
Avail Cap(c_a), veh/h	265	568	480	364	597	505	588	802	680	331	0	355
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.8	25.7	26.5	20.9	28.6	21.8	22.5	18.7	21.1	31.6	0.0	38.6
Incr Delay (d2), s/veh	0.4	2.1	3.5	0.3	8.6	0.1	21.2	0.1	0.4	0.2	0.0	11.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	4.0	4.6	1.2	9.6	0.2	12.4	1.3	4.0	0.8	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.1	27.8	30.0	21.3	37.2	21.8	43.7	18.8	21.6	31.8	0.0	50.3
LnGrp LOS	C	C	C	C	D	C	D	B	C	C		D
Approach Vol, veh/h		506			546			895			255	
Approach Delay, s/veh		28.4			34.4			34.7			47.4	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	35.0	8.2	41.2	8.3	36.2	29.9	19.5
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	29.0	5.0	40.0	5.0	29.0	25.0	20.0
Max Q Clear Time (g_c+I1), s	5.1	13.5	3.8	12.9	3.5	22.4	24.9	13.8
Green Ext Time (p_c), s	0.0	1.6	0.0	1.4	0.0	1.3	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	34.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	12.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	80	335	66	55	249	33
Future Vol, veh/h	80	335	66	55	249	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	62	62	64	64	71	71
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	129	540	103	86	351	46

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	871	95	0	0	189	0
Stage 1	146	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.14	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.22	-
Pot Cap-1 Maneuver	292	947	-	-	1382	-
Stage 1	869	-	-	-	-	-
Stage 2	443	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	217	947	-	-	1382	-
Mov Cap-2 Maneuver	217	-	-	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	329	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	19.42	0	7.51
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	217	947	1364	-
HCM Lane V/C Ratio	-	-	0.594	0.571	0.254	-
HCM Control Delay (s/veh)	-	-	43.2	13.7	8.5	0.1
HCM Lane LOS	-	-	E	B	A	A
HCM 95th %tile Q(veh)	-	-	3.4	3.7	1	-

Intersection	
Intersection Delay, s/veh	5.5
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	561	387	306
Demand Flow Rate, veh/h	561	387	315
Vehicles Circulating, veh/h	312	142	101
Vehicles Exiting, veh/h	217	274	772
Ped Vol Crossing Leg, #/h	1	1	1
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	7.2	4.3	4.0
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	L	TR	LT	TR	LT	TR
Assumed Moves	L	TR	LT	TR	LT	TR
RT Channelized						
Lane Util	0.180	0.820	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	101	460	182	205	148	167
Cap Entry Lane, veh/h	1013	1089	1185	1259	1230	1303
Entry HV Adj Factor	1.000	1.000	0.999	1.001	0.972	0.971
Flow Entry, veh/h	101	460	182	205	144	162
Cap Entry, veh/h	1012	1088	1183	1258	1194	1264
V/C Ratio	0.100	0.423	0.154	0.163	0.120	0.128
Control Delay, s/veh	4.4	7.8	4.4	4.2	4.0	3.9
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	2	1	1	0	0

Intersection						
Intersection Delay, s/veh	6.1					
Intersection LOS	A					

Approach	EB	WB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	502	426	577
Demand Flow Rate, veh/h	512	434	588
Vehicles Circulating, veh/h	114	426	161
Vehicles Exiting, veh/h	635	200	699
Ped Vol Crossing Leg, #/h	5	5	5
Ped Cap Adj	0.995	0.996	0.995
Approach Delay, s/veh	5.9	6.3	6.2
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	L	TR	LT	R	L	TR
RT Channelized						
Lane Util	0.832	0.168	0.371	0.629	0.194	0.806
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	426	86	161	273	114	474
Cap Entry Lane, veh/h	1215	1289	912	989	1164	1238
Entry HV Adj Factor	0.981	0.980	0.980	0.982	0.982	0.981
Flow Entry, veh/h	418	84	158	268	112	465
Cap Entry, veh/h	1186	1257	891	967	1138	1209
V/C Ratio	0.352	0.067	0.177	0.277	0.098	0.385
Control Delay, s/veh	6.4	3.4	5.8	6.5	4.0	6.8
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	0	1	1	0	2

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	63	0	22	0	165	16	6	115	1
Future Vol, veh/h	1	0	0	63	0	22	0	165	16	6	115	1
Conflicting Peds, #/hr	0	0	0	4	0	4	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	214	-	-	164	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	73	73	73	58	58	58	55	55	55
Heavy Vehicles, %	0	0	0	1	1	1	3	3	3	2	2	2
Mvmt Flow	4	0	0	86	0	30	0	284	28	11	209	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	378	548	109	433	535	164	211	0	0	316	0	0
Stage 1	232	232	-	302	302	-	-	-	-	-	-	-
Stage 2	146	316	-	130	233	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.52	6.52	6.92	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.52	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.52	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.51	4.01	3.31	2.23	-	-	2.22	-	-
Pot Cap-1 Maneuver	559	447	930	509	452	855	1350	-	-	1241	-	-
Stage 1	756	716	-	685	665	-	-	-	-	-	-	-
Stage 2	847	659	-	863	713	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	533	441	926	501	447	848	1350	-	-	1236	-	-
Mov Cap-2 Maneuver	533	441	-	501	447	-	-	-	-	-	-	-
Stage 1	749	710	-	682	663	-	-	-	-	-	-	-
Stage 2	814	656	-	852	707	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.81	13.1	0	0.39
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1350	-	-	533	560	1236	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.208	0.009	-	-
HCM Control Delay (s/veh)	0	-	-	11.8	13.1	7.9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.8	0	-	-

Intersection	
Int Delay, s/veh	9.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	366	43	7	181	12
Future Vol, veh/h	6	366	43	7	181	12
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	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	69	69	65	65
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	8	482	62	10	278	18

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	643	67	0	0	72	0
Stage 1	67	-	-	-	-	-
Stage 2	575	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.12	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	440	999	-	-	1528	-
Stage 1	958	-	-	-	-	-
Stage 2	565	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	359	999	-	-	1528	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	958	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.97	0	7.39
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	359	999	1512	-
HCM Lane V/C Ratio	-	-	0.022	0.482	0.182	-
HCM Control Delay (s/veh)	-	-	15.3	11.9	7.9	0
HCM Lane LOS	-	-	C	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	2.7	0.7	-

Intersection	
Intersection Delay, s/veh	3.4
Intersection LOS	A

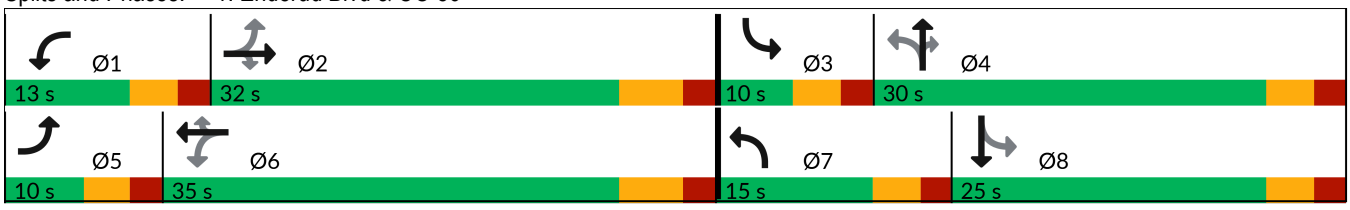
Approach	NB	SE	NW
Entry Lanes	2	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	147	160	320
Demand Flow Rate, veh/h	150	163	323
Vehicles Circulating, veh/h	39	176	90
Vehicles Exiting, veh/h	176	237	99
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.2	0.8	4.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Bypass	Left
Designated Moves	L	LTR	T	R	LT
Assumed Moves	L	LTR	T		LT
RT Channelized				Free	
Lane Util	0.533	0.467	1.000		1.000
Follow-Up Headway, s	2.667	2.535	2.535		2.535
Critical Headway, s	4.645	4.328	4.328		4.328
A (Intercept)	1350	1420	1420		1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4		8.501e-4
Entry Flow, veh/h	80	70	39	124	323
Cap Entry Lane, veh/h	1302	1374	1223	1938	1316
Entry HV Adj Factor	0.974	0.987	0.980	0.980	0.989
Flow Entry, veh/h	78	69	38	122	320
Cap Entry, veh/h	1268	1356	1199	1900	1301
V/C Ratio	0.061	0.051	0.032	0.064	0.246
Control Delay, s/veh	3.3	3.1	3.3	0.0	4.9
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	50	414	290	123	345	18	252	15	87	10	32
Future Volume (vph)	50	414	290	123	345	18	252	15	87	10	32
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6	4		4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	25.0	25.0	10.0	25.0
Total Split (s)	10.0	32.0	32.0	13.0	35.0	35.0	15.0	30.0	30.0	10.0	25.0
Total Split (%)	11.8%	37.6%	37.6%	15.3%	41.2%	41.2%	17.6%	35.3%	35.3%	11.8%	29.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	32.9	28.1	28.1	37.7	32.1	32.1	20.5	18.7	18.7	11.7	8.7
Actuated g/C Ratio	0.47	0.40	0.40	0.54	0.46	0.46	0.29	0.27	0.27	0.17	0.13
v/c Ratio	0.11	0.61	0.38	0.33	0.46	0.03	0.72	0.03	0.18	0.05	0.35
Control Delay (s/veh)	9.3	23.6	3.9	10.7	17.6	0.1	32.3	21.1	1.5	18.1	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.3	23.6	3.9	10.7	17.6	0.1	32.3	21.1	1.5	18.1	20.3
LOS	A	C	A	B	B	A	C	C	A	B	C
Approach Delay (s/veh)		15.1			15.2			24.3			20.0
Approach LOS		B			B			C			C

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 69.5	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay (s/veh): 17.3	Intersection LOS: B
Intersection Capacity Utilization 62.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

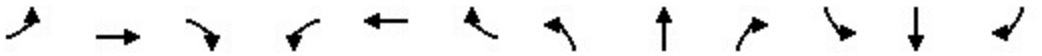




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	56	460	322	140	392	20	277	16	96	13	89
v/c Ratio	0.11	0.61	0.38	0.33	0.46	0.03	0.72	0.03	0.18	0.05	0.35
Control Delay (s/veh)	9.3	23.6	3.9	10.7	17.6	0.1	32.3	21.1	1.5	18.1	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.3	23.6	3.9	10.7	17.6	0.1	32.3	21.1	1.5	18.1	20.3
Queue Length 50th (ft)	11	174	0	29	131	0	100	5	0	4	17
Queue Length 95th (ft)	28	290	51	58	217	0	#173	21	7	13	47
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	130		120	185	
Base Capacity (vph)	487	759	837	441	861	797	387	682	685	264	533
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.61	0.38	0.32	0.46	0.03	0.72	0.02	0.14	0.05	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	414	290	123	345	18	252	15	87	10	32	39
Future Volume (veh/h)	50	414	290	123	345	18	252	15	87	10	32	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	56	460	322	140	392	20	277	16	96	12	40	49
Peak Hour Factor	0.90	0.90	0.90	0.88	0.88	0.88	0.91	0.91	0.91	0.80	0.80	0.80
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	1	1	1
Cap, veh/h	428	719	608	353	759	642	434	447	378	274	87	107
Arrive On Green	0.05	0.38	0.38	0.07	0.41	0.41	0.14	0.24	0.24	0.01	0.11	0.11
Sat Flow, veh/h	1795	1885	1593	1781	1870	1583	1781	1870	1585	1795	767	939
Grp Volume(v), veh/h	56	460	322	140	392	20	277	16	96	12	0	89
Grp Sat Flow(s),veh/h/ln	1795	1885	1593	1781	1870	1583	1781	1870	1585	1795	0	1706
Q Serve(g_s), s	1.3	14.3	11.2	3.3	11.3	0.5	9.5	0.5	3.5	0.4	0.0	3.5
Cycle Q Clear(g_c), s	1.3	14.3	11.2	3.3	11.3	0.5	9.5	0.5	3.5	0.4	0.0	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	428	719	608	353	759	642	434	447	378	274	0	194
V/C Ratio(X)	0.13	0.64	0.53	0.40	0.52	0.03	0.64	0.04	0.25	0.04	0.00	0.46
Avail Cap(c_a), veh/h	470	719	608	426	759	642	434	654	554	373	0	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.7	18.1	17.1	13.4	16.0	12.8	22.1	20.9	22.0	27.3	0.0	29.6
Incr Delay (d2), s/veh	0.1	4.3	3.3	0.7	2.5	0.1	3.1	0.0	0.3	0.1	0.0	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	5.9	4.3	1.1	4.4	0.2	4.0	0.2	1.3	0.2	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.9	22.4	20.4	14.1	18.5	12.9	25.2	20.9	22.4	27.4	0.0	31.3
LnGrp LOS	B	C	C	B	B	B	C	C	C	C		C
Approach Vol, veh/h		838			552			389			101	
Approach Delay, s/veh		21.0			17.2			24.3			30.8	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	33.3	6.1	22.1	8.4	35.0	15.0	13.1
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	8.0	26.0	5.0	25.0	5.0	29.0	10.0	20.0
Max Q Clear Time (g_c+I1), s	5.3	16.3	2.4	5.5	3.3	13.3	11.5	5.5
Green Ext Time (p_c), s	0.1	2.6	0.0	0.3	0.0	1.8	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	21.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	7.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	56	179	67	62	200	73
Future Vol, veh/h	56	179	67	62	200	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	72	72	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	78	249	73	67	217	79

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	581	70	0	0	140	0
Stage 1	107	-	-	-	-	-
Stage 2	474	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	447	981	-	-	1448	-
Stage 1	909	-	-	-	-	-
Stage 2	595	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	378	981	-	-	1448	-
Mov Cap-2 Maneuver	378	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	504	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.59	0	5.86
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	378	981	1416	-
HCM Lane V/C Ratio	-	-	0.206	0.253	0.15	-
HCM Control Delay (s/veh)	-	-	17	9.9	7.9	0.2
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	0.8	1	0.5	-

Intersection	
Intersection Delay, s/veh	6.5
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	394	452	979
Demand Flow Rate, veh/h	394	452	1008
Vehicles Circulating, veh/h	332	451	105
Vehicles Exiting, veh/h	571	662	621
Ped Vol Crossing Leg, #/h	1	1	1
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	5.6	6.3	6.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	L	TR	LT	TR	LT	TR
Assumed Moves	L	TR	LT	TR	LT	TR
RT Channelized						
Lane Util	0.266	0.734	0.469	0.531	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	105	289	212	240	474	534
Cap Entry Lane, veh/h	995	1071	891	968	1226	1299
Entry HV Adj Factor	1.000	1.000	1.002	0.998	0.971	0.971
Flow Entry, veh/h	105	289	212	240	460	519
Cap Entry, veh/h	994	1070	893	965	1188	1260
V/C Ratio	0.106	0.270	0.238	0.248	0.387	0.412
Control Delay, s/veh	4.6	6.0	6.5	6.2	6.9	6.9
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	1	1	1	2	2

Intersection	
Intersection Delay, s/veh	3.7
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	168	259	215
Demand Flow Rate, veh/h	170	262	215
Vehicles Circulating, veh/h	35	78	210
Vehicles Exiting, veh/h	390	127	130
Ped Vol Crossing Leg, #/h	5	5	5
Ped Cap Adj	0.994	0.995	0.995
Approach Delay, s/veh	3.2	3.7	4.2
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	LT	TR	LT	TR	L	TR
RT Channelized						
Lane Util	0.471	0.529	0.469	0.531	0.163	0.837
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	80	90	123	139	35	180
Cap Entry Lane, veh/h	1307	1378	1256	1329	1113	1188
Entry HV Adj Factor	0.988	0.990	0.989	0.987	1.000	1.000
Flow Entry, veh/h	79	89	122	137	35	180
Cap Entry, veh/h	1284	1357	1236	1305	1107	1182
V/C Ratio	0.062	0.066	0.098	0.105	0.032	0.152
Control Delay, s/veh	3.3	3.2	3.7	3.6	3.5	4.4
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0	1

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	67	2	19	0	104	68	13	120	12
Future Vol, veh/h	0	0	0	67	2	19	0	104	68	13	120	12
Conflicting Peds, #/hr	0	0	0	4	0	4	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	214	-	-	164	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	39	39	39	91	91	91	50	50	50
Heavy Vehicles, %	0	0	0	2	2	2	1	1	1	1	1	1
Mvmt Flow	0	0	0	172	5	49	0	114	75	26	240	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	368	497	136	332	472	103	264	0	0	193	0	0
Stage 1	304	304	-	156	156	-	-	-	-	-	-	-
Stage 2	64	193	-	176	316	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.54	6.54	6.94	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.52	4.02	3.32	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	569	477	894	598	489	933	1304	-	-	1385	-	-
Stage 1	686	667	-	831	768	-	-	-	-	-	-	-
Stage 2	945	745	-	809	654	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	521	467	891	582	478	926	1304	-	-	1380	-	-
Mov Cap-2 Maneuver	521	467	-	582	478	-	-	-	-	-	-	-
Stage 1	673	654	-	828	765	-	-	-	-	-	-	-
Stage 2	886	742	-	790	641	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	13.88	0	0.69
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1304	-	-	-	629	1380	-	-
HCM Lane V/C Ratio	-	-	-	-	0.358	0.019	-	-
HCM Control Delay (s/veh)	0	-	-	0	13.9	7.7	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	1.6	0.1	-	-

Intersection	
Int Delay, s/veh	8.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	255	27	7	434	58
Future Vol, veh/h	10	255	27	7	434	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	65	65	86	86
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	14	345	42	11	505	67

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1124	47	0	0	52	0
Stage 1	47	-	-	-	-	-
Stage 2	1077	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.1	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.2	-
Pot Cap-1 Maneuver	227	1022	-	-	1567	-
Stage 1	976	-	-	-	-	-
Stage 2	327	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	151	1022	-	-	1567	-
Mov Cap-2 Maneuver	151	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	218	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.09	0	7.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	151	1022	1508	-
HCM Lane V/C Ratio	-	-	0.089	0.337	0.322	-
HCM Control Delay (s/veh)	-	-	31.1	10.3	8.4	0
HCM Lane LOS	-	-	D	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	1.5	1.4	-

Intersection	
Intersection Delay, s/veh	4.5
Intersection LOS	A

Approach	NB	SE	NW
Entry Lanes	2	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	557	597	349
Demand Flow Rate, veh/h	563	603	359
Vehicles Circulating, veh/h	270	176	254
Vehicles Exiting, veh/h	176	437	579
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.8	2.2	6.3
Approach LOS	A	A	A

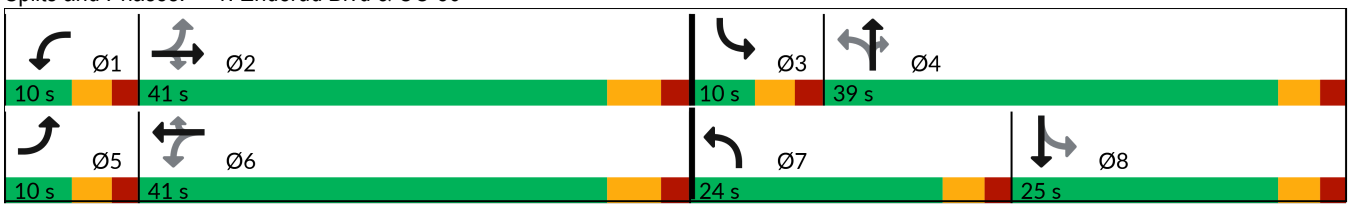
Lane	Left	Right	Left	Bypass	Left
Designated Moves	L	LTR	T	R	LT
Assumed Moves	L	TR	T		LT
RT Channelized				Free	
Lane Util	0.451	0.549	1.000		1.000
Follow-Up Headway, s	2.667	2.535	2.535		2.535
Critical Headway, s	4.645	4.328	4.328		4.328
A (Intercept)	1350	1420	1420		1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4		8.501e-4
Entry Flow, veh/h	254	309	270	333	359
Cap Entry Lane, veh/h	1053	1129	1223	1919	1144
Entry HV Adj Factor	0.988	0.990	0.990	0.990	0.971
Flow Entry, veh/h	251	306	267	330	349
Cap Entry, veh/h	1041	1118	1211	1900	1111
V/C Ratio	0.241	0.274	0.221	0.174	0.314
Control Delay, s/veh	5.8	5.8	4.9	0.0	6.3
LOS	A	A	A	A	A
95th %tile Queue, veh	1	1	1	1	1

Intersection Capacity Worksheets: 2030 Background

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	34	193	201	82	430	9	388	70	191	27	50
Future Volume (vph)	34	193	201	82	430	9	388	70	191	27	50
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6	4		4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	30.0	30.0	10.0	25.0
Total Split (s)	10.0	41.0	41.0	10.0	41.0	41.0	24.0	39.0	39.0	10.0	25.0
Total Split (%)	10.0%	41.0%	41.0%	10.0%	41.0%	41.0%	24.0%	39.0%	39.0%	10.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	40.1	35.2	35.2	41.1	37.2	37.2	34.0	30.2	30.2	15.4	10.4
Actuated g/C Ratio	0.46	0.40	0.40	0.47	0.42	0.42	0.39	0.34	0.34	0.18	0.12
v/c Ratio	0.11	0.29	0.29	0.16	0.60	0.01	0.84	0.12	0.30	0.11	0.58
Control Delay (s/veh)	13.0	20.7	4.1	13.2	25.4	0.0	38.8	23.1	5.0	20.4	27.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.0	20.7	4.1	13.2	25.4	0.0	38.8	23.1	5.0	20.4	27.4
LOS	B	C	A	B	C	A	D	C	A	C	C
Approach Delay (s/veh)		12.3			23.1			27.1			26.3
Approach LOS		B			C			C			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 88	
Natural Cycle: 85	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 22.3	Intersection LOS: C
Intersection Capacity Utilization 75.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

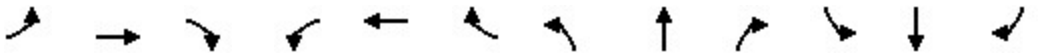




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	37	210	218	89	467	10	422	76	208	29	156
v/c Ratio	0.11	0.29	0.29	0.16	0.60	0.01	0.84	0.12	0.30	0.11	0.58
Control Delay (s/veh)	13.0	20.7	4.1	13.2	25.4	0.0	38.8	23.1	5.0	20.4	27.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.0	20.7	4.1	13.2	25.4	0.0	38.8	23.1	5.0	20.4	27.4
Queue Length 50th (ft)	10	80	0	24	210	0	192	28	0	10	38
Queue Length 95th (ft)	28	147	46	55	349	0	#291	67	50	27	98
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	130		120	185	
Base Capacity (vph)	333	731	752	541	780	753	512	731	749	256	444
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.29	0.29	0.16	0.60	0.01	0.82	0.10	0.28	0.11	0.35

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	193	201	82	430	9	388	70	191	27	50	94
Future Volume (veh/h)	34	193	201	82	430	9	388	70	191	27	50	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	37	210	218	89	467	10	422	76	208	29	54	102
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	3	3	3	1	1	1	2	2	2
Cap, veh/h	321	712	602	460	747	632	495	571	484	264	70	132
Arrive On Green	0.03	0.39	0.39	0.05	0.40	0.40	0.21	0.30	0.30	0.03	0.12	0.12
Sat Flow, veh/h	1753	1841	1556	1767	1856	1570	1795	1885	1598	1781	576	1088
Grp Volume(v), veh/h	37	210	218	89	467	10	422	76	208	29	0	156
Grp Sat Flow(s),veh/h/ln	1753	1841	1556	1767	1856	1570	1795	1885	1598	1781	0	1664
Q Serve(g_s), s	1.1	7.1	9.0	2.7	18.2	0.3	18.0	2.6	9.4	1.3	0.0	8.2
Cycle Q Clear(g_c), s	1.1	7.1	9.0	2.7	18.2	0.3	18.0	2.6	9.4	1.3	0.0	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	321	712	602	460	747	632	495	571	484	264	0	202
V/C Ratio(X)	0.12	0.29	0.36	0.19	0.62	0.02	0.85	0.13	0.43	0.11	0.00	0.77
Avail Cap(c_a), veh/h	359	712	602	470	747	632	495	709	600	311	0	368
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.1	19.2	19.8	15.4	21.6	16.2	25.5	22.9	25.3	33.2	0.0	38.5
Incr Delay (d2), s/veh	0.2	1.1	1.7	0.2	3.9	0.0	13.5	0.1	0.6	0.2	0.0	6.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.9	3.5	1.0	7.7	0.1	9.1	1.2	3.6	0.6	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.3	20.2	21.5	15.7	25.5	16.3	39.0	23.0	25.9	33.4	0.0	44.6
LnGrp LOS	B	C	C	B	C	B	D	C	C	C		D
Approach Vol, veh/h		465			566			706			185	
Approach Delay, s/veh		20.6			23.8			33.4			42.9	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	41.0	7.6	32.4	8.0	42.4	24.0	16.0
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	35.0	5.0	34.0	5.0	35.0	19.0	20.0
Max Q Clear Time (g_c+I1), s	4.7	11.0	3.3	11.4	3.1	20.2	20.0	10.2
Green Ext Time (p_c), s	0.0	1.7	0.0	1.0	0.0	2.1	0.0	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	28.4
HCM 7th LOS	C

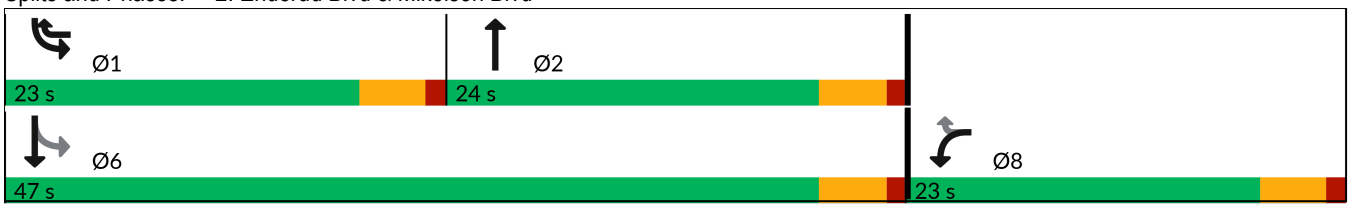
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	126	372	68	269	34
Future Volume (vph)	126	372	68	269	34
Turn Type	Prot	pm+ov	NA	pm+pt	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8		6	
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	24.0	23.0	47.0
Total Split (%)	32.9%	32.9%	34.3%	32.9%	67.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	Max	None	Max
Act Effct Green (s)	9.9	21.4	28.8	43.1	44.3
Actuated g/C Ratio	0.17	0.36	0.48	0.73	0.75
v/c Ratio	0.46	0.48	0.09	0.33	0.01
Control Delay (s/veh)	28.5	3.3	7.3	4.9	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.5	3.3	7.3	4.9	3.6
LOS	C	A	A	A	A
Approach Delay (s/veh)	9.7		7.3		4.8
Approach LOS	A		A		A

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 59.4	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay (s/veh): 7.8	Intersection LOS: A
Intersection Capacity Utilization 37.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Enderud Blvd & Mikelson Blvd





Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	137	404	142	292	37
v/c Ratio	0.46	0.48	0.09	0.33	0.01
Control Delay (s/veh)	28.5	3.3	7.3	4.9	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.5	3.3	7.3	4.9	3.6
Queue Length 50th (ft)	47	0	7	31	1
Queue Length 95th (ft)	93	36	27	71	6
Internal Link Dist (ft)	4240		3911		2535
Turn Bay Length (ft)	310	305		138	
Base Capacity (vph)	564	1017	1644	996	2636
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.24	0.40	0.09	0.29	0.01

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	126	372	68	63	269	34
Future Volume (veh/h)	126	372	68	63	269	34
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1870	1870
Adj Flow Rate, veh/h	137	404	74	68	292	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	2	2
Cap, veh/h	447	589	809	667	827	2203
Arrive On Green	0.25	0.25	0.43	0.43	0.12	0.62
Sat Flow, veh/h	1795	1598	1958	1536	1781	3647
Grp Volume(v), veh/h	137	404	71	71	292	37
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1609	1781	1777
Q Serve(g_s), s	4.3	14.6	1.6	1.8	5.6	0.3
Cycle Q Clear(g_c), s	4.3	14.6	1.6	1.8	5.6	0.3
Prop In Lane	1.00	1.00		0.95	1.00	
Lane Grp Cap(c), veh/h	447	589	778	699	827	2203
V/C Ratio(X)	0.31	0.69	0.09	0.10	0.35	0.02
Avail Cap(c_a), veh/h	484	623	778	699	1094	2203
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	18.3	11.4	11.5	7.3	5.0
Incr Delay (d2), s/veh	0.4	2.9	0.2	0.3	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	5.3	0.6	0.6	1.7	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.3	21.2	11.7	11.8	7.5	5.0
LnGrp LOS	C	C	B	B	A	A
Approach Vol, veh/h	541		142			329
Approach Delay, s/veh	21.2		11.7			7.2
Approach LOS	C		B			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	12.7	34.3				47.0	21.6
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	18.5	19.5				42.5	18.5
Max Q Clear Time (g_c+I1), s	7.6	3.8				2.3	16.6
Green Ext Time (p_c), s	0.6	0.6				0.2	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	15.3
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	5.4
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	550	341	282
Demand Flow Rate, veh/h	550	341	291
Vehicles Circulating, veh/h	278	131	90
Vehicles Exiting, veh/h	194	250	738
Ped Vol Crossing Leg, #/h	1	1	1
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	6.9	4.1	3.8
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	L	TR	LT	TR	LT	TR
Assumed Moves	L	TR	LT	TR	LT	TR
RT Channelized						
Lane Util	0.164	0.836	0.469	0.531	0.471	0.529
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	90	460	160	181	137	154
Cap Entry Lane, veh/h	1045	1121	1197	1270	1243	1316
Entry HV Adj Factor	1.000	1.000	1.002	0.999	0.969	0.972
Flow Entry, veh/h	90	460	160	181	133	150
Cap Entry, veh/h	1044	1120	1197	1267	1202	1277
V/C Ratio	0.086	0.411	0.134	0.143	0.110	0.117
Control Delay, s/veh	4.2	7.5	4.1	4.0	3.9	3.8
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	2	0	0	0	0

Intersection	
Intersection Delay, s/veh	4.8
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	363	261	428
Demand Flow Rate, veh/h	370	266	437
Vehicles Circulating, veh/h	90	311	97
Vehicles Exiting, veh/h	444	149	480
Ped Vol Crossing Leg, #/h	5	5	5
Ped Cap Adj	0.995	0.996	0.995
Approach Delay, s/veh	4.9	4.7	4.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	L	TR	LT	R	L	TR
RT Channelized						
Lane Util	0.841	0.159	0.365	0.635	0.206	0.794
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	311	59	97	169	90	347
Cap Entry Lane, veh/h	1243	1316	1014	1090	1235	1308
Entry HV Adj Factor	0.981	0.980	0.980	0.982	0.978	0.980
Flow Entry, veh/h	305	58	95	166	88	340
Cap Entry, veh/h	1212	1283	990	1066	1201	1275
V/C Ratio	0.252	0.045	0.096	0.156	0.073	0.267
Control Delay, s/veh	5.2	3.2	4.5	4.8	3.6	5.2
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	1	0	1

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	2	0	0	71	0	23	0	177	19	6	133	2
Future Vol, veh/h	2	0	0	71	0	23	0	177	19	6	133	2
Conflicting Peds, #/hr	0	0	0	4	0	4	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	214	-	-	164	-	-
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, %	0	0	0	1	1	1	3	3	3	2	2	2
Mvmt Flow	2	0	0	77	0	25	0	192	21	7	145	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	259	376	77	296	367	115	147	0	0	217	0	0
Stage 1	159	159	-	207	207	-	-	-	-	-	-	-
Stage 2	100	217	-	89	160	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.52	6.52	6.92	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.52	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.52	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.51	4.01	3.31	2.23	-	-	2.22	-	-
Pot Cap-1 Maneuver	678	559	974	636	563	919	1425	-	-	1350	-	-
Stage 1	833	770	-	779	732	-	-	-	-	-	-	-
Stage 2	901	727	-	911	767	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	654	554	971	628	558	912	1425	-	-	1345	-	-
Mov Cap-2 Maneuver	654	554	-	628	558	-	-	-	-	-	-	-
Stage 1	829	767	-	776	729	-	-	-	-	-	-	-
Stage 2	873	724	-	903	763	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.52	11.23	0	0.33
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1425	-	-	654	680	1345	-	-
HCM Lane V/C Ratio	-	-	-	0.003	0.15	0.005	-	-
HCM Control Delay (s/veh)	0	-	-	10.5	11.2	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	0	-	-

Intersection	
Int Delay, s/veh	9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	395	47	8	193	13
Future Vol, veh/h	8	395	47	8	193	13
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	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	9	429	51	9	210	14

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	489	55	0	0	60	0
Stage 1	55	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.12	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	540	1014	-	-	1544	-
Stage 1	970	-	-	-	-	-
Stage 2	656	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	466	1014	-	-	1544	-
Mov Cap-2 Maneuver	466	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	566	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.17	0	7.21
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	466	1014	1532	-
HCM Lane V/C Ratio	-	-	0.019	0.423	0.136	-
HCM Control Delay (s/veh)	-	-	12.9	11.1	7.7	0
HCM Lane LOS	-	-	B	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	2.1	0.5	-

Intersection	
Intersection Delay, s/veh	3.7
Intersection LOS	A

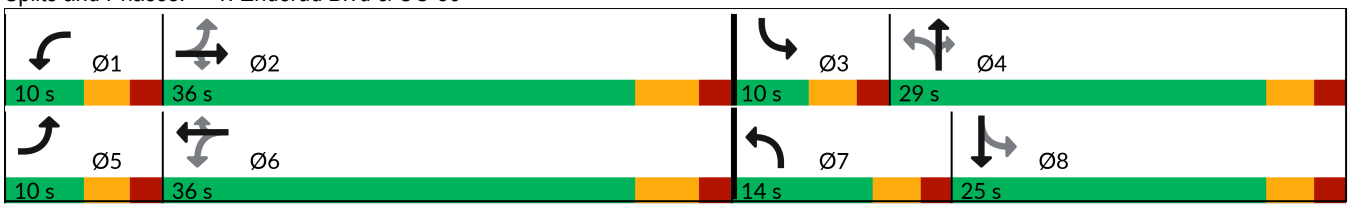
Approach	NB	SE	NW
Entry Lanes	2	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	152	132	342
Demand Flow Rate, veh/h	155	135	346
Vehicles Circulating, veh/h	31	189	93
Vehicles Exiting, veh/h	189	250	93
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.2	0.7	5.1
Approach LOS	A	A	A

Lane	Left	Right	Left	Bypass	Left
Designated Moves	L	LTR	T	R	LT
Assumed Moves	L	LTR	T		LT
RT Channelized				Free	
Lane Util	0.529	0.471	1.000		1.000
Follow-Up Headway, s	2.667	2.535	2.535		2.535
Critical Headway, s	4.645	4.328	4.328		4.328
A (Intercept)	1350	1420	1420		1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4		8.501e-4
Entry Flow, veh/h	82	73	31	104	346
Cap Entry Lane, veh/h	1312	1383	1209	1938	1312
Entry HV Adj Factor	0.982	0.979	0.980	0.980	0.990
Flow Entry, veh/h	81	71	30	102	342
Cap Entry, veh/h	1289	1354	1186	1900	1299
V/C Ratio	0.063	0.053	0.026	0.054	0.264
Control Delay, s/veh	3.3	3.1	3.2	0.0	5.1
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	52	440	320	133	366	19	276	15	95	10	33
Future Volume (vph)	52	440	320	133	366	19	276	15	95	10	33
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6	4		4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	25.0	25.0	10.0	25.0
Total Split (s)	10.0	36.0	36.0	10.0	36.0	36.0	14.0	29.0	29.0	10.0	25.0
Total Split (%)	11.8%	42.4%	42.4%	11.8%	42.4%	42.4%	16.5%	34.1%	34.1%	11.8%	29.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	36.3	30.2	30.2	38.4	34.5	34.5	19.3	17.7	17.7	11.7	8.5
Actuated g/C Ratio	0.51	0.43	0.43	0.54	0.49	0.49	0.27	0.25	0.25	0.17	0.12
v/c Ratio	0.11	0.60	0.40	0.36	0.44	0.03	0.85	0.03	0.20	0.04	0.33
Control Delay (s/veh)	8.4	20.6	3.4	10.9	16.5	0.1	47.1	22.0	2.2	18.7	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.4	20.6	3.4	10.9	16.5	0.1	47.1	22.0	2.2	18.7	20.5
LOS	A	C	A	B	B	A	D	C	A	B	C
Approach Delay (s/veh)		13.0			14.4			35.1			20.3
Approach LOS		B			B			D			C

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 70.9	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay (s/veh): 18.5	Intersection LOS: B
Intersection Capacity Utilization 65.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

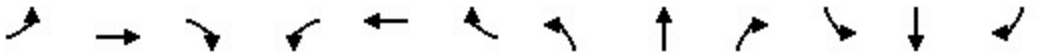




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	57	478	348	145	398	21	300	16	103	11	79
v/c Ratio	0.11	0.60	0.40	0.36	0.44	0.03	0.85	0.03	0.20	0.04	0.33
Control Delay (s/veh)	8.4	20.6	3.4	10.9	16.5	0.1	47.1	22.0	2.2	18.7	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.4	20.6	3.4	10.9	16.5	0.1	47.1	22.0	2.2	18.7	20.5
Queue Length 50th (ft)	11	165	0	29	130	0	113	5	0	4	15
Queue Length 95th (ft)	27	273	47	58	220	0	#175	22	12	14	52
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	130		120	185	
Base Capacity (vph)	509	801	881	403	907	831	351	635	649	257	515
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.60	0.40	0.36	0.44	0.03	0.85	0.03	0.16	0.04	0.15

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	440	320	133	366	19	276	15	95	10	33	40
Future Volume (veh/h)	52	440	320	133	366	19	276	15	95	10	33	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	57	478	348	145	398	21	300	16	103	11	36	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	1	1	1
Cap, veh/h	454	773	654	359	807	683	407	413	350	266	87	103
Arrive On Green	0.05	0.41	0.41	0.07	0.43	0.43	0.12	0.22	0.22	0.01	0.11	0.11
Sat Flow, veh/h	1795	1885	1594	1781	1870	1583	1781	1870	1585	1795	778	930
Grp Volume(v), veh/h	57	478	348	145	398	21	300	16	103	11	0	79
Grp Sat Flow(s),veh/h/ln	1795	1885	1594	1781	1870	1583	1781	1870	1585	1795	0	1708
Q Serve(g_s), s	1.3	14.7	12.0	3.4	11.2	0.6	9.0	0.5	4.0	0.4	0.0	3.2
Cycle Q Clear(g_c), s	1.3	14.7	12.0	3.4	11.2	0.6	9.0	0.5	4.0	0.4	0.0	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	454	773	654	359	807	683	407	413	350	266	0	190
V/C Ratio(X)	0.13	0.62	0.53	0.40	0.49	0.03	0.74	0.04	0.29	0.04	0.00	0.42
Avail Cap(c_a), veh/h	492	773	654	359	807	683	407	614	520	364	0	467
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.8	17.0	16.3	12.7	15.0	12.0	25.1	22.4	23.8	28.2	0.0	30.3
Incr Delay (d2), s/veh	0.1	3.7	3.1	0.7	2.1	0.1	6.9	0.0	0.5	0.1	0.0	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	5.9	4.6	1.1	4.3	0.2	5.1	0.2	1.5	0.2	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.9	20.7	19.4	13.4	17.2	12.1	32.0	22.4	24.2	28.2	0.0	31.7
LnGrp LOS	B	C	B	B	B	B	C	C	C	C		C
Approach Vol, veh/h		883			564			419			90	
Approach Delay, s/veh		19.6			16.0			29.7			31.3	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	36.0	6.0	21.1	8.4	37.6	14.0	13.1
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	30.0	5.0	24.0	5.0	30.0	9.0	20.0
Max Q Clear Time (g_c+I1), s	5.4	16.7	2.4	6.0	3.3	13.2	11.0	5.2
Green Ext Time (p_c), s	0.0	3.2	0.0	0.3	0.0	1.9	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	21.3
HCM 7th LOS	C

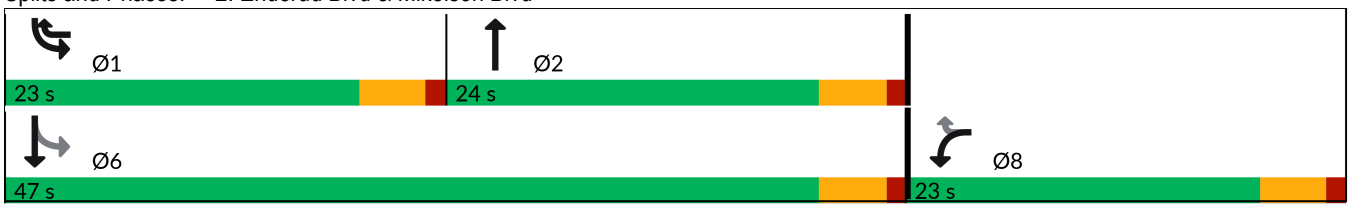
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	67	205	69	233	75
Future Volume (vph)	67	205	69	233	75
Turn Type	Prot	pm+ov	NA	pm+pt	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8		6	
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	24.0	23.0	47.0
Total Split (%)	32.9%	32.9%	34.3%	32.9%	67.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	Max	None	Max
Act Effct Green (s)	7.7	15.3	30.8	43.3	45.4
Actuated g/C Ratio	0.14	0.28	0.56	0.78	0.82
v/c Ratio	0.29	0.37	0.08	0.27	0.03
Control Delay (s/veh)	25.8	3.9	5.2	3.4	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.8	3.9	5.2	3.4	2.6
LOS	C	A	A	A	A
Approach Delay (s/veh)	9.3		5.2		3.2
Approach LOS	A		A		A

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 55.3	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay (s/veh): 5.9	Intersection LOS: A
Intersection Capacity Utilization 32.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Enderud Blvd & Mikelson Blvd





Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	73	223	158	253	82
v/c Ratio	0.29	0.37	0.08	0.27	0.03
Control Delay (s/veh)	25.8	3.9	5.2	3.4	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.8	3.9	5.2	3.4	2.6
Queue Length 50th (ft)	24	0	6	22	3
Queue Length 95th (ft)	56	32	23	49	8
Internal Link Dist (ft)	4240		3911		2535
Turn Bay Length (ft)	310	305		138	
Base Capacity (vph)	606	874	1871	1082	2936
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.12	0.26	0.08	0.23	0.03

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	67	205	69	76	233	75
Future Volume (veh/h)	67	205	69	76	233	75
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	73	223	75	83	253	82
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	291	416	931	830	905	2478
Arrive On Green	0.16	0.16	0.52	0.52	0.10	0.69
Sat Flow, veh/h	1795	1598	1885	1598	1795	3676
Grp Volume(v), veh/h	73	223	75	83	253	82
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1598	1795	1791
Q Serve(g_s), s	2.2	7.4	1.3	1.6	3.5	0.4
Cycle Q Clear(g_c), s	2.2	7.4	1.3	1.6	3.5	0.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	291	416	931	830	905	2478
V/C Ratio(X)	0.25	0.54	0.08	0.10	0.28	0.03
Avail Cap(c_a), veh/h	541	639	931	830	1269	2478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.5	19.5	7.4	7.5	4.5	3.0
Incr Delay (d2), s/veh	0.4	1.1	0.2	0.2	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.6	0.4	0.5	0.9	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.9	20.6	7.6	7.7	4.7	3.0
LnGrp LOS	C	C	A	A	A	A
Approach Vol, veh/h	296		158			335
Approach Delay, s/veh	21.2		7.6			4.3
Approach LOS	C		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	10.6	36.4				47.0	14.4
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	18.5	19.5				42.5	18.5
Max Q Clear Time (g_c+I1), s	5.5	3.6				2.4	9.4
Green Ext Time (p_c), s	0.6	0.7				0.5	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	11.3
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	363	675	1370
Demand Flow Rate, veh/h	363	675	1411
Vehicles Circulating, veh/h	574	408	95
Vehicles Exiting, veh/h	509	1098	842
Ped Vol Crossing Leg, #/h	1	1	1
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	7.0	7.5	9.3
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	L	TR	LT	TR	LT	TR
Assumed Moves	L	TR	LT	TR	LT	TR
RT Channelized						
Lane Util	0.262	0.738	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	95	268	317	358	663	748
Cap Entry Lane, veh/h	796	872	927	1004	1237	1310
Entry HV Adj Factor	1.000	1.000	1.001	0.999	0.971	0.971
Flow Entry, veh/h	95	268	317	358	644	726
Cap Entry, veh/h	796	871	927	1002	1200	1270
V/C Ratio	0.119	0.308	0.342	0.357	0.537	0.572
Control Delay, s/veh	5.7	7.5	7.6	7.4	9.1	9.4
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	1	2	2	3	4

Intersection	
Intersection Delay, s/veh	3.5
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	213	188	165
Demand Flow Rate, veh/h	215	190	165
Vehicles Circulating, veh/h	33	122	139
Vehicles Exiting, veh/h	271	126	173
Ped Vol Crossing Leg, #/h	5	5	5
Ped Cap Adj	0.994	0.995	0.995
Approach Delay, s/veh	3.4	3.6	3.6
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	L	TR	LT	TR	L	TR
RT Channelized						
Lane Util	0.567	0.433	0.468	0.532	0.200	0.800
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	122	93	89	101	33	132
Cap Entry Lane, veh/h	1309	1381	1207	1280	1188	1262
Entry HV Adj Factor	0.992	0.990	0.991	0.985	1.000	1.000
Flow Entry, veh/h	121	92	88	99	33	132
Cap Entry, veh/h	1292	1360	1189	1254	1182	1255
V/C Ratio	0.094	0.068	0.074	0.079	0.028	0.105
Control Delay, s/veh	3.5	3.2	3.6	3.5	3.3	3.7
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0	0

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	0	0	0	74	2	20	0	122	76	13	136	12
Future Vol, veh/h	0	0	0	74	2	20	0	122	76	13	136	12
Conflicting Peds, #/hr	0	0	0	4	0	4	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	214	-	-	164	-	-
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, %	0	0	0	2	2	2	1	1	1	1	1	1
Mvmt Flow	0	0	0	80	2	22	0	133	83	14	148	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	254	402	84	284	367	116	161	0	0	219	0	0
Stage 1	183	183	-	178	178	-	-	-	-	-	-	-
Stage 2	71	219	-	106	189	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.54	6.54	6.94	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.52	4.02	3.32	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	684	540	964	646	560	915	1423	-	-	1355	-	-
Stage 1	807	752	-	807	751	-	-	-	-	-	-	-
Stage 2	936	725	-	888	743	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	655	532	961	634	552	908	1423	-	-	1350	-	-
Mov Cap-2 Maneuver	655	532	-	634	552	-	-	-	-	-	-	-
Stage 1	799	744	-	803	748	-	-	-	-	-	-	-
Stage 2	907	723	-	875	735	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	11.31	0	0.62
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1423	-	-	-	675	1350	-	-
HCM Lane V/C Ratio	-	-	-	-	0.155	0.01	-	-
HCM Control Delay (s/veh)	0	-	-	0	11.3	7.7	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0	-	-

Intersection	
Int Delay, s/veh	8.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	277	30	9	466	63
Future Vol, veh/h	11	277	30	9	466	63
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	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	3	3	0	0
Mvmt Flow	12	301	33	10	507	68

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1119	38	0	0	42	0
Stage 1	38	-	-	-	-	-
Stage 2	1082	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.1	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.2	-
Pot Cap-1 Maneuver	229	1035	-	-	1580	-
Stage 1	985	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	152	1035	-	-	1580	-
Mov Cap-2 Maneuver	152	-	-	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	217	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.69	0	7.36
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	152	1035	1519	-
HCM Lane V/C Ratio	-	-	0.078	0.291	0.321	-
HCM Control Delay (s/veh)	-	-	30.6	9.9	8.4	0
HCM Lane LOS	-	-	D	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	1.2	1.4	-

Intersection	
Intersection Delay, s/veh	4.6
Intersection LOS	A

Approach	NB	SE	NW
Entry Lanes	2	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	577	596	361
Demand Flow Rate, veh/h	583	602	372
Vehicles Circulating, veh/h	269	182	264
Vehicles Exiting, veh/h	182	454	588
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.9	2.2	6.5
Approach LOS	A	A	A

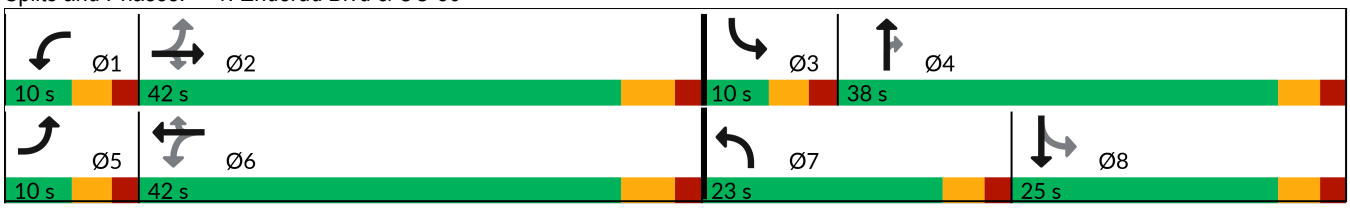
Lane	Left	Right	Left	Bypass	Left
Designated Moves	L	LTR	T	R	LT
Assumed Moves	L	TR	T		LT
RT Channelized				Free	
Lane Util	0.453	0.547	1.000		1.000
Follow-Up Headway, s	2.667	2.535	2.535		2.535
Critical Headway, s	4.645	4.328	4.328		4.328
A (Intercept)	1350	1420	1420		1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4		8.501e-4
Entry Flow, veh/h	264	319	269	333	372
Cap Entry Lane, veh/h	1054	1130	1217	1919	1135
Entry HV Adj Factor	0.989	0.991	0.990	0.990	0.972
Flow Entry, veh/h	261	316	266	330	361
Cap Entry, veh/h	1042	1119	1205	1900	1102
V/C Ratio	0.250	0.282	0.221	0.174	0.328
Control Delay, s/veh	5.9	5.9	4.9	0.0	6.5
LOS	A	A	A	A	A
95th %tile Queue, veh	1	1	1	1	1

Intersection Capacity Worksheets: 2030 Background With Improvements

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	34	193	201	82	430	9	388	70	191	27	50
Future Volume (vph)	34	193	201	82	430	9	388	70	191	27	50
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6			4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	30.0	30.0	10.0	25.0
Total Split (s)	10.0	42.0	42.0	10.0	42.0	42.0	23.0	38.0	38.0	10.0	25.0
Total Split (%)	10.0%	42.0%	42.0%	10.0%	42.0%	42.0%	23.0%	38.0%	38.0%	10.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	41.2	36.4	36.4	42.3	38.4	38.4	15.1	26.8	26.8	15.4	10.3
Actuated g/C Ratio	0.48	0.43	0.43	0.49	0.45	0.45	0.18	0.31	0.31	0.18	0.12
v/c Ratio	0.10	0.27	0.28	0.15	0.56	0.01	0.69	0.13	0.32	0.11	0.57
Control Delay (s/veh)	12.0	19.2	3.9	12.1	23.2	0.0	40.3	24.2	5.4	20.8	26.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.0	19.2	3.9	12.1	23.2	0.0	40.3	24.2	5.4	20.8	26.8
LOS	B	B	A	B	C	A	D	C	A	C	C
Approach Delay (s/veh)		11.5			21.0			28.3			25.8
Approach LOS		B			C			C			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 85.6	
Natural Cycle: 85	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 21.8	Intersection LOS: C
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

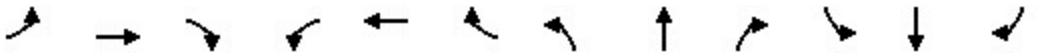
Splits and Phases: 1: Enderud Blvd & CO 86





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	37	210	218	89	467	10	422	76	208	29	156
v/c Ratio	0.10	0.27	0.28	0.15	0.56	0.01	0.69	0.13	0.32	0.11	0.57
Control Delay (s/veh)	12.0	19.2	3.9	12.1	23.2	0.0	40.3	24.2	5.4	20.8	26.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.0	19.2	3.9	12.1	23.2	0.0	40.3	24.2	5.4	20.8	26.8
Queue Length 50th (ft)	9	74	0	22	195	0	112	28	0	10	37
Queue Length 95th (ft)	28	144	45	54	343	0	172	68	51	28	98
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	250		120	185	
Base Capacity (vph)	368	776	785	578	827	788	736	732	749	262	457
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.27	0.28	0.15	0.56	0.01	0.57	0.10	0.28	0.11	0.34

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	193	201	82	430	9	388	70	191	27	50	94
Future Volume (veh/h)	34	193	201	82	430	9	388	70	191	27	50	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	37	210	218	89	467	10	422	76	208	29	54	102
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	3	3	3	1	1	1	2	2	2
Cap, veh/h	376	784	662	511	822	696	524	462	391	273	71	135
Arrive On Green	0.03	0.43	0.43	0.05	0.44	0.44	0.15	0.25	0.25	0.03	0.12	0.12
Sat Flow, veh/h	1753	1841	1556	1767	1856	1570	3483	1885	1598	1781	576	1088
Grp Volume(v), veh/h	37	210	218	89	467	10	422	76	208	29	0	156
Grp Sat Flow(s),veh/h/ln	1753	1841	1556	1767	1856	1570	1742	1885	1598	1781	0	1664
Q Serve(g_s), s	1.0	6.3	7.9	2.3	15.8	0.3	9.9	2.7	9.6	1.2	0.0	7.7
Cycle Q Clear(g_c), s	1.0	6.3	7.9	2.3	15.8	0.3	9.9	2.7	9.6	1.2	0.0	7.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	376	784	662	511	822	696	524	462	391	273	0	206
V/C Ratio(X)	0.10	0.27	0.33	0.17	0.57	0.01	0.80	0.16	0.53	0.11	0.00	0.76
Avail Cap(c_a), veh/h	420	784	662	524	822	696	741	736	623	326	0	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	15.7	16.2	12.4	17.5	13.2	34.7	25.1	27.7	30.8	0.0	35.8
Incr Delay (d2), s/veh	0.1	0.8	1.3	0.2	2.8	0.0	4.4	0.2	1.1	0.2	0.0	5.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.4	2.9	0.8	6.3	0.1	4.4	1.2	3.7	0.5	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.0	16.6	17.5	12.6	20.4	13.2	39.1	25.3	28.8	31.0	0.0	41.5
LnGrp LOS	B	B	B	B	C	B	D	C	C	C		D
Approach Vol, veh/h		465			566			706			185	
Approach Delay, s/veh		16.8			19.0			34.6			39.8	
Approach LOS		B			B			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	42.0	7.5	25.7	7.9	43.5	17.7	15.5
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	36.0	5.0	33.0	5.0	36.0	18.0	20.0
Max Q Clear Time (g_c+I1), s	4.3	9.9	3.2	11.6	3.0	17.8	11.9	9.7
Green Ext Time (p_c), s	0.0	1.7	0.0	1.0	0.0	2.3	0.8	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	26.2
HCM 7th LOS	C

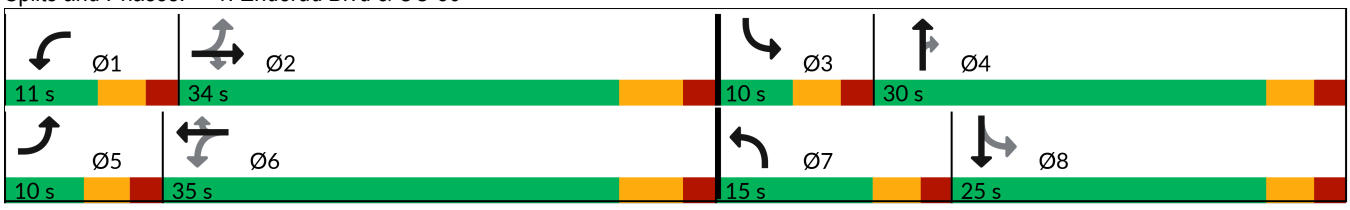
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	52	440	320	133	366	19	276	15	95	10	33
Future Volume (vph)	52	440	320	133	366	19	276	15	95	10	33
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6			4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	25.0	25.0	10.0	25.0
Total Split (s)	10.0	34.0	34.0	11.0	35.0	35.0	15.0	30.0	30.0	10.0	25.0
Total Split (%)	11.8%	40.0%	40.0%	12.9%	41.2%	41.2%	17.6%	35.3%	35.3%	11.8%	29.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	34.2	29.5	29.5	36.5	32.1	32.1	9.8	18.1	18.1	11.6	8.6
Actuated g/C Ratio	0.50	0.43	0.43	0.53	0.47	0.47	0.14	0.26	0.26	0.17	0.12
v/c Ratio	0.12	0.59	0.39	0.35	0.46	0.03	0.62	0.03	0.19	0.04	0.31
Control Delay (s/veh)	9.0	21.7	3.6	11.1	17.5	0.1	35.6	21.2	2.1	18.1	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.0	21.7	3.6	11.1	17.5	0.1	35.6	21.2	2.1	18.1	20.2
LOS	A	C	A	B	B	A	D	C	A	B	C
Approach Delay (s/veh)		13.8			15.2			26.8			19.9
Approach LOS		B			B			C			B

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 68.9	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay (s/veh): 17.3	Intersection LOS: B
Intersection Capacity Utilization 58.4%	ICU Level of Service B
Analysis Period (min) 15	

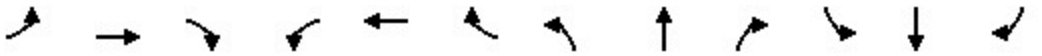
Splits and Phases: 1: Enderud Blvd & CO 86





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	57	478	348	145	398	21	300	16	103	11	79
v/c Ratio	0.12	0.59	0.39	0.35	0.46	0.03	0.62	0.03	0.19	0.04	0.31
Control Delay (s/veh)	9.0	21.7	3.6	11.1	17.5	0.1	35.6	21.2	2.1	18.1	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.0	21.7	3.6	11.1	17.5	0.1	35.6	21.2	2.1	18.1	20.2
Queue Length 50th (ft)	11	174	0	30	134	0	67	5	0	3	15
Queue Length 95th (ft)	28	287	50	60	225	0	108	22	12	14	52
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	250		120	185	
Base Capacity (vph)	489	804	882	412	868	802	510	692	693	263	539
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.59	0.39	0.35	0.46	0.03	0.59	0.02	0.15	0.04	0.15

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	440	320	133	366	19	276	15	95	10	33	40
Future Volume (veh/h)	52	440	320	133	366	19	276	15	95	10	33	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	57	478	348	145	398	21	300	16	103	11	36	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	1	1	1
Cap, veh/h	448	752	635	359	790	668	399	406	344	275	90	107
Arrive On Green	0.05	0.40	0.40	0.07	0.42	0.42	0.12	0.22	0.22	0.01	0.12	0.12
Sat Flow, veh/h	1795	1885	1594	1781	1870	1583	3456	1870	1585	1795	778	930
Grp Volume(v), veh/h	57	478	348	145	398	21	300	16	103	11	0	79
Grp Sat Flow(s),veh/h/ln	1795	1885	1594	1781	1870	1583	1728	1870	1585	1795	0	1708
Q Serve(g_s), s	1.3	14.3	11.8	3.3	11.0	0.5	5.9	0.5	3.8	0.4	0.0	3.0
Cycle Q Clear(g_c), s	1.3	14.3	11.8	3.3	11.0	0.5	5.9	0.5	3.8	0.4	0.0	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	448	752	635	359	790	668	399	406	344	275	0	197
V/C Ratio(X)	0.13	0.64	0.55	0.40	0.50	0.03	0.75	0.04	0.30	0.04	0.00	0.40
Avail Cap(c_a), veh/h	490	752	635	384	790	668	492	666	564	378	0	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.8	17.0	16.2	12.6	14.9	11.9	30.1	21.7	23.0	26.8	0.0	28.8
Incr Delay (d2), s/veh	0.1	4.1	3.4	0.7	2.3	0.1	5.1	0.0	0.5	0.1	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	5.8	4.5	1.1	4.2	0.2	2.6	0.2	1.4	0.2	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.9	21.1	19.6	13.3	17.2	12.0	35.1	21.7	23.5	26.8	0.0	30.1
LnGrp LOS	B	C	B	B	B	B	D	C	C	C		C
Approach Vol, veh/h		883			564			419			90	
Approach Delay, s/veh		19.9			16.0			31.8			29.7	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	34.0	6.0	20.2	8.4	35.7	13.1	13.1
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	6.0	28.0	5.0	25.0	5.0	29.0	10.0	20.0
Max Q Clear Time (g_c+I1), s	5.3	16.3	2.4	5.8	3.3	13.0	7.9	5.0
Green Ext Time (p_c), s	0.0	3.0	0.0	0.3	0.0	1.8	0.2	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	21.8
HCM 7th LOS	C

Notes

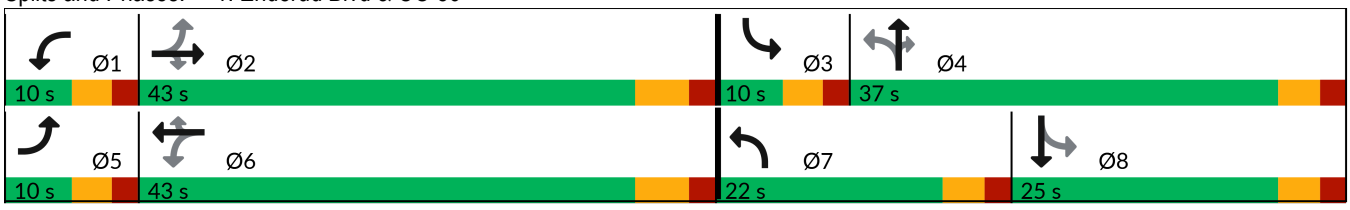
User approved pedestrian interval to be less than phase max green.

Intersection Capacity Worksheets: 2045 Background

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	40	225	215	90	500	15	395	75	205	30	55
Future Volume (vph)	40	225	215	90	500	15	395	75	205	30	55
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6	4		4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	30.0	30.0	10.0	25.0
Total Split (s)	10.0	43.0	43.0	10.0	43.0	43.0	22.0	37.0	37.0	10.0	25.0
Total Split (%)	10.0%	43.0%	43.0%	10.0%	43.0%	43.0%	22.0%	37.0%	37.0%	10.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	42.1	37.2	37.2	43.1	39.2	39.2	33.1	27.4	27.4	16.0	11.0
Actuated g/C Ratio	0.47	0.42	0.42	0.48	0.44	0.44	0.37	0.31	0.31	0.18	0.12
v/c Ratio	0.14	0.32	0.30	0.18	0.67	0.02	0.93	0.14	0.35	0.13	0.61
Control Delay (s/veh)	12.7	20.3	3.8	12.8	26.8	0.1	54.1	25.9	5.4	21.2	30.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.7	20.3	3.8	12.8	26.8	0.1	54.1	25.9	5.4	21.2	30.0
LOS	B	C	A	B	C	A	D	C	A	C	C
Approach Delay (s/veh)		12.3			24.0			36.1			28.6
Approach LOS		B			C			D			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 89.1	
Natural Cycle: 85	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay (s/veh): 25.8	Intersection LOS: C
Intersection Capacity Utilization 79.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

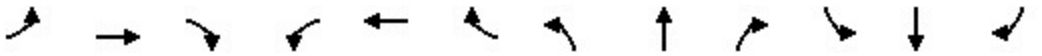




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	43	245	234	98	543	16	429	82	223	33	169
v/c Ratio	0.14	0.32	0.30	0.18	0.67	0.02	0.93	0.14	0.35	0.13	0.61
Control Delay (s/veh)	12.7	20.3	3.8	12.8	26.8	0.1	54.1	25.9	5.4	21.2	30.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.7	20.3	3.8	12.8	26.8	0.1	54.1	25.9	5.4	21.2	30.0
Queue Length 50th (ft)	11	93	0	26	253	0	204	37	0	12	47
Queue Length 95th (ft)	31	168	46	58	419	0	#340	73	52	31	112
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	130		120	185	
Base Capacity (vph)	297	762	784	532	811	777	461	678	719	261	436
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.32	0.30	0.18	0.67	0.02	0.93	0.12	0.31	0.13	0.39

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	225	215	90	500	15	395	75	205	30	55	100
Future Volume (veh/h)	40	225	215	90	500	15	395	75	205	30	55	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	43	245	234	98	543	16	429	82	223	33	60	109
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	3	3	3	1	1	1	2	2	2
Cap, veh/h	292	746	630	452	777	658	450	535	453	272	76	138
Arrive On Green	0.04	0.41	0.41	0.05	0.42	0.42	0.19	0.28	0.28	0.03	0.13	0.13
Sat Flow, veh/h	1753	1841	1556	1767	1856	1570	1795	1885	1598	1781	592	1075
Grp Volume(v), veh/h	43	245	234	98	543	16	429	82	223	33	0	169
Grp Sat Flow(s),veh/h/ln	1753	1841	1556	1767	1856	1570	1795	1885	1598	1781	0	1667
Q Serve(g_s), s	1.3	8.3	9.6	2.9	22.0	0.5	17.0	3.0	10.6	1.4	0.0	9.0
Cycle Q Clear(g_c), s	1.3	8.3	9.6	2.9	22.0	0.5	17.0	3.0	10.6	1.4	0.0	9.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.64
Lane Grp Cap(c), veh/h	292	746	630	452	777	658	450	535	453	272	0	215
V/C Ratio(X)	0.15	0.33	0.37	0.22	0.70	0.02	0.95	0.15	0.49	0.12	0.00	0.79
Avail Cap(c_a), veh/h	324	746	630	460	777	658	450	660	560	315	0	365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.1	18.7	19.0	14.8	21.8	15.6	28.2	24.5	27.2	32.8	0.0	38.6
Incr Delay (d2), s/veh	0.2	1.2	1.7	0.2	5.2	0.1	30.6	0.1	0.8	0.2	0.0	6.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.4	3.7	1.0	9.4	0.2	11.5	1.3	4.1	0.6	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.3	19.8	20.7	15.0	27.0	15.7	58.8	24.6	28.1	33.0	0.0	44.9
LnGrp LOS	B	B	C	B	C	B	E	C	C	C		D
Approach Vol, veh/h		522			657			734			202	
Approach Delay, s/veh		20.0			24.9			45.7			42.9	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	43.0	7.8	30.9	8.3	44.3	22.0	16.8
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	37.0	5.0	32.0	5.0	37.0	17.0	20.0
Max Q Clear Time (g_c+I1), s	4.9	11.6	3.4	12.6	3.3	24.0	19.0	11.0
Green Ext Time (p_c), s	0.0	1.9	0.0	1.1	0.0	2.5	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	32.6
HCM 7th LOS	C

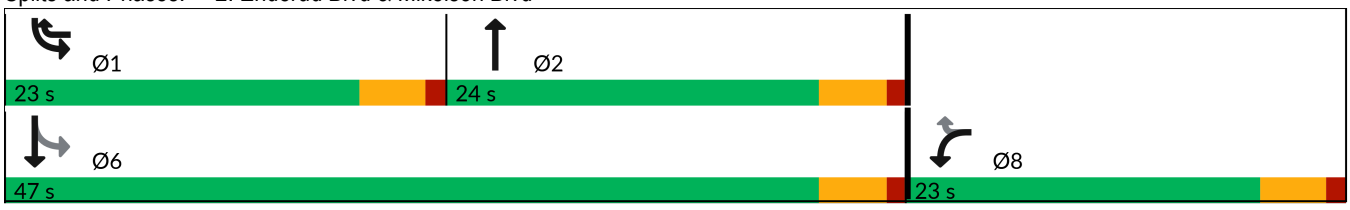
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	155	400	75	290	35
Future Volume (vph)	155	400	75	290	35
Turn Type	Prot	pm+ov	NA	pm+pt	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8		6	
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	24.0	23.0	47.0
Total Split (%)	32.9%	32.9%	34.3%	32.9%	67.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	Max	None	Max
Act Effct Green (s)	11.1	26.5	27.2	42.6	42.6
Actuated g/C Ratio	0.18	0.42	0.43	0.68	0.68
v/c Ratio	0.53	0.47	0.10	0.38	0.02
Control Delay (s/veh)	29.7	2.8	8.1	5.9	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.7	2.8	8.1	5.9	4.1
LOS	C	A	A	A	A
Approach Delay (s/veh)	10.3		8.1		5.7
Approach LOS	B		A		A

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 62.7	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay (s/veh): 8.5	Intersection LOS: A
Intersection Capacity Utilization 40.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Enderud Blvd & Mikelson Blvd





Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	168	435	153	315	38
v/c Ratio	0.53	0.47	0.10	0.38	0.02
Control Delay (s/veh)	29.7	2.8	8.1	5.9	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.7	2.8	8.1	5.9	4.1
Queue Length 50th (ft)	59	0	8	38	2
Queue Length 95th (ft)	110	35	31	85	7
Internal Link Dist (ft)	4240		3911		2535
Turn Bay Length (ft)	310	305		138	
Base Capacity (vph)	528	1068	1479	924	2403
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.32	0.41	0.10	0.34	0.02

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	155	400	75	65	290	35
Future Volume (veh/h)	155	400	75	65	290	35
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1870	1870
Adj Flow Rate, veh/h	168	435	82	71	315	38
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	2	2
Cap, veh/h	466	622	796	623	813	2171
Arrive On Green	0.26	0.26	0.42	0.42	0.13	0.61
Sat Flow, veh/h	1795	1598	2004	1497	1781	3647
Grp Volume(v), veh/h	168	435	76	77	315	38
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1616	1781	1777
Q Serve(g_s), s	5.3	15.9	1.8	2.0	6.4	0.3
Cycle Q Clear(g_c), s	5.3	15.9	1.8	2.0	6.4	0.3
Prop In Lane	1.00	1.00		0.93	1.00	
Lane Grp Cap(c), veh/h	466	622	746	673	813	2171
V/C Ratio(X)	0.36	0.70	0.10	0.11	0.39	0.02
Avail Cap(c_a), veh/h	477	632	746	673	1055	2171
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	17.8	12.4	12.4	7.8	5.3
Incr Delay (d2), s/veh	0.5	3.4	0.3	0.3	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	5.8	0.7	0.7	2.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.5	21.2	12.6	12.8	8.1	5.3
LnGrp LOS	C	C	B	B	A	A
Approach Vol, veh/h	603		153			353
Approach Delay, s/veh	21.3		12.7			7.8
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.5	33.5			47.0	22.6
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	18.5	19.5			42.5	18.5
Max Q Clear Time (g_c+I1), s	8.4	4.0			2.3	17.9
Green Ext Time (p_c), s	0.7	0.6			0.2	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	15.8
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	6.1
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	614	413	332
Demand Flow Rate, veh/h	614	413	342
Vehicles Circulating, veh/h	348	140	98
Vehicles Exiting, veh/h	205	300	864
Ped Vol Crossing Leg, #/h	1	1	1
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	8.4	4.4	4.0
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	L	TR	LT	TR	LT	TR
Assumed Moves	L	TR	LT	TR	LT	TR
RT Channelized						
Lane Util	0.160	0.840	0.470	0.530	0.471	0.529
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	98	516	194	219	161	181
Cap Entry Lane, veh/h	980	1056	1187	1261	1233	1307
Entry HV Adj Factor	1.000	1.000	1.001	0.999	0.970	0.972
Flow Entry, veh/h	98	516	194	219	156	176
Cap Entry, veh/h	979	1056	1186	1259	1195	1269
V/C Ratio	0.100	0.489	0.164	0.174	0.131	0.139
Control Delay, s/veh	4.6	9.1	4.4	4.3	4.1	4.0
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	3	1	1	0	0

Intersection	
Intersection Delay, s/veh	5.1
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	392	282	456
Demand Flow Rate, veh/h	400	288	465
Vehicles Circulating, veh/h	94	339	105
Vehicles Exiting, veh/h	476	155	522
Ped Vol Crossing Leg, #/h	5	5	5
Ped Cap Adj	0.995	0.996	0.995
Approach Delay, s/veh	5.1	4.9	5.1
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	L	TR	LT	R	L	TR
RT Channelized						
Lane Util	0.848	0.153	0.365	0.635	0.202	0.798
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	339	61	105	183	94	371
Cap Entry Lane, veh/h	1238	1311	988	1065	1226	1299
Entry HV Adj Factor	0.979	0.980	0.980	0.978	0.979	0.981
Flow Entry, veh/h	332	60	103	179	92	364
Cap Entry, veh/h	1206	1279	965	1037	1193	1268
V/C Ratio	0.275	0.047	0.107	0.173	0.077	0.287
Control Delay, s/veh	5.5	3.2	4.7	5.1	3.7	5.4
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	1	0	1

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	1	0	0	75	0	25	0	190	25	10	145	1
Future Vol, veh/h	1	0	0	75	0	25	0	190	25	10	145	1
Conflicting Peds, #/hr	0	0	0	4	0	4	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	214	-	-	164	-	-
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, %	0	0	0	1	1	1	3	3	3	2	2	2
Mvmt Flow	1	0	0	82	0	27	0	207	27	11	158	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	287	418	83	329	405	125	159	0	0	238	0	0
Stage 1	180	180	-	224	224	-	-	-	-	-	-	-
Stage 2	107	238	-	105	180	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.52	6.52	6.92	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.52	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.52	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.51	4.01	3.31	2.23	-	-	2.22	-	-
Pot Cap-1 Maneuver	648	529	966	603	536	906	1411	-	-	1326	-	-
Stage 1	810	754	-	761	719	-	-	-	-	-	-	-
Stage 2	892	712	-	893	751	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	621	523	962	594	530	899	1411	-	-	1321	-	-
Mov Cap-2 Maneuver	621	523	-	594	530	-	-	-	-	-	-	-
Stage 1	804	748	-	758	717	-	-	-	-	-	-	-
Stage 2	862	710	-	882	745	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.81	11.66	0	0.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1411	-	-	621	649	1321	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.168	0.008	-	-
HCM Control Delay (s/veh)	0	-	-	10.8	11.7	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.6	0	-	-

Intersection	
Int Delay, s/veh	9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	425	100	10	210	30
Future Vol, veh/h	10	425	100	10	210	30
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	0	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	11	462	109	11	228	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	603	114	0	0	120	0
Stage 1	114	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.12	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	464	941	-	-	1468	-
Stage 1	913	-	-	-	-	-
Stage 2	618	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	391	941	-	-	1468	-
Mov Cap-2 Maneuver	391	-	-	-	-	-
Stage 1	913	-	-	-	-	-
Stage 2	522	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.5	0	6.91
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	391	941	1468	-
HCM Lane V/C Ratio	-	-	0.028	0.491	0.155	-
HCM Control Delay (s/veh)	-	-	14.5	12.5	7.9	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	2.8	0.6	-

Intersection	
Intersection Delay, s/veh	4.2
Intersection LOS	A

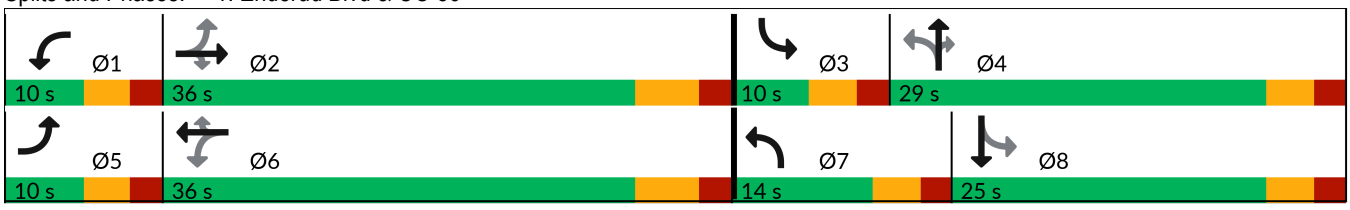
Approach	NB	SE	NW
Entry Lanes	2	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	190	163	430
Demand Flow Rate, veh/h	194	167	434
Vehicles Circulating, veh/h	39	236	116
Vehicles Exiting, veh/h	236	314	117
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.3	0.8	5.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Bypass	Left
Designated Moves	L	LTR	T	R	LT
Assumed Moves	L	LTR	T		LT
RT Channelized				Free	
Lane Util	0.531	0.469	1.000		1.000
Follow-Up Headway, s	2.667	2.535	2.535		2.535
Critical Headway, s	4.645	4.328	4.328		4.328
A (Intercept)	1350	1420	1420		1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4		8.501e-4
Entry Flow, veh/h	103	91	39	128	434
Cap Entry Lane, veh/h	1302	1374	1162	1938	1287
Entry HV Adj Factor	0.978	0.981	0.980	0.980	0.991
Flow Entry, veh/h	101	89	38	125	430
Cap Entry, veh/h	1273	1348	1139	1900	1275
V/C Ratio	0.079	0.066	0.034	0.066	0.337
Control Delay, s/veh	3.5	3.2	3.4	0.0	5.9
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	55	510	345	145	425	25	295	20	100	15	35
Future Volume (vph)	55	510	345	145	425	25	295	20	100	15	35
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6	4		4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	25.0	25.0	10.0	25.0
Total Split (s)	10.0	36.0	36.0	10.0	36.0	36.0	14.0	29.0	29.0	10.0	25.0
Total Split (%)	11.8%	42.4%	42.4%	11.8%	42.4%	42.4%	16.5%	34.1%	34.1%	11.8%	29.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	36.3	30.2	30.2	38.4	34.5	34.5	19.4	17.7	17.7	11.7	8.6
Actuated g/C Ratio	0.51	0.43	0.43	0.54	0.49	0.49	0.27	0.25	0.25	0.16	0.12
v/c Ratio	0.13	0.69	0.42	0.46	0.51	0.03	0.91	0.05	0.21	0.06	0.35
Control Delay (s/veh)	8.6	23.5	3.4	13.4	17.7	0.1	56.2	21.9	2.5	18.9	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.6	23.5	3.4	13.4	17.7	0.1	56.2	21.9	2.5	18.9	20.2
LOS	A	C	A	B	B	A	E	C	A	B	C
Approach Delay (s/veh)		15.0			15.9			41.6			20.0
Approach LOS		B			B			D			B

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 71	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay (s/veh): 21.0	Intersection LOS: C
Intersection Capacity Utilization 71.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

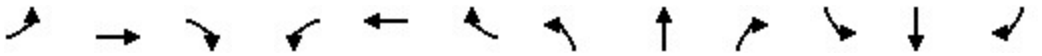




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	60	554	375	158	462	27	321	22	109	16	87
v/c Ratio	0.13	0.69	0.42	0.46	0.51	0.03	0.91	0.05	0.21	0.06	0.35
Control Delay (s/veh)	8.6	23.5	3.4	13.4	17.7	0.1	56.2	21.9	2.5	18.9	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.6	23.5	3.4	13.4	17.7	0.1	56.2	21.9	2.5	18.9	20.2
Queue Length 50th (ft)	11	202	0	31	158	0	123	7	0	5	16
Queue Length 95th (ft)	28	334	49	64	264	0	#199	27	15	18	55
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	130		120	185	
Base Capacity (vph)	453	800	896	341	906	831	351	634	649	258	517
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.69	0.42	0.46	0.51	0.03	0.91	0.03	0.17	0.06	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	510	345	145	425	25	295	20	100	15	35	45
Future Volume (veh/h)	55	510	345	145	425	25	295	20	100	15	35	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	60	554	375	158	462	27	321	22	109	16	38	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	1	1	1
Cap, veh/h	407	773	653	319	805	681	401	404	342	274	83	107
Arrive On Green	0.05	0.41	0.41	0.07	0.43	0.43	0.12	0.22	0.22	0.02	0.11	0.11
Sat Flow, veh/h	1795	1885	1594	1781	1870	1583	1781	1870	1585	1795	744	959
Grp Volume(v), veh/h	60	554	375	158	462	27	321	22	109	16	0	87
Grp Sat Flow(s),veh/h/ln	1795	1885	1594	1781	1870	1583	1781	1870	1585	1795	0	1702
Q Serve(g_s), s	1.4	18.0	13.3	3.7	13.7	0.7	9.0	0.7	4.2	0.6	0.0	3.5
Cycle Q Clear(g_c), s	1.4	18.0	13.3	3.7	13.7	0.7	9.0	0.7	4.2	0.6	0.0	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	407	773	653	319	805	681	401	404	342	274	0	190
V/C Ratio(X)	0.15	0.72	0.57	0.50	0.57	0.04	0.80	0.05	0.32	0.06	0.00	0.46
Avail Cap(c_a), veh/h	443	773	653	319	805	681	401	613	520	363	0	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.2	18.0	16.7	13.9	15.8	12.1	26.0	22.8	24.2	27.9	0.0	30.4
Incr Delay (d2), s/veh	0.2	5.6	3.6	1.2	3.0	0.1	11.1	0.1	0.5	0.1	0.0	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	7.5	5.1	1.2	5.3	0.3	2.1	0.3	1.6	0.2	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.4	23.7	20.3	15.1	18.8	12.2	37.0	22.8	24.7	28.0	0.0	32.1
LnGrp LOS	B	C	C	B	B	B	D	C	C	C		C
Approach Vol, veh/h		989			647			452			103	
Approach Delay, s/veh		21.7			17.6			33.4			31.5	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	36.0	6.4	20.8	8.5	37.5	14.0	13.2
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	30.0	5.0	24.0	5.0	30.0	9.0	20.0
Max Q Clear Time (g_c+I1), s	5.7	20.0	2.6	6.2	3.4	15.7	11.0	5.5
Green Ext Time (p_c), s	0.0	3.2	0.0	0.4	0.0	2.1	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	23.4
HCM 7th LOS	C

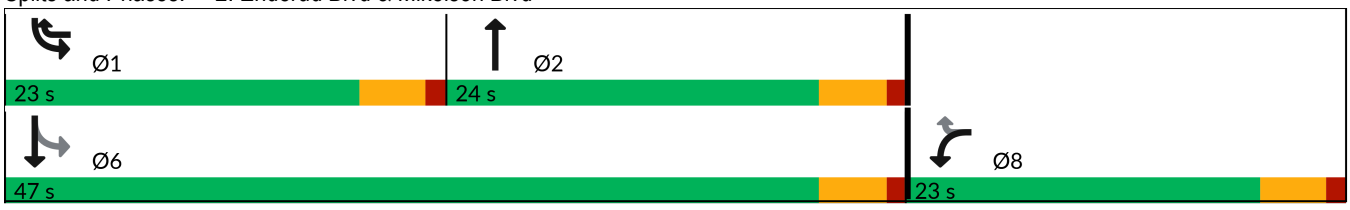
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	70	220	75	250	80
Future Volume (vph)	70	220	75	250	80
Turn Type	Prot	pm+ov	NA	pm+pt	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8		6	
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	24.0	23.0	47.0
Total Split (%)	32.9%	32.9%	34.3%	32.9%	67.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	Max	None	Max
Act Effct Green (s)	7.8	15.6	30.5	43.2	45.3
Actuated g/C Ratio	0.14	0.28	0.55	0.78	0.82
v/c Ratio	0.30	0.38	0.09	0.29	0.03
Control Delay (s/veh)	25.9	3.8	5.3	3.6	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.9	3.8	5.3	3.6	2.6
LOS	C	A	A	A	A
Approach Delay (s/veh)	9.2		5.3		3.4
Approach LOS	A		A		A

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 55.2	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.38	
Intersection Signal Delay (s/veh): 5.9	Intersection LOS: A
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Enderud Blvd & Mikelson Blvd





Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	76	239	169	272	87
v/c Ratio	0.30	0.38	0.09	0.29	0.03
Control Delay (s/veh)	25.9	3.8	5.3	3.6	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.9	3.8	5.3	3.6	2.6
Queue Length 50th (ft)	25	0	7	24	3
Queue Length 95th (ft)	58	33	25	54	9
Internal Link Dist (ft)	4240		3911		2535
Turn Bay Length (ft)	310	305		138	
Base Capacity (vph)	608	885	1860	1075	2933
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.13	0.27	0.09	0.25	0.03

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	70	220	75	80	250	80
Future Volume (veh/h)	70	220	75	80	250	80
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	76	239	82	87	272	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	305	440	908	810	892	2454
Arrive On Green	0.17	0.17	0.51	0.51	0.11	0.69
Sat Flow, veh/h	1795	1598	1885	1598	1795	3676
Grp Volume(v), veh/h	76	239	82	87	272	87
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1598	1795	1791
Q Serve(g_s), s	2.3	7.9	1.5	1.8	3.9	0.5
Cycle Q Clear(g_c), s	2.3	7.9	1.5	1.8	3.9	0.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	305	440	908	810	892	2454
V/C Ratio(X)	0.25	0.54	0.09	0.11	0.30	0.04
Avail Cap(c_a), veh/h	535	645	908	810	1238	2454
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	19.2	7.9	8.0	4.8	3.2
Incr Delay (d2), s/veh	0.4	1.0	0.2	0.3	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.8	0.5	0.6	1.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.7	20.2	8.1	8.2	4.9	3.2
LnGrp LOS	C	C	A	A	A	A
Approach Vol, veh/h	315		169			359
Approach Delay, s/veh	20.8		8.2			4.5
Approach LOS	C		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	11.0	36.0				47.0	15.0
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	18.5	19.5				42.5	18.5
Max Q Clear Time (g_c+I1), s	5.9	3.8				2.5	9.9
Green Ext Time (p_c), s	0.6	0.7				0.5	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	11.3
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	397	479	1049
Demand Flow Rate, veh/h	397	479	1081
Vehicles Circulating, veh/h	370	437	109
Vehicles Exiting, veh/h	546	753	658
Ped Vol Crossing Leg, #/h	1	1	1
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	5.8	6.4	7.3
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	L	TR	LT	TR	LT	TR
Assumed Moves	L	TR	LT	TR	LT	TR
RT Channelized						
Lane Util	0.275	0.725	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	109	288	225	254	508	573
Cap Entry Lane, veh/h	960	1037	903	979	1221	1294
Entry HV Adj Factor	1.000	1.000	1.001	0.999	0.971	0.971
Flow Entry, veh/h	109	288	225	254	493	556
Cap Entry, veh/h	960	1036	903	978	1184	1255
V/C Ratio	0.114	0.278	0.249	0.260	0.416	0.443
Control Delay, s/veh	4.8	6.2	6.6	6.3	7.3	7.3
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	1	1	1	2	2

Intersection	
Intersection Delay, s/veh	3.6
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	228	207	174
Demand Flow Rate, veh/h	230	209	174
Vehicles Circulating, veh/h	33	131	148
Vehicles Exiting, veh/h	289	132	192
Ped Vol Crossing Leg, #/h	5	5	5
Ped Cap Adj	0.994	0.995	0.995
Approach Delay, s/veh	3.4	3.7	3.7
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	L	TR	LT	TR	L	TR
RT Channelized						
Lane Util	0.570	0.430	0.469	0.531	0.190	0.810
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	131	99	98	111	33	141
Cap Entry Lane, veh/h	1309	1381	1197	1270	1178	1252
Entry HV Adj Factor	0.992	0.990	0.991	0.986	1.000	1.000
Flow Entry, veh/h	130	98	97	109	33	141
Cap Entry, veh/h	1292	1360	1179	1246	1172	1246
V/C Ratio	0.101	0.072	0.082	0.088	0.028	0.113
Control Delay, s/veh	3.6	3.2	3.7	3.6	3.3	3.8
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0	0

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	85	2	20	0	130	85	20	145	15
Future Vol, veh/h	0	0	0	85	2	20	0	130	85	20	145	15
Conflicting Peds, #/hr	0	0	0	4	0	4	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	214	-	-	164	-	-
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, %	0	0	0	2	2	2	1	1	1	1	1	1
Mvmt Flow	0	0	0	92	2	22	0	141	92	22	158	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	285	447	91	318	409	125	174	0	0	238	0	0
Stage 1	209	209	-	191	191	-	-	-	-	-	-	-
Stage 2	76	238	-	126	217	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.54	6.54	6.94	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.52	4.02	3.32	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	650	510	955	612	531	902	1407	-	-	1334	-	-
Stage 1	779	733	-	792	741	-	-	-	-	-	-	-
Stage 2	931	712	-	864	722	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	619	499	951	597	520	896	1407	-	-	1329	-	-
Mov Cap-2 Maneuver	619	499	-	597	520	-	-	-	-	-	-	-
Stage 1	766	721	-	789	738	-	-	-	-	-	-	-
Stage 2	902	710	-	847	710	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	11.94	0	0.86
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1407	-	-	-	635	1329	-	-
HCM Lane V/C Ratio	-	-	-	-	0.183	0.016	-	-
HCM Control Delay (s/veh)	0	-	-	0	11.9	7.8	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.7	0	-	-

Intersection	
Int Delay, s/veh	7.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	295	65	10	500	125
Future Vol, veh/h	10	295	65	10	500	125
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	0	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	11	321	71	11	543	136

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1299	76	0	0	82	0
Stage 1	76	-	-	-	-	-
Stage 2	1223	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.1	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.2	-
Pot Cap-1 Maneuver	178	985	-	-	1529	-
Stage 1	947	-	-	-	-	-
Stage 2	278	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	115	985	-	-	1529	-
Mov Cap-2 Maneuver	115	-	-	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	179	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.37	0	6.92
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	115	985	1529	-
HCM Lane V/C Ratio	-	-	0.095	0.326	0.356	-
HCM Control Delay (s/veh)	-	-	39.6	10.4	8.6	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	1.4	1.6	-

Intersection	
Intersection Delay, s/veh	5.7
Intersection LOS	A

Approach	NB	SE	NW
Entry Lanes	2	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	723	745	451
Demand Flow Rate, veh/h	730	752	465
Vehicles Circulating, veh/h	335	230	329
Vehicles Exiting, veh/h	230	564	736
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.2	2.6	8.2
Approach LOS	A	A	A

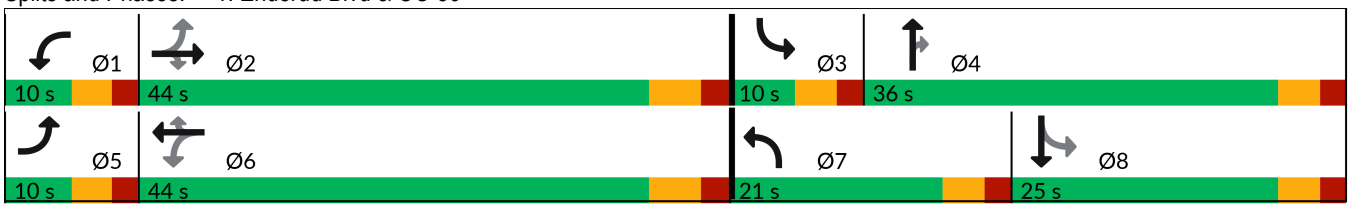
Lane	Left	Right	Left	Bypass	Left
Designated Moves	L	LTR	T	R	LT
Assumed Moves	L	TR	T		LT
RT Channelized				Free	
Lane Util	0.451	0.549	1.000		1.000
Follow-Up Headway, s	2.667	2.535	2.535		2.535
Critical Headway, s	4.645	4.328	4.328		4.328
A (Intercept)	1350	1420	1420		1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4		8.501e-4
Entry Flow, veh/h	329	401	335	417	465
Cap Entry Lane, veh/h	992	1068	1168	1919	1074
Entry HV Adj Factor	0.991	0.990	0.990	0.990	0.970
Flow Entry, veh/h	326	397	332	413	451
Cap Entry, veh/h	983	1058	1156	1900	1042
V/C Ratio	0.332	0.375	0.287	0.217	0.433
Control Delay, s/veh	7.1	7.3	5.8	0.0	8.2
LOS	A	A	A	A	A
95th %tile Queue, veh	1	2	1	1	2

Intersection Capacity Worksheets: 2045 Background With Improvements

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	40	225	215	90	500	15	395	75	205	30	55
Future Volume (vph)	40	225	215	90	500	15	395	75	205	30	55
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6			4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	30.0	30.0	10.0	25.0
Total Split (s)	10.0	44.0	44.0	10.0	44.0	44.0	21.0	36.0	36.0	10.0	25.0
Total Split (%)	10.0%	44.0%	44.0%	10.0%	44.0%	44.0%	21.0%	36.0%	36.0%	10.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	43.2	38.3	38.3	44.2	40.4	40.4	14.7	25.0	25.0	16.0	10.9
Actuated g/C Ratio	0.49	0.44	0.44	0.50	0.46	0.46	0.17	0.28	0.28	0.18	0.12
v/c Ratio	0.13	0.31	0.29	0.18	0.64	0.02	0.74	0.15	0.36	0.13	0.61
Control Delay (s/veh)	12.0	19.2	3.7	12.0	24.8	0.1	44.3	26.9	5.7	21.6	29.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.0	19.2	3.7	12.0	24.8	0.1	44.3	26.9	5.7	21.6	29.7
LOS	B	B	A	B	C	A	D	C	A	C	C
Approach Delay (s/veh)		11.7			22.3			30.6			28.4
Approach LOS		B			C			C			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 87.8	
Natural Cycle: 85	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay (s/veh): 23.1	Intersection LOS: C
Intersection Capacity Utilization 69.2%	ICU Level of Service C
Analysis Period (min) 15	

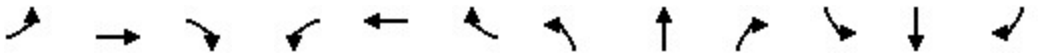
Splits and Phases: 1: Enderud Blvd & CO 86





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	43	245	234	98	543	16	429	82	223	33	169
v/c Ratio	0.13	0.31	0.29	0.18	0.64	0.02	0.74	0.15	0.36	0.13	0.61
Control Delay (s/veh)	12.0	19.2	3.7	12.0	24.8	0.1	44.3	26.9	5.7	21.6	29.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.0	19.2	3.7	12.0	24.8	0.1	44.3	26.9	5.7	21.6	29.7
Queue Length 50th (ft)	11	91	0	25	247	0	119	38	0	12	47
Queue Length 95th (ft)	30	165	45	57	410	0	182	75	53	32	111
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	250		120	185	
Base Capacity (vph)	323	797	809	558	848	803	637	670	713	264	446
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.31	0.29	0.18	0.64	0.02	0.67	0.12	0.31	0.13	0.38

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	225	215	90	500	15	395	75	205	30	55	100
Future Volume (veh/h)	40	225	215	90	500	15	395	75	205	30	55	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	43	245	234	98	543	16	429	82	223	33	60	109
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	3	3	3	1	1	1	2	2	2
Cap, veh/h	328	794	671	485	828	700	518	466	395	277	77	140
Arrive On Green	0.04	0.43	0.43	0.05	0.45	0.45	0.15	0.25	0.25	0.03	0.13	0.13
Sat Flow, veh/h	1753	1841	1556	1767	1856	1570	3483	1885	1598	1781	592	1075
Grp Volume(v), veh/h	43	245	234	98	543	16	429	82	223	33	0	169
Grp Sat Flow(s),veh/h/ln	1753	1841	1556	1767	1856	1570	1742	1885	1598	1781	0	1667
Q Serve(g_s), s	1.2	7.7	8.9	2.7	20.2	0.5	10.5	3.0	10.8	1.4	0.0	8.6
Cycle Q Clear(g_c), s	1.2	7.7	8.9	2.7	20.2	0.5	10.5	3.0	10.8	1.4	0.0	8.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.64
Lane Grp Cap(c), veh/h	328	794	671	485	828	700	518	466	395	277	0	217
V/C Ratio(X)	0.13	0.31	0.35	0.20	0.66	0.02	0.83	0.18	0.56	0.12	0.00	0.78
Avail Cap(c_a), veh/h	363	794	671	494	828	700	633	663	562	322	0	379
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	16.4	16.8	12.8	19.1	13.7	36.4	26.1	29.0	31.6	0.0	37.1
Incr Delay (d2), s/veh	0.2	1.0	1.4	0.2	4.0	0.1	7.6	0.2	1.3	0.2	0.0	6.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.0	3.3	0.9	8.2	0.2	4.9	1.3	4.2	0.6	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.1	17.4	18.2	13.0	23.1	13.7	44.0	26.3	30.3	31.7	0.0	43.1
LnGrp LOS	B	B	B	B	C	B	D	C	C	C		D
Approach Vol, veh/h		522			657			734			202	
Approach Delay, s/veh		17.6			21.4			37.8			41.2	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	44.0	7.8	26.8	8.3	45.3	18.1	16.4
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	38.0	5.0	31.0	5.0	38.0	16.0	20.0
Max Q Clear Time (g_c+I1), s	4.7	10.9	3.4	12.8	3.2	22.2	12.5	10.6
Green Ext Time (p_c), s	0.0	2.0	0.0	1.1	0.0	2.7	0.6	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	28.1
HCM 7th LOS	C

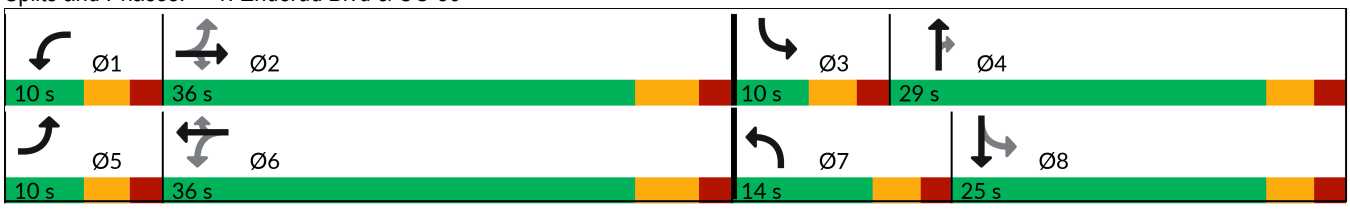
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	55	510	345	145	425	25	295	20	100	15	35
Future Volume (vph)	55	510	345	145	425	25	295	20	100	15	35
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6			4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	25.0	25.0	10.0	25.0
Total Split (s)	10.0	36.0	36.0	10.0	36.0	36.0	14.0	29.0	29.0	10.0	25.0
Total Split (%)	11.8%	42.4%	42.4%	11.8%	42.4%	42.4%	16.5%	34.1%	34.1%	11.8%	29.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	36.3	30.2	30.2	38.4	34.5	34.5	9.1	17.7	17.7	11.7	8.6
Actuated g/C Ratio	0.51	0.43	0.43	0.54	0.49	0.49	0.13	0.25	0.25	0.16	0.12
v/c Ratio	0.13	0.69	0.42	0.46	0.51	0.03	0.73	0.05	0.21	0.06	0.35
Control Delay (s/veh)	8.6	23.5	3.4	13.4	17.7	0.1	42.6	21.9	2.5	18.9	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.6	23.5	3.4	13.4	17.7	0.1	42.6	21.9	2.5	18.9	20.2
LOS	A	C	A	B	B	A	D	C	A	B	C
Approach Delay (s/veh)		15.0			15.9			31.9			20.0
Approach LOS		B			B			C			B

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 71	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay (s/veh): 19.0	Intersection LOS: B
Intersection Capacity Utilization 63.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

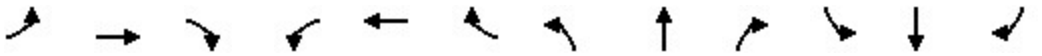




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	60	554	375	158	462	27	321	22	109	16	87
v/c Ratio	0.13	0.69	0.42	0.46	0.51	0.03	0.73	0.05	0.21	0.06	0.35
Control Delay (s/veh)	8.6	23.5	3.4	13.4	17.7	0.1	42.6	21.9	2.5	18.9	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.6	23.5	3.4	13.4	17.7	0.1	42.6	21.9	2.5	18.9	20.2
Queue Length 50th (ft)	11	202	0	31	158	0	73	7	0	5	16
Queue Length 95th (ft)	28	334	49	64	264	0	#137	27	15	18	55
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	250		120	185	
Base Capacity (vph)	453	800	896	341	906	831	438	634	649	258	520
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.69	0.42	0.46	0.51	0.03	0.73	0.03	0.17	0.06	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	510	345	145	425	25	295	20	100	15	35	45
Future Volume (veh/h)	55	510	345	145	425	25	295	20	100	15	35	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	60	554	375	158	462	27	321	22	109	16	38	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	1	1	1
Cap, veh/h	411	777	657	322	809	685	409	396	336	276	84	108
Arrive On Green	0.05	0.41	0.41	0.07	0.43	0.43	0.12	0.21	0.21	0.02	0.11	0.11
Sat Flow, veh/h	1795	1885	1594	1781	1870	1583	3456	1870	1585	1795	744	959
Grp Volume(v), veh/h	60	554	375	158	462	27	321	22	109	16	0	87
Grp Sat Flow(s),veh/h/ln	1795	1885	1594	1781	1870	1583	1728	1870	1585	1795	0	1702
Q Serve(g_s), s	1.4	17.8	13.2	3.7	13.5	0.7	6.6	0.7	4.2	0.6	0.0	3.5
Cycle Q Clear(g_c), s	1.4	17.8	13.2	3.7	13.5	0.7	6.6	0.7	4.2	0.6	0.0	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	411	777	657	322	809	685	409	396	336	276	0	191
V/C Ratio(X)	0.15	0.71	0.57	0.49	0.57	0.04	0.78	0.06	0.32	0.06	0.00	0.45
Avail Cap(c_a), veh/h	447	777	657	322	809	685	427	617	523	365	0	468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.0	17.8	16.4	13.7	15.6	11.9	31.2	22.9	24.3	27.7	0.0	30.2
Incr Delay (d2), s/veh	0.2	5.5	3.6	1.2	2.9	0.1	9.0	0.1	0.6	0.1	0.0	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	7.4	5.1	1.2	5.2	0.3	3.1	0.3	1.6	0.2	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.2	23.3	20.0	14.9	18.5	12.0	40.2	22.9	24.8	27.8	0.0	31.9
LnGrp LOS	B	C	C	B	B	B	D	C	C	C		C
Approach Vol, veh/h		989			647			452			103	
Approach Delay, s/veh		21.4			17.3			35.6			31.3	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	36.0	6.4	20.4	8.5	37.5	13.6	13.2
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	30.0	5.0	24.0	5.0	30.0	9.0	20.0
Max Q Clear Time (g_c+I1), s	5.7	19.8	2.6	6.2	3.4	15.5	8.6	5.5
Green Ext Time (p_c), s	0.0	3.2	0.0	0.4	0.0	2.1	0.1	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	23.6
HCM 7th LOS	C

Notes

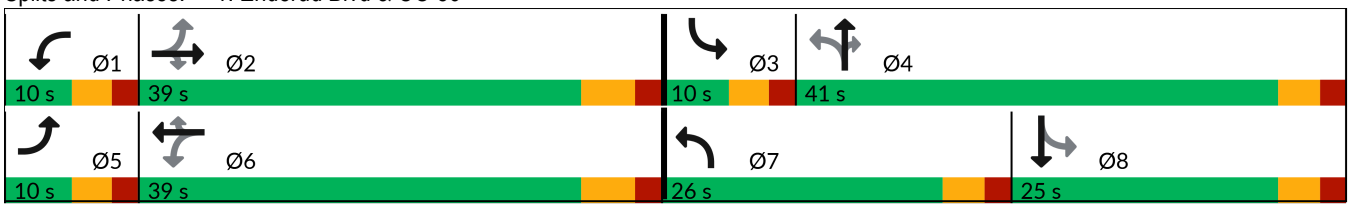
User approved pedestrian interval to be less than phase max green.

Intersection Capacity Worksheets: 2030 Background + Project

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	34	193	234	87	430	9	456	70	205	27	50
Future Volume (vph)	34	193	234	87	430	9	456	70	205	27	50
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6	4		4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	30.0	30.0	10.0	25.0
Total Split (s)	10.0	39.0	39.0	10.0	39.0	39.0	26.0	41.0	41.0	10.0	25.0
Total Split (%)	10.0%	39.0%	39.0%	10.0%	39.0%	39.0%	26.0%	41.0%	41.0%	10.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	38.1	33.2	33.2	39.1	35.2	35.2	36.3	32.5	32.5	15.4	10.4
Actuated g/C Ratio	0.43	0.38	0.38	0.44	0.40	0.40	0.41	0.37	0.37	0.17	0.12
v/c Ratio	0.12	0.31	0.34	0.19	0.64	0.01	0.90	0.11	0.31	0.11	0.58
Control Delay (s/veh)	14.2	22.4	4.3	14.6	28.0	0.0	44.5	21.6	4.6	19.6	27.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.2	22.4	4.3	14.6	28.0	0.0	44.5	21.6	4.6	19.6	27.4
LOS	B	C	A	B	C	A	D	C	A	B	C
Approach Delay (s/veh)		12.6			25.3			31.1			26.2
Approach LOS		B			C			C			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 88.3	
Natural Cycle: 85	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay (s/veh): 24.5	Intersection LOS: C
Intersection Capacity Utilization 78.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

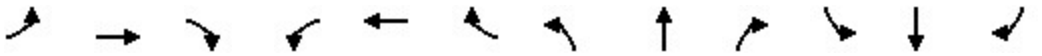




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	37	210	254	95	467	10	496	76	223	29	156
v/c Ratio	0.12	0.31	0.34	0.19	0.64	0.01	0.90	0.11	0.31	0.11	0.58
Control Delay (s/veh)	14.2	22.4	4.3	14.6	28.0	0.0	44.5	21.6	4.6	19.6	27.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.2	22.4	4.3	14.6	28.0	0.0	44.5	21.6	4.6	19.6	27.4
Queue Length 50th (ft)	10	83	0	28	219	0	229	26	0	10	38
Queue Length 95th (ft)	29	152	51	61	363	0	#372	65	49	26	98
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	130		120	185	
Base Capacity (vph)	304	686	742	509	735	721	553	771	787	255	442
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.31	0.34	0.19	0.64	0.01	0.90	0.10	0.28	0.11	0.35

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	193	234	87	430	9	456	70	205	27	50	94
Future Volume (veh/h)	34	193	234	87	430	9	456	70	205	27	50	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	37	210	254	95	467	10	496	76	223	29	54	102
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	3	3	3	1	1	1	2	2	2
Cap, veh/h	294	671	567	428	707	599	534	612	519	262	70	132
Arrive On Green	0.03	0.36	0.36	0.05	0.38	0.38	0.23	0.32	0.32	0.03	0.12	0.12
Sat Flow, veh/h	1753	1841	1556	1767	1856	1570	1795	1885	1598	1781	576	1088
Grp Volume(v), veh/h	37	210	254	95	467	10	496	76	223	29	0	156
Grp Sat Flow(s),veh/h/ln	1753	1841	1556	1767	1856	1570	1795	1885	1598	1781	0	1664
Q Serve(g_s), s	1.2	7.4	11.2	3.0	18.8	0.4	21.0	2.6	9.9	1.3	0.0	8.2
Cycle Q Clear(g_c), s	1.2	7.4	11.2	3.0	18.8	0.4	21.0	2.6	9.9	1.3	0.0	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	294	671	567	428	707	599	534	612	519	262	0	202
V/C Ratio(X)	0.13	0.31	0.45	0.22	0.66	0.02	0.93	0.12	0.43	0.11	0.00	0.77
Avail Cap(c_a), veh/h	333	671	567	437	707	599	534	749	635	309	0	367
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.5	20.6	21.9	16.7	23.2	17.4	25.4	21.5	24.0	33.2	0.0	38.6
Incr Delay (d2), s/veh	0.2	1.2	2.6	0.3	4.8	0.1	22.9	0.1	0.6	0.2	0.0	6.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.1	4.4	1.1	8.2	0.1	12.0	1.1	3.7	0.6	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.7	21.9	24.4	17.0	28.0	17.5	48.4	21.6	24.6	33.4	0.0	44.7
LnGrp LOS	B	C	C	B	C	B	D	C	C	C		D
Approach Vol, veh/h		501			572			795			185	
Approach Delay, s/veh		22.9			26.0			39.1			42.9	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	39.0	7.6	34.4	8.0	40.5	26.0	16.0
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	33.0	5.0	36.0	5.0	33.0	21.0	20.0
Max Q Clear Time (g_c+I1), s	5.0	13.2	3.3	11.9	3.2	20.8	23.0	10.2
Green Ext Time (p_c), s	0.0	1.7	0.0	1.1	0.0	2.0	0.0	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	31.8
HCM 7th LOS	C

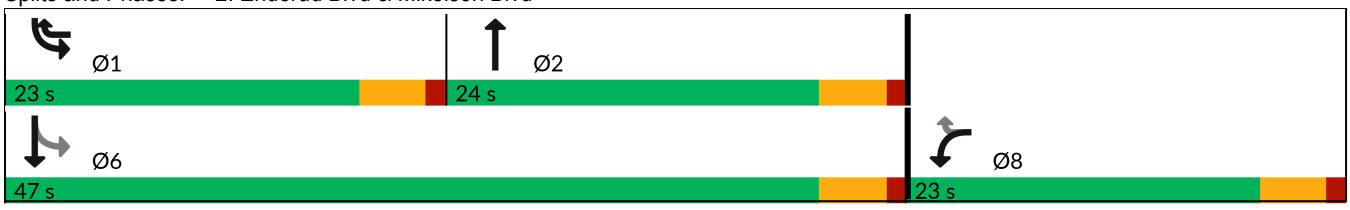
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	221	454	68	312	34
Future Volume (vph)	221	454	68	312	34
Turn Type	Prot	pm+ov	NA	pm+pt	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8		6	
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	24.0	23.0	47.0
Total Split (%)	32.9%	32.9%	34.3%	32.9%	67.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	Max	None	Max
Act Effct Green (s)	13.6	30.2	26.1	42.6	42.6
Actuated g/C Ratio	0.21	0.46	0.40	0.65	0.65
v/c Ratio	0.65	0.49	0.12	0.42	0.02
Control Delay (s/veh)	32.0	2.6	8.2	7.3	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.0	2.6	8.2	7.3	4.9
LOS	C	A	A	A	A
Approach Delay (s/veh)	12.2		8.2		7.0
Approach LOS	B		A		A

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 65.3	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay (s/veh): 10.2	Intersection LOS: B
Intersection Capacity Utilization 45.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Enderud Blvd & Mikelson Blvd





Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	240	493	169	339	37
v/c Ratio	0.65	0.49	0.12	0.42	0.02
Control Delay (s/veh)	32.0	2.6	8.2	7.3	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.0	2.6	8.2	7.3	4.9
Queue Length 50th (ft)	88	0	8	49	2
Queue Length 95th (ft)	153	33	33	104	7
Internal Link Dist (ft)	4240		3911		2535
Turn Bay Length (ft)	310	305		138	
Base Capacity (vph)	508	1114	1366	881	2311
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.47	0.44	0.12	0.38	0.02

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	221	454	68	87	312	34
Future Volume (veh/h)	221	454	68	87	312	34
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1870	1870
Adj Flow Rate, veh/h	240	493	74	95	339	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	2	2
Cap, veh/h	475	645	722	644	796	2158
Arrive On Green	0.26	0.26	0.40	0.40	0.14	0.61
Sat Flow, veh/h	1795	1598	1885	1598	1781	3647
Grp Volume(v), veh/h	240	493	74	95	339	37
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1598	1781	1777
Q Serve(g_s), s	7.9	18.5	1.8	2.6	7.1	0.3
Cycle Q Clear(g_c), s	7.9	18.5	1.8	2.6	7.1	0.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	475	645	722	644	796	2158
V/C Ratio(X)	0.51	0.76	0.10	0.15	0.43	0.02
Avail Cap(c_a), veh/h	475	645	722	644	1018	2158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	18.0	13.0	13.2	8.2	5.5
Incr Delay (d2), s/veh	0.9	5.4	0.3	0.5	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	7.0	0.7	0.9	2.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.7	23.4	13.3	13.7	8.5	5.5
LnGrp LOS	C	C	B	B	A	A
Approach Vol, veh/h	733		169			376
Approach Delay, s/veh	23.2		13.5			8.2
Approach LOS	C		B			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.3	32.7				47.0	23.0
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	18.5	19.5				42.5	18.5
Max Q Clear Time (g_c+I1), s	9.1	4.6				2.3	20.5
Green Ext Time (p_c), s	0.7	0.7				0.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	17.5
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	6.2
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	653	341	308
Demand Flow Rate, veh/h	653	341	318
Vehicles Circulating, veh/h	278	158	90
Vehicles Exiting, veh/h	221	250	841
Ped Vol Crossing Leg, #/h	1	1	1
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	8.3	4.2	3.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	L	TR	LT	TR	LT	TR
Assumed Moves	L	TR	LT	TR	LT	TR
RT Channelized						
Lane Util	0.138	0.862	0.469	0.531	0.469	0.531
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	90	563	160	181	149	169
Cap Entry Lane, veh/h	1045	1121	1167	1242	1243	1316
Entry HV Adj Factor	1.000	1.000	1.002	0.999	0.973	0.967
Flow Entry, veh/h	90	563	160	181	145	163
Cap Entry, veh/h	1044	1120	1168	1239	1207	1271
V/C Ratio	0.086	0.503	0.137	0.146	0.120	0.129
Control Delay, s/veh	4.2	8.9	4.3	4.1	4.0	3.9
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	3	0	1	0	0

Intersection	
Intersection Delay, s/veh	6.0
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	431	287	695
Demand Flow Rate, veh/h	439	293	709
Vehicles Circulating, veh/h	165	380	97
Vehicles Exiting, veh/h	641	224	576
Ped Vol Crossing Leg, #/h	5	5	5
Ped Cap Adj	0.995	0.996	0.995
Approach Delay, s/veh	6.0	5.2	6.3
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	L	TR	LT	R	L	TR
RT Channelized						
Lane Util	0.866	0.134	0.331	0.669	0.233	0.767
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	380	59	97	196	165	544
Cap Entry Lane, veh/h	1160	1234	952	1028	1235	1308
Entry HV Adj Factor	0.982	0.980	0.980	0.980	0.982	0.980
Flow Entry, veh/h	373	58	95	192	162	533
Cap Entry, veh/h	1133	1204	929	1003	1206	1274
V/C Ratio	0.329	0.048	0.102	0.191	0.134	0.418
Control Delay, s/veh	6.4	3.4	4.8	5.4	4.1	6.9
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	1	0	2

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	98	0	23	0	201	29	6	201	1
Future Vol, veh/h	1	0	0	98	0	23	0	201	29	6	201	1
Conflicting Peds, #/hr	0	0	0	4	0	4	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	214	-	-	164	-	-
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, %	0	0	0	1	1	1	3	3	3	2	2	2
Mvmt Flow	1	0	0	107	0	25	0	218	32	7	218	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	345	486	114	365	471	133	220	0	0	254	0	0
Stage 1	232	232	-	238	238	-	-	-	-	-	-	-
Stage 2	113	254	-	126	233	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.52	6.52	6.92	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.52	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.52	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.51	4.01	3.31	2.23	-	-	2.22	-	-
Pot Cap-1 Maneuver	590	484	924	569	492	895	1340	-	-	1308	-	-
Stage 1	756	716	-	747	709	-	-	-	-	-	-	-
Stage 2	885	701	-	867	713	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	568	480	920	562	487	888	1340	-	-	1303	-	-
Mov Cap-2 Maneuver	568	480	-	562	487	-	-	-	-	-	-	-
Stage 1	752	713	-	744	707	-	-	-	-	-	-	-
Stage 2	857	698	-	860	710	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.35	12.61	0	0.22
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1340	-	-	568	604	1303	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.218	0.005	-	-
HCM Control Delay (s/veh)	0	-	-	11.3	12.6	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.8	0	-	-

Intersection	
Int Delay, s/veh	10

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	490	47	8	227	13
Future Vol, veh/h	8	490	47	8	227	13
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	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	9	533	51	9	247	14

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	563	55	0	0	60	0
Stage 1	55	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.12	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	489	1014	-	-	1544	-
Stage 1	970	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	410	1014	-	-	1544	-
Mov Cap-2 Maneuver	410	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	509	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.43	0	7.35
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	410	1014	1532	-
HCM Lane V/C Ratio	-	-	0.021	0.525	0.16	-
HCM Control Delay (s/veh)	-	-	14	12.4	7.8	0
HCM Lane LOS	-	-	B	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	3.2	0.6	-

Intersection	
Intersection Delay, s/veh	4.4
Intersection LOS	A

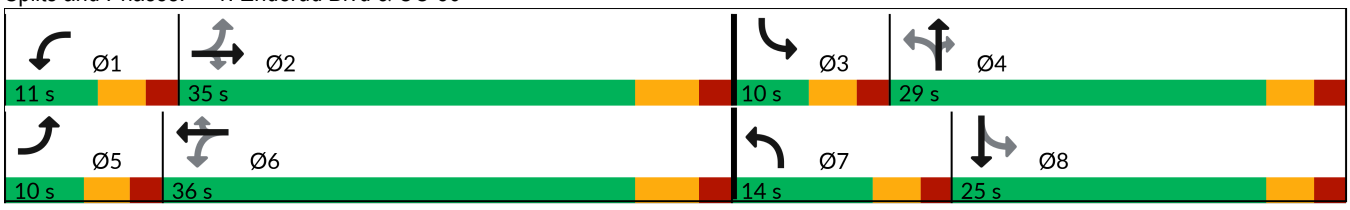
Approach	NB	SE	NW
Entry Lanes	2	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	189	132	445
Demand Flow Rate, veh/h	193	135	450
Vehicles Circulating, veh/h	31	293	93
Vehicles Exiting, veh/h	293	250	131
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.3	0.8	5.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Bypass	Left
Designated Moves	L	LTR	T	R	LT
Assumed Moves	L	TR	T		LT
RT Channelized				Free	
Lane Util	0.482	0.518	1.000		1.000
Follow-Up Headway, s	2.667	2.535	2.535		2.535
Critical Headway, s	4.645	4.328	4.328		4.328
A (Intercept)	1350	1420	1420		1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4		8.501e-4
Entry Flow, veh/h	93	100	31	104	450
Cap Entry Lane, veh/h	1312	1383	1107	1938	1312
Entry HV Adj Factor	0.978	0.980	0.980	0.980	0.990
Flow Entry, veh/h	91	98	30	102	445
Cap Entry, veh/h	1284	1356	1085	1900	1299
V/C Ratio	0.071	0.072	0.028	0.054	0.343
Control Delay, s/veh	3.4	3.2	3.6	0.0	5.9
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	52	440	429	149	366	19	322	15	104	10	33
Future Volume (vph)	52	440	429	149	366	19	322	15	104	10	33
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6	4		4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	25.0	25.0	10.0	25.0
Total Split (s)	10.0	35.0	35.0	11.0	36.0	36.0	14.0	29.0	29.0	10.0	25.0
Total Split (%)	11.8%	41.2%	41.2%	12.9%	42.4%	42.4%	16.5%	34.1%	34.1%	11.8%	29.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	35.2	29.2	29.2	39.0	34.5	34.5	19.3	17.7	17.7	11.7	8.5
Actuated g/C Ratio	0.50	0.41	0.41	0.55	0.49	0.49	0.27	0.25	0.25	0.17	0.12
v/c Ratio	0.11	0.62	0.50	0.40	0.44	0.03	1.00	0.03	0.22	0.04	0.33
Control Delay (s/veh)	8.5	21.8	3.8	11.1	16.5	0.1	74.6	22.0	2.8	18.7	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.5	21.8	3.8	11.1	16.5	0.1	74.6	22.0	2.8	18.7	20.5
LOS	A	C	A	B	B	A	E	C	A	B	C
Approach Delay (s/veh)		12.7			14.4			55.9			20.3
Approach LOS		B			B			E			C

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 70.9	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay (s/veh): 23.1	Intersection LOS: C
Intersection Capacity Utilization 69.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

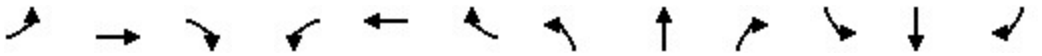




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	57	478	466	162	398	21	350	16	113	11	79
v/c Ratio	0.11	0.62	0.50	0.40	0.44	0.03	1.00	0.03	0.22	0.04	0.33
Control Delay (s/veh)	8.5	21.8	3.8	11.1	16.5	0.1	74.6	22.0	2.8	18.7	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.5	21.8	3.8	11.1	16.5	0.1	74.6	22.0	2.8	18.7	20.5
Queue Length 50th (ft)	11	169	0	32	130	0	136	5	0	4	15
Queue Length 95th (ft)	27	280	55	64	220	0	#233	22	17	14	52
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	130		120	185	
Base Capacity (vph)	509	775	932	408	907	831	351	635	649	257	515
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.62	0.50	0.40	0.44	0.03	1.00	0.03	0.17	0.04	0.15

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	440	429	149	366	19	322	15	104	10	33	40
Future Volume (veh/h)	52	440	429	149	366	19	322	15	104	10	33	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	57	478	466	162	398	21	350	16	113	11	36	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	1	1	1
Cap, veh/h	451	751	635	352	802	678	410	415	352	266	87	104
Arrive On Green	0.05	0.40	0.40	0.08	0.43	0.43	0.12	0.22	0.22	0.01	0.11	0.11
Sat Flow, veh/h	1795	1885	1594	1781	1870	1583	1781	1870	1585	1795	778	930
Grp Volume(v), veh/h	57	478	466	162	398	21	350	16	113	11	0	79
Grp Sat Flow(s),veh/h/ln	1795	1885	1594	1781	1870	1583	1781	1870	1585	1795	0	1708
Q Serve(g_s), s	1.3	14.9	18.1	3.8	11.2	0.6	9.0	0.5	4.3	0.4	0.0	3.1
Cycle Q Clear(g_c), s	1.3	14.9	18.1	3.8	11.2	0.6	9.0	0.5	4.3	0.4	0.0	3.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	451	751	635	352	802	678	410	415	352	266	0	191
V/C Ratio(X)	0.13	0.64	0.73	0.46	0.50	0.03	0.85	0.04	0.32	0.04	0.00	0.41
Avail Cap(c_a), veh/h	490	751	635	361	802	678	410	617	523	365	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.1	17.6	18.6	13.1	15.1	12.0	26.5	22.2	23.7	28.0	0.0	30.1
Incr Delay (d2), s/veh	0.1	4.1	7.4	0.9	2.2	0.1	15.9	0.0	0.5	0.1	0.0	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.1	7.4	1.3	4.3	0.2	3.2	0.2	1.6	0.2	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.3	21.7	25.9	14.0	17.3	12.1	42.4	22.2	24.2	28.0	0.0	31.5
LnGrp LOS	B	C	C	B	B	B	D	C	C	C		C
Approach Vol, veh/h		1001			581			479			90	
Approach Delay, s/veh		23.1			16.2			37.5			31.1	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	35.0	6.0	21.2	8.4	37.2	14.0	13.2
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	6.0	29.0	5.0	24.0	5.0	30.0	9.0	20.0
Max Q Clear Time (g_c+I1), s	5.8	20.1	2.4	6.3	3.3	13.2	11.0	5.1
Green Ext Time (p_c), s	0.0	2.9	0.0	0.3	0.0	1.9	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	24.8
HCM 7th LOS	C

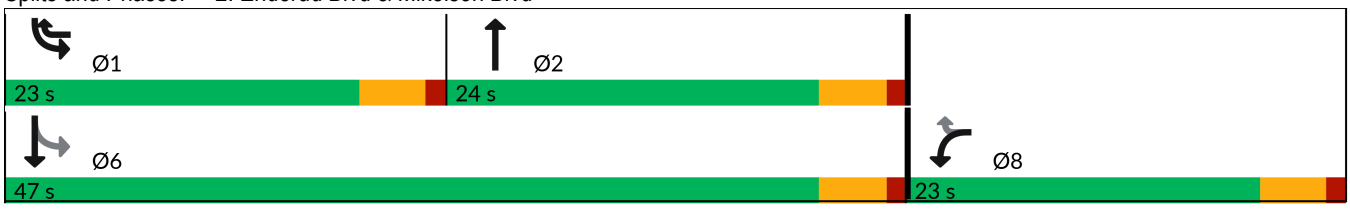
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	131	260	69	373	75
Future Volume (vph)	131	260	69	373	75
Turn Type	Prot	pm+ov	NA	pm+pt	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8		6	
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	24.0	23.0	47.0
Total Split (%)	32.9%	32.9%	34.3%	32.9%	67.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	Max	None	Max
Act Effct Green (s)	10.0	23.2	27.1	43.1	44.2
Actuated g/C Ratio	0.17	0.39	0.46	0.72	0.74
v/c Ratio	0.47	0.36	0.16	0.47	0.03
Control Delay (s/veh)	28.6	2.5	5.7	6.2	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.6	2.5	5.7	6.2	3.7
LOS	C	A	A	A	A
Approach Delay (s/veh)	11.2		5.7		5.7
Approach LOS	B		A		A

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 59.5	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay (s/veh): 7.8	Intersection LOS: A
Intersection Capacity Utilization 46.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Enderud Blvd & Mikelson Blvd





Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	142	283	242	405	82
v/c Ratio	0.47	0.36	0.16	0.47	0.03
Control Delay (s/veh)	28.6	2.5	5.7	6.2	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.6	2.5	5.7	6.2	3.7
Queue Length 50th (ft)	49	0	7	48	4
Queue Length 95th (ft)	95	27	35	105	11
Internal Link Dist (ft)	4240		3911		2535
Turn Bay Length (ft)	310	305		138	
Base Capacity (vph)	563	960	1551	960	2655
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.29	0.16	0.42	0.03

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	131	260	69	154	373	75
Future Volume (veh/h)	131	260	69	154	373	75
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	142	283	75	167	405	82
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	336	544	799	713	827	2402
Arrive On Green	0.19	0.19	0.45	0.45	0.15	0.67
Sat Flow, veh/h	1795	1598	1885	1598	1795	3676
Grp Volume(v), veh/h	142	283	75	167	405	82
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1598	1795	1791
Q Serve(g_s), s	4.4	9.0	1.5	4.1	6.8	0.5
Cycle Q Clear(g_c), s	4.4	9.0	1.5	4.1	6.8	0.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	336	544	799	713	827	2402
V/C Ratio(X)	0.42	0.52	0.09	0.23	0.49	0.03
Avail Cap(c_a), veh/h	524	712	799	713	1075	2402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.7	16.7	10.1	10.9	6.0	3.5
Incr Delay (d2), s/veh	0.8	0.8	0.2	0.8	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	3.0	0.6	1.4	1.9	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.6	17.5	10.4	11.6	6.5	3.5
LnGrp LOS	C	B	B	B	A	A
Approach Vol, veh/h	425		242			487
Approach Delay, s/veh	19.5		11.2			6.0
Approach LOS	B		B			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.2	32.8				47.0	16.4
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	18.5	19.5				42.5	18.5
Max Q Clear Time (g_c+I1), s	8.8	6.1				2.5	11.0
Green Ext Time (p_c), s	0.9	1.1				0.5	0.9

Intersection Summary		
HCM 7th Control Delay, s/veh		12.1
HCM 7th LOS		B

Intersection	
Intersection Delay, s/veh	6.5
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	433	397	981
Demand Flow Rate, veh/h	433	397	1010
Vehicles Circulating, veh/h	296	494	95
Vehicles Exiting, veh/h	595	611	634
Ped Vol Crossing Leg, #/h	1	1	1
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	5.8	6.3	6.8
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	L	TR	LT	TR	LT	TR
Assumed Moves	L	TR	LT	TR	LT	TR
RT Channelized						
Lane Util	0.219	0.781	0.471	0.529	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	95	338	187	210	475	535
Cap Entry Lane, veh/h	1028	1104	857	933	1237	1310
Entry HV Adj Factor	1.000	1.000	0.998	1.002	0.971	0.972
Flow Entry, veh/h	95	338	187	210	461	520
Cap Entry, veh/h	1027	1103	854	934	1199	1272
V/C Ratio	0.092	0.306	0.218	0.225	0.384	0.409
Control Delay, s/veh	4.3	6.2	6.5	6.1	6.8	6.8
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	1	1	1	2	2

Intersection	
Intersection Delay, s/veh	4.7
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	432	273	344
Demand Flow Rate, veh/h	436	275	344
Vehicles Circulating, veh/h	83	343	139
Vehicles Exiting, veh/h	400	176	479
Ped Vol Crossing Leg, #/h	5	5	5
Ped Cap Adj	0.995	0.996	0.995
Approach Delay, s/veh	5.0	4.8	4.4
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	L	TR	LT	TR	L	TR
RT Channelized						
Lane Util	0.787	0.213	0.469	0.531	0.241	0.759
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	343	93	129	146	83	261
Cap Entry Lane, veh/h	1251	1323	985	1061	1188	1262
Entry HV Adj Factor	0.991	0.990	0.993	0.990	1.000	1.000
Flow Entry, veh/h	340	92	128	144	83	261
Cap Entry, veh/h	1233	1303	974	1046	1182	1255
V/C Ratio	0.276	0.071	0.132	0.138	0.070	0.208
Control Delay, s/veh	5.4	3.3	4.9	4.7	3.6	4.7
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	0	0	1

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	0	0	0	92	2	20	0	200	107	13	182	24
Future Vol, veh/h	0	0	0	92	2	20	0	200	107	13	182	24
Conflicting Peds, #/hr	0	0	0	4	0	4	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	214	-	-	164	-	-
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, %	0	0	0	2	2	2	1	1	1	1	1	1
Mvmt Flow	0	0	0	100	2	22	0	217	116	14	198	26

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	353	577	116	411	532	175	224	0	0	338	0	0
Stage 1	239	239	-	280	280	-	-	-	-	-	-	-
Stage 2	114	338	-	131	252	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.54	6.54	6.94	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.52	4.02	3.32	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	583	430	921	525	452	838	1349	-	-	1225	-	-
Stage 1	749	711	-	703	678	-	-	-	-	-	-	-
Stage 2	885	644	-	859	697	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	556	424	917	515	445	832	1349	-	-	1221	-	-
Mov Cap-2 Maneuver	556	424	-	515	445	-	-	-	-	-	-	-
Stage 1	740	703	-	701	675	-	-	-	-	-	-	-
Stage 2	856	642	-	845	689	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	13.43	0	0.47
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1349	-	-	-	551	1221	-	-
HCM Lane V/C Ratio	-	-	-	-	0.225	0.012	-	-
HCM Control Delay (s/veh)	0	-	-	0	13.4	8	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.9	0	-	-

Intersection	
Int Delay, s/veh	8.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	341	30	9	575	63
Future Vol, veh/h	11	341	30	9	575	63
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	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	3	3	0	0
Mvmt Flow	12	371	33	10	625	68

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1356	38	0	0	42	0
Stage 1	38	-	-	-	-	-
Stage 2	1318	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.1	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.2	-
Pot Cap-1 Maneuver	165	1035	-	-	1580	-
Stage 1	985	-	-	-	-	-
Stage 2	250	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	97	1035	-	-	1580	-
Mov Cap-2 Maneuver	97	-	-	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	147	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.56	0	7.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	97	1035	1519	-
HCM Lane V/C Ratio	-	-	0.123	0.358	0.396	-
HCM Control Delay (s/veh)	-	-	47.3	10.4	8.8	0
HCM Lane LOS	-	-	E	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	1.6	1.9	-

Intersection	
Intersection Delay, s/veh	5.4
Intersection LOS	A

Approach	NB	SE	NW
Entry Lanes	2	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	696	596	431
Demand Flow Rate, veh/h	703	602	444
Vehicles Circulating, veh/h	269	254	264
Vehicles Exiting, veh/h	254	454	708
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.7	2.4	7.3
Approach LOS	A	A	A

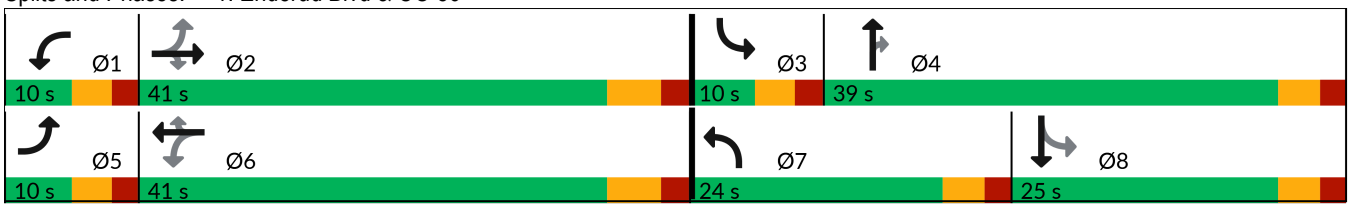
Lane	Left	Right	Left	Bypass	Left
Designated Moves	L	LTR	T	R	LT
Assumed Moves	L	TR	T		LT
RT Channelized				Free	
Lane Util	0.376	0.624	1.000		1.000
Follow-Up Headway, s	2.667	2.535	2.535		2.535
Critical Headway, s	4.645	4.328	4.328		4.328
A (Intercept)	1350	1420	1420		1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4		8.501e-4
Entry Flow, veh/h	264	439	269	333	444
Cap Entry Lane, veh/h	1054	1130	1144	1919	1135
Entry HV Adj Factor	0.989	0.991	0.990	0.990	0.972
Flow Entry, veh/h	261	435	266	330	431
Cap Entry, veh/h	1042	1120	1133	1900	1103
V/C Ratio	0.250	0.389	0.235	0.174	0.391
Control Delay, s/veh	5.9	7.2	5.3	0.0	7.3
LOS	A	A	A	A	A
95th %tile Queue, veh	1	2	1	1	2

Intersection Capacity Worksheets: 2030 Background + Project With Improvements

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	34	193	234	87	430	9	456	70	205	27	50
Future Volume (vph)	34	193	234	87	430	9	456	70	205	27	50
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6			4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	30.0	30.0	10.0	25.0
Total Split (s)	10.0	41.0	41.0	10.0	41.0	41.0	24.0	39.0	39.0	10.0	25.0
Total Split (%)	10.0%	41.0%	41.0%	10.0%	41.0%	41.0%	24.0%	39.0%	39.0%	10.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	40.2	35.4	35.4	41.2	37.4	37.4	16.5	28.2	28.2	15.4	10.3
Actuated g/C Ratio	0.47	0.41	0.41	0.48	0.43	0.43	0.19	0.33	0.33	0.18	0.12
v/c Ratio	0.11	0.28	0.32	0.17	0.58	0.01	0.75	0.12	0.33	0.11	0.57
Control Delay (s/veh)	12.7	20.2	4.0	13.0	24.4	0.0	41.2	23.3	5.1	20.4	26.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.7	20.2	4.0	13.0	24.4	0.0	41.2	23.3	5.1	20.4	26.9
LOS	B	C	A	B	C	A	D	C	A	C	C
Approach Delay (s/veh)		11.4			22.1			29.3			25.9
Approach LOS		B			C			C			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 86	
Natural Cycle: 85	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay (s/veh): 22.6	Intersection LOS: C
Intersection Capacity Utilization 66.6%	ICU Level of Service C
Analysis Period (min) 15	

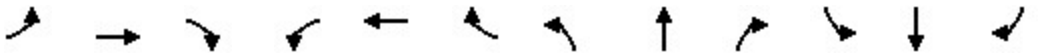
Splits and Phases: 1: Enderud Blvd & CO 86





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	37	210	254	95	467	10	496	76	223	29	156
v/c Ratio	0.11	0.28	0.32	0.17	0.58	0.01	0.75	0.12	0.33	0.11	0.57
Control Delay (s/veh)	12.7	20.2	4.0	13.0	24.4	0.0	41.2	23.3	5.1	20.4	26.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.7	20.2	4.0	13.0	24.4	0.0	41.2	23.3	5.1	20.4	26.9
Queue Length 50th (ft)	9	77	0	25	204	0	133	28	0	10	37
Queue Length 95th (ft)	28	147	49	58	349	0	200	67	51	27	98
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	250		120	185	
Base Capacity (vph)	350	750	788	560	801	769	773	751	772	261	455
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.28	0.32	0.17	0.58	0.01	0.64	0.10	0.29	0.11	0.34

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	193	234	87	430	9	456	70	205	27	50	94
Future Volume (veh/h)	34	193	234	87	430	9	456	70	205	27	50	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	37	210	254	95	467	10	496	76	223	29	54	102
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	3	3	3	1	1	1	2	2	2
Cap, veh/h	354	751	635	482	791	669	597	501	424	269	71	134
Arrive On Green	0.03	0.41	0.41	0.05	0.43	0.43	0.17	0.27	0.27	0.03	0.12	0.12
Sat Flow, veh/h	1753	1841	1556	1767	1856	1570	3483	1885	1598	1781	576	1088
Grp Volume(v), veh/h	37	210	254	95	467	10	496	76	223	29	0	156
Grp Sat Flow(s),veh/h/ln	1753	1841	1556	1767	1856	1570	1742	1885	1598	1781	0	1664
Q Serve(g_s), s	1.0	6.5	9.9	2.6	16.5	0.3	11.8	2.6	10.2	1.2	0.0	7.8
Cycle Q Clear(g_c), s	1.0	6.5	9.9	2.6	16.5	0.3	11.8	2.6	10.2	1.2	0.0	7.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	354	751	635	482	791	669	597	501	424	269	0	205
V/C Ratio(X)	0.10	0.28	0.40	0.20	0.59	0.01	0.83	0.15	0.53	0.11	0.00	0.76
Avail Cap(c_a), veh/h	397	751	635	492	791	669	772	747	633	321	0	388
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.0	17.0	17.9	13.5	18.9	14.2	34.3	24.1	26.9	31.3	0.0	36.4
Incr Delay (d2), s/veh	0.1	0.9	1.9	0.2	3.2	0.0	6.0	0.1	1.0	0.2	0.0	5.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.6	3.7	0.9	6.7	0.1	5.3	1.2	3.9	0.5	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.1	17.9	19.8	13.7	22.1	14.2	40.3	24.2	27.9	31.5	0.0	42.1
LnGrp LOS	B	B	B	B	C	B	D	C	C	C		D
Approach Vol, veh/h		501			572			795			185	
Approach Delay, s/veh		18.7			20.6			35.3			40.4	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	41.0	7.5	27.8	7.9	42.6	19.7	15.6
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	35.0	5.0	34.0	5.0	35.0	19.0	20.0
Max Q Clear Time (g_c+I1), s	4.6	11.9	3.2	12.2	3.0	18.5	13.8	9.8
Green Ext Time (p_c), s	0.0	1.8	0.0	1.1	0.0	2.2	0.9	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	27.6
HCM 7th LOS	C

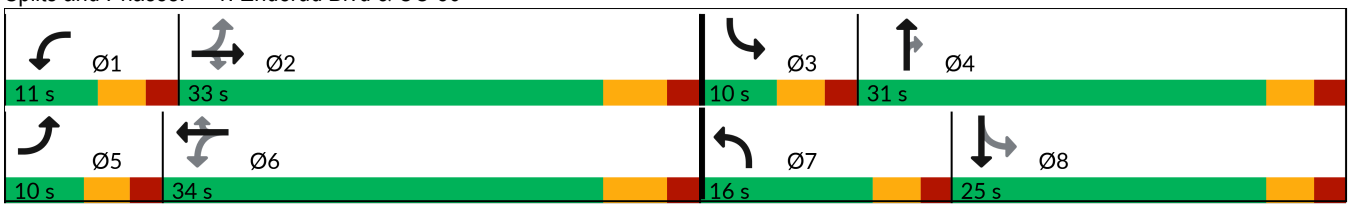
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	52	440	429	149	366	19	322	15	104	10	33
Future Volume (vph)	52	440	429	149	366	19	322	15	104	10	33
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6			4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	25.0	25.0	10.0	25.0
Total Split (s)	10.0	33.0	33.0	11.0	34.0	34.0	16.0	31.0	31.0	10.0	25.0
Total Split (%)	11.8%	38.8%	38.8%	12.9%	40.0%	40.0%	18.8%	36.5%	36.5%	11.8%	29.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	33.3	27.3	27.3	37.1	32.6	32.6	10.6	19.1	19.1	11.6	8.5
Actuated g/C Ratio	0.47	0.39	0.39	0.53	0.46	0.46	0.15	0.27	0.27	0.16	0.12
v/c Ratio	0.12	0.66	0.52	0.43	0.46	0.03	0.68	0.03	0.21	0.04	0.32
Control Delay (s/veh)	9.5	24.4	4.2	12.9	18.1	0.1	36.8	20.4	2.6	17.6	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.5	24.4	4.2	12.9	18.1	0.1	36.8	20.4	2.6	17.6	20.4
LOS	A	C	A	B	B	A	D	C	A	B	C
Approach Delay (s/veh)		14.1			16.0			28.2			20.1
Approach LOS		B			B			C			C

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 70.5	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 18.0	Intersection LOS: B
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	57	478	466	162	398	21	350	16	113	11	79
v/c Ratio	0.12	0.66	0.52	0.43	0.46	0.03	0.68	0.03	0.21	0.04	0.32
Control Delay (s/veh)	9.5	24.4	4.2	12.9	18.1	0.1	36.8	20.4	2.6	17.6	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.5	24.4	4.2	12.9	18.1	0.1	36.8	20.4	2.6	17.6	20.4
Queue Length 50th (ft)	11	178	0	35	137	0	78	5	0	3	15
Queue Length 95th (ft)	29	294	58	69	231	0	#125	21	17	14	52
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	250		120	185	
Base Capacity (vph)	481	727	904	378	862	832	541	693	694	258	521
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.66	0.52	0.43	0.46	0.03	0.65	0.02	0.16	0.04	0.15

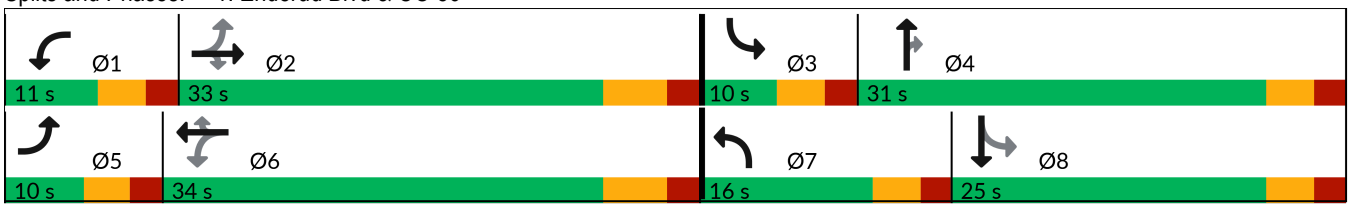
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	52	440	429	149	366	19	322	15	104	10	33
Future Volume (vph)	52	440	429	149	366	19	322	15	104	10	33
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6			4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	25.0	25.0	10.0	25.0
Total Split (s)	10.0	33.0	33.0	11.0	34.0	34.0	16.0	31.0	31.0	10.0	25.0
Total Split (%)	11.8%	38.8%	38.8%	12.9%	40.0%	40.0%	18.8%	36.5%	36.5%	11.8%	29.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	33.3	27.3	27.3	37.1	32.6	32.6	10.6	19.1	19.1	11.6	8.5
Actuated g/C Ratio	0.47	0.39	0.39	0.53	0.46	0.46	0.15	0.27	0.27	0.16	0.12
v/c Ratio	0.12	0.66	0.52	0.43	0.46	0.03	0.68	0.03	0.21	0.04	0.32
Control Delay (s/veh)	9.5	24.4	4.2	12.9	18.1	0.1	36.8	20.4	2.6	17.6	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.5	24.4	4.2	12.9	18.1	0.1	36.8	20.4	2.6	17.6	20.4
LOS	A	C	A	B	B	A	D	C	A	B	C
Approach Delay (s/veh)		14.1			16.0			28.2			20.1
Approach LOS		B			B			C			C

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 70.5	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 18.0	Intersection LOS: B
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

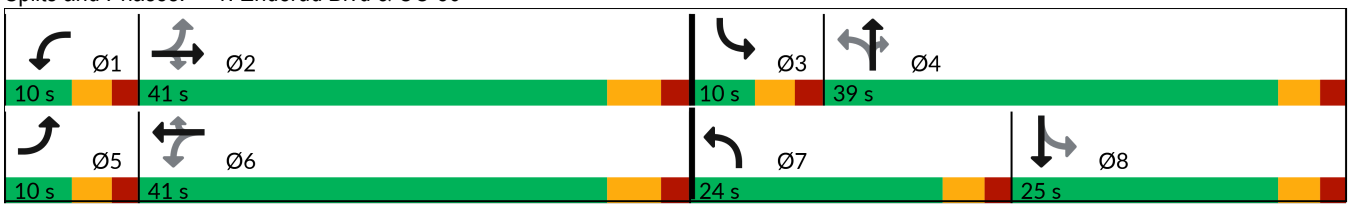


Intersection Capacity Worksheets: 2045 Background + Project

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	40	225	248	95	500	15	463	75	219	30	55
Future Volume (vph)	40	225	248	95	500	15	463	75	219	30	55
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6	4		4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	30.0	30.0	10.0	25.0
Total Split (s)	10.0	41.0	41.0	10.0	41.0	41.0	24.0	39.0	39.0	10.0	25.0
Total Split (%)	10.0%	41.0%	41.0%	10.0%	41.0%	41.0%	24.0%	39.0%	39.0%	10.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	40.1	35.2	35.2	41.1	37.2	37.2	35.1	29.4	29.4	16.0	11.0
Actuated g/C Ratio	0.45	0.40	0.40	0.46	0.42	0.42	0.39	0.33	0.33	0.18	0.12
v/c Ratio	0.16	0.34	0.35	0.21	0.71	0.02	1.00	0.13	0.35	0.13	0.61
Control Delay (s/veh)	14.0	21.9	4.1	14.1	29.6	0.1	67.6	24.3	5.0	20.3	30.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.0	21.9	4.1	14.1	29.6	0.1	67.6	24.3	5.0	20.3	30.0
LOS	B	C	A	B	C	A	E	C	A	C	C
Approach Delay (s/veh)		12.7			26.5			45.2			28.4
Approach LOS		B			C			D			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 89.1	
Natural Cycle: 85	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay (s/veh): 30.1	Intersection LOS: C
Intersection Capacity Utilization 83.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86



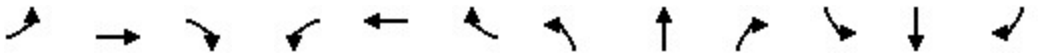


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	43	245	270	103	543	16	503	82	238	33	169
v/c Ratio	0.16	0.34	0.35	0.21	0.71	0.02	1.00	0.13	0.35	0.13	0.61
Control Delay (s/veh)	14.0	21.9	4.1	14.1	29.6	0.1	67.6	24.3	5.0	20.3	30.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.0	21.9	4.1	14.1	29.6	0.1	67.6	24.3	5.0	20.3	30.0
Queue Length 50th (ft)	12	97	0	29	263	0	~255	36	0	12	47
Queue Length 95th (ft)	32	174	51	64	#469	0	#420	71	52	30	112
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	130		120	185	
Base Capacity (vph)	270	721	776	502	770	746	502	721	759	261	436
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.34	0.35	0.21	0.71	0.02	1.00	0.11	0.31	0.13	0.39

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	225	248	95	500	15	463	75	219	30	55	100
Future Volume (veh/h)	40	225	248	95	500	15	463	75	219	30	55	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	43	245	270	103	543	16	503	82	238	33	60	109
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	3	3	3	1	1	1	2	2	2
Cap, veh/h	267	703	594	424	739	626	488	575	487	270	76	138
Arrive On Green	0.04	0.38	0.38	0.05	0.40	0.40	0.21	0.31	0.31	0.03	0.13	0.13
Sat Flow, veh/h	1753	1841	1556	1767	1856	1570	1795	1885	1598	1781	592	1075
Grp Volume(v), veh/h	43	245	270	103	543	16	503	82	238	33	0	169
Grp Sat Flow(s),veh/h/ln	1753	1841	1556	1767	1856	1570	1795	1885	1598	1781	0	1667
Q Serve(g_s), s	1.3	8.7	11.9	3.2	22.8	0.6	19.0	2.9	11.1	1.5	0.0	9.0
Cycle Q Clear(g_c), s	1.3	8.7	11.9	3.2	22.8	0.6	19.0	2.9	11.1	1.5	0.0	9.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.64
Lane Grp Cap(c), veh/h	267	703	594	424	739	626	488	575	487	270	0	215
V/C Ratio(X)	0.16	0.35	0.45	0.24	0.73	0.03	1.03	0.14	0.49	0.12	0.00	0.79
Avail Cap(c_a), veh/h	299	703	594	427	739	626	488	700	593	312	0	364
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.5	20.2	21.2	16.0	23.4	16.8	27.9	23.1	26.0	33.0	0.0	38.7
Incr Delay (d2), s/veh	0.3	1.4	2.5	0.3	6.4	0.1	48.8	0.1	0.8	0.2	0.0	6.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.6	4.6	1.2	10.0	0.2	15.5	1.3	4.2	0.6	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.8	21.5	23.7	16.3	29.8	16.8	76.7	23.2	26.8	33.2	0.0	45.0
LnGrp LOS	B	C	C	B	C	B	F	C	C	C		D
Approach Vol, veh/h		558			662			823			202	
Approach Delay, s/veh		22.4			27.4			57.0			43.1	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	41.0	7.8	33.0	8.3	42.5	24.0	16.8
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	35.0	5.0	34.0	5.0	35.0	19.0	20.0
Max Q Clear Time (g_c+I1), s	5.2	13.9	3.5	13.1	3.3	24.8	21.0	11.0
Green Ext Time (p_c), s	0.0	2.0	0.0	1.2	0.0	2.2	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	38.4
HCM 7th LOS	D

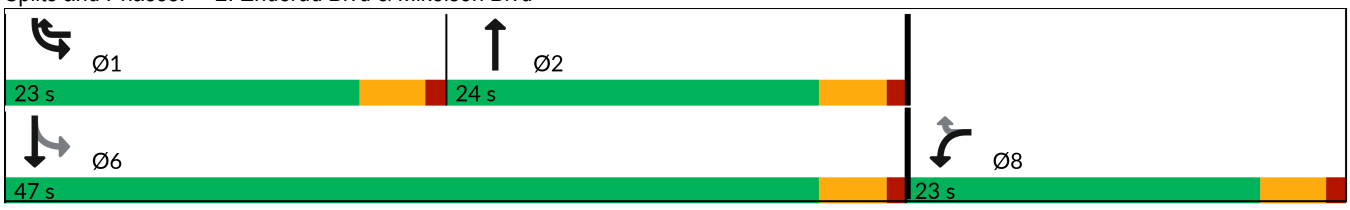
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	250	482	75	333	35
Future Volume (vph)	250	482	75	333	35
Turn Type	Prot	pm+ov	NA	pm+pt	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8		6	
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	24.0	23.0	47.0
Total Split (%)	32.9%	32.9%	34.3%	32.9%	67.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	Max	None	Max
Act Effct Green (s)	14.5	31.8	25.4	42.6	42.6
Actuated g/C Ratio	0.22	0.48	0.38	0.64	0.64
v/c Ratio	0.69	0.50	0.14	0.45	0.02
Control Delay (s/veh)	33.6	2.6	8.8	7.9	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.6	2.6	8.8	7.9	5.1
LOS	C	A	A	A	A
Approach Delay (s/veh)	13.2		8.8		7.7
Approach LOS	B		A		A

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 66.2	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 11.0	Intersection LOS: B
Intersection Capacity Utilization 48.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Enderud Blvd & Mikelson Blvd





Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	272	524	179	362	38
v/c Ratio	0.69	0.50	0.14	0.45	0.02
Control Delay (s/veh)	33.6	2.6	8.8	7.9	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.6	2.6	8.8	7.9	5.1
Queue Length 50th (ft)	101	0	11	57	2
Queue Length 95th (ft)	174	34	35	112	7
Internal Link Dist (ft)	4240		3911		2535
Turn Bay Length (ft)	310	305		138	
Base Capacity (vph)	500	1134	1318	863	2278
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.54	0.46	0.14	0.42	0.02

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	250	482	75	89	333	35
Future Volume (veh/h)	250	482	75	89	333	35
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1870	1870
Adj Flow Rate, veh/h	272	524	82	97	362	38
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	2	2
Cap, veh/h	475	660	706	630	796	2158
Arrive On Green	0.26	0.26	0.39	0.39	0.15	0.61
Sat Flow, veh/h	1795	1598	1885	1598	1781	3647
Grp Volume(v), veh/h	272	524	82	97	362	38
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1598	1781	1777
Q Serve(g_s), s	9.2	18.5	2.0	2.7	7.7	0.3
Cycle Q Clear(g_c), s	9.2	18.5	2.0	2.7	7.7	0.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	475	660	706	630	796	2158
V/C Ratio(X)	0.57	0.79	0.12	0.15	0.46	0.02
Avail Cap(c_a), veh/h	475	660	706	630	1001	2158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	17.9	13.5	13.7	8.3	5.5
Incr Delay (d2), s/veh	1.7	6.7	0.3	0.5	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	7.7	0.8	1.0	2.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.0	24.6	13.8	14.2	8.7	5.5
LnGrp LOS	C	C	B	B	A	A
Approach Vol, veh/h	796		179			400
Approach Delay, s/veh	24.4		14.0			8.4
Approach LOS	C		B			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.9	32.1				47.0	23.0
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	18.5	19.5				42.5	18.5
Max Q Clear Time (g_c+I1), s	9.7	4.7				2.3	20.5
Green Ext Time (p_c), s	0.8	0.8				0.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	18.4
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	718	413	358
Demand Flow Rate, veh/h	718	413	369
Vehicles Circulating, veh/h	348	167	98
Vehicles Exiting, veh/h	232	300	968
Ped Vol Crossing Leg, #/h	1	1	1
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	10.2	4.5	4.1
Approach LOS	B	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	L	TR	LT	TR	LT	TR
Assumed Moves	L	TR	LT	TR	LT	TR
RT Channelized						
Lane Util	0.136	0.864	0.470	0.530	0.469	0.531
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	98	620	194	219	173	196
Cap Entry Lane, veh/h	980	1056	1158	1232	1233	1307
Entry HV Adj Factor	1.000	1.000	1.001	0.999	0.973	0.968
Flow Entry, veh/h	98	620	194	219	168	190
Cap Entry, veh/h	979	1056	1157	1230	1199	1264
V/C Ratio	0.100	0.587	0.168	0.178	0.140	0.150
Control Delay, s/veh	4.6	11.1	4.6	4.4	4.2	4.1
LOS	A	B	A	A	A	A
95th %tile Queue, veh	0	4	1	1	0	1

Intersection	
Intersection Delay, s/veh	6.2
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	459	308	723
Demand Flow Rate, veh/h	468	314	737
Vehicles Circulating, veh/h	169	407	105
Vehicles Exiting, veh/h	673	230	616
Ped Vol Crossing Leg, #/h	5	5	5
Ped Cap Adj	0.995	0.996	0.995
Approach Delay, s/veh	6.3	5.5	6.5
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	L	TR	LT	R	L	TR
RT Channelized						
Lane Util	0.870	0.130	0.334	0.666	0.229	0.771
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	407	61	105	209	169	568
Cap Entry Lane, veh/h	1155	1230	928	1005	1226	1299
Entry HV Adj Factor	0.980	0.980	0.980	0.981	0.982	0.981
Flow Entry, veh/h	399	60	103	205	166	557
Cap Entry, veh/h	1127	1200	907	982	1197	1267
V/C Ratio	0.354	0.050	0.114	0.209	0.139	0.440
Control Delay, s/veh	6.7	3.4	5.0	5.7	4.2	7.2
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	0	0	1	0	2

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	102	0	25	0	214	35	10	213	1
Future Vol, veh/h	1	0	0	102	0	25	0	214	35	10	213	1
Conflicting Peds, #/hr	0	0	0	4	0	4	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	214	-	-	164	-	-
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, %	0	0	0	1	1	1	3	3	3	2	2	2
Mvmt Flow	1	0	0	111	0	27	0	233	38	11	232	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	374	528	120	397	510	143	233	0	0	275	0	0
Stage 1	254	254	-	256	256	-	-	-	-	-	-	-
Stage 2	120	275	-	142	254	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.52	6.52	6.92	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.52	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.52	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.51	4.01	3.31	2.23	-	-	2.22	-	-
Pot Cap-1 Maneuver	563	458	915	540	467	881	1325	-	-	1285	-	-
Stage 1	734	701	-	729	697	-	-	-	-	-	-	-
Stage 2	877	686	-	850	698	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	539	453	911	531	462	875	1325	-	-	1280	-	-
Mov Cap-2 Maneuver	539	453	-	531	462	-	-	-	-	-	-	-
Stage 1	728	695	-	727	694	-	-	-	-	-	-	-
Stage 2	847	684	-	839	692	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.7	13.22	0	0.35
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1325	-	-	539	575	1280	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.24	0.008	-	-
HCM Control Delay (s/veh)	0	-	-	11.7	13.2	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.9	0	-	-

Intersection	
Int Delay, s/veh	10.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	520	100	10	244	30
Future Vol, veh/h	10	520	100	10	244	30
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	0	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	11	565	109	11	265	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	677	114	0	0	120	0
Stage 1	114	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.12	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	420	941	-	-	1468	-
Stage 1	913	-	-	-	-	-
Stage 2	572	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	344	941	-	-	1468	-
Mov Cap-2 Maneuver	344	-	-	-	-	-
Stage 1	913	-	-	-	-	-
Stage 2	469	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	14.43	0	7.12
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	344	941	1468	-
HCM Lane V/C Ratio	-	-	0.032	0.601	0.181	-
HCM Control Delay (s/veh)	-	-	15.8	14.4	8	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	4.1	0.7	-

Intersection	
Intersection Delay, s/veh	5.0
Intersection LOS	A

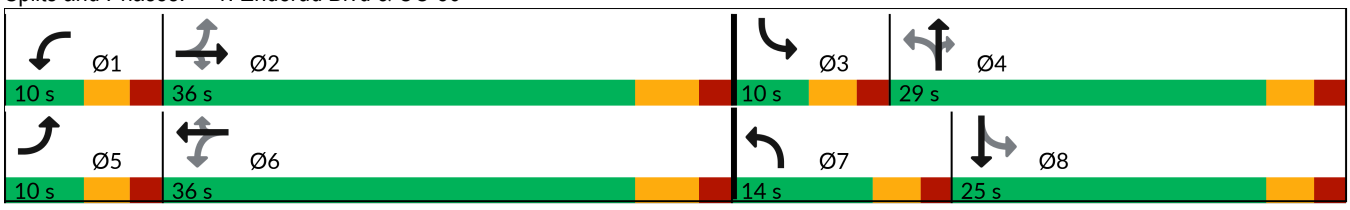
Approach	NB	SE	NW
Entry Lanes	2	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	227	163	533
Demand Flow Rate, veh/h	231	167	538
Vehicles Circulating, veh/h	39	340	116
Vehicles Exiting, veh/h	340	314	154
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.4	0.9	6.9
Approach LOS	A	A	A

Lane	Left	Right	Left	Bypass	Left
Designated Moves	L	LTR	T	R	LT
Assumed Moves	L	LTR	T		LT
RT Channelized				Free	
Lane Util	0.528	0.472	1.000		1.000
Follow-Up Headway, s	2.667	2.535	2.535		2.535
Critical Headway, s	4.645	4.328	4.328		4.328
A (Intercept)	1350	1420	1420		1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4		8.501e-4
Entry Flow, veh/h	122	109	39	128	538
Cap Entry Lane, veh/h	1302	1374	1064	1938	1287
Entry HV Adj Factor	0.986	0.979	0.980	0.980	0.991
Flow Entry, veh/h	120	107	38	125	533
Cap Entry, veh/h	1284	1345	1043	1900	1275
V/C Ratio	0.094	0.079	0.037	0.066	0.418
Control Delay, s/veh	3.6	3.3	3.8	0.0	6.9
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	55	510	454	161	425	25	341	20	109	15	35
Future Volume (vph)	55	510	454	161	425	25	341	20	109	15	35
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6	4		4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	25.0	25.0	10.0	25.0
Total Split (s)	10.0	36.0	36.0	10.0	36.0	36.0	14.0	29.0	29.0	10.0	25.0
Total Split (%)	11.8%	42.4%	42.4%	11.8%	42.4%	42.4%	16.5%	34.1%	34.1%	11.8%	29.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	36.3	30.2	30.2	38.4	34.5	34.5	19.4	17.7	17.7	11.7	8.6
Actuated g/C Ratio	0.51	0.43	0.43	0.54	0.49	0.49	0.27	0.25	0.25	0.16	0.12
v/c Ratio	0.13	0.69	0.51	0.51	0.51	0.03	1.06	0.05	0.23	0.06	0.35
Control Delay (s/veh)	8.6	23.5	3.8	14.8	17.7	0.1	90.6	21.9	3.1	18.9	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.6	23.5	3.8	14.8	17.7	0.1	90.6	21.9	3.1	18.9	20.2
LOS	A	C	A	B	B	A	F	C	A	B	C
Approach Delay (s/veh)		13.9			16.2			67.4			20.0
Approach LOS		B			B			E			B

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 71	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay (s/veh): 26.3	Intersection LOS: C
Intersection Capacity Utilization 74.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86



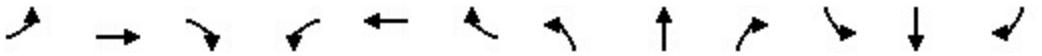


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	60	554	493	175	462	27	371	22	118	16	87
v/c Ratio	0.13	0.69	0.51	0.51	0.51	0.03	1.06	0.05	0.23	0.06	0.35
Control Delay (s/veh)	8.6	23.5	3.8	14.8	17.7	0.1	90.6	21.9	3.1	18.9	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.6	23.5	3.8	14.8	17.7	0.1	90.6	21.9	3.1	18.9	20.2
Queue Length 50th (ft)	11	202	0	35	158	0	~147	7	0	5	16
Queue Length 95th (ft)	28	334	55	70	264	0	#256	27	20	18	55
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	130		120	185	
Base Capacity (vph)	453	800	963	341	906	831	351	634	649	258	517
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.69	0.51	0.51	0.51	0.03	1.06	0.03	0.18	0.06	0.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	510	454	161	425	25	341	20	109	15	35	45
Future Volume (veh/h)	55	510	454	161	425	25	341	20	109	15	35	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	60	554	493	175	462	27	371	22	118	16	38	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	1	1	1
Cap, veh/h	407	773	653	309	804	681	401	404	342	273	83	107
Arrive On Green	0.05	0.41	0.41	0.07	0.43	0.43	0.12	0.22	0.22	0.02	0.11	0.11
Sat Flow, veh/h	1795	1885	1594	1781	1870	1583	1781	1870	1585	1795	744	959
Grp Volume(v), veh/h	60	554	493	175	462	27	371	22	118	16	0	87
Grp Sat Flow(s),veh/h/ln	1795	1885	1594	1781	1870	1583	1781	1870	1585	1795	0	1702
Q Serve(g_s), s	1.4	18.0	19.3	4.2	13.7	0.7	9.0	0.7	4.6	0.6	0.0	3.5
Cycle Q Clear(g_c), s	1.4	18.0	19.3	4.2	13.7	0.7	9.0	0.7	4.6	0.6	0.0	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	407	773	653	309	804	681	401	404	342	273	0	191
V/C Ratio(X)	0.15	0.72	0.75	0.57	0.57	0.04	0.93	0.05	0.34	0.06	0.00	0.46
Avail Cap(c_a), veh/h	443	773	653	309	804	681	401	613	520	362	0	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.2	18.0	18.5	14.3	15.8	12.1	27.4	22.8	24.3	27.9	0.0	30.4
Incr Delay (d2), s/veh	0.2	5.6	7.9	2.4	3.0	0.1	27.1	0.1	0.6	0.1	0.0	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	7.5	7.9	1.5	5.3	0.3	5.0	0.3	1.7	0.2	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.4	23.7	26.4	16.7	18.8	12.2	54.5	22.8	24.9	28.0	0.0	32.1
LnGrp LOS	B	C	C	B	B	B	D	C	C	C		C
Approach Vol, veh/h		1107			664			511			103	
Approach Delay, s/veh		24.3			18.0			46.3			31.5	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	36.0	6.4	20.8	8.5	37.5	14.0	13.2
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	30.0	5.0	24.0	5.0	30.0	9.0	20.0
Max Q Clear Time (g_c+I1), s	6.2	21.3	2.6	6.6	3.4	15.7	11.0	5.5
Green Ext Time (p_c), s	0.0	3.3	0.0	0.4	0.0	2.1	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	27.6
HCM 7th LOS	C

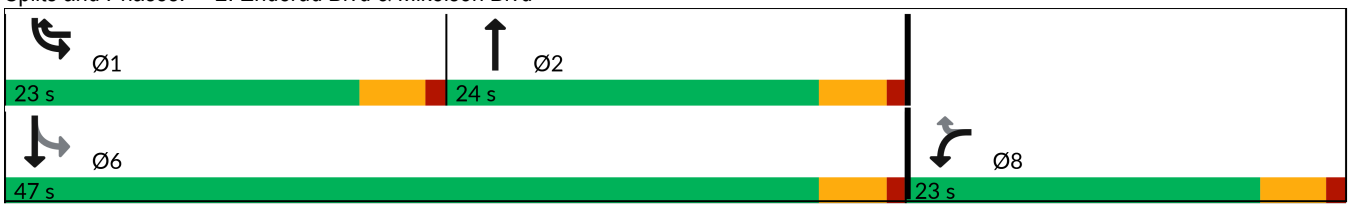
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	134	275	75	390	80
Future Volume (vph)	134	275	75	390	80
Turn Type	Prot	pm+ov	NA	pm+pt	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8		6	
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	24.0	23.0	47.0
Total Split (%)	32.9%	32.9%	34.3%	32.9%	67.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	Max	None	Max
Act Effct Green (s)	10.2	23.6	26.9	43.1	44.3
Actuated g/C Ratio	0.17	0.40	0.45	0.72	0.74
v/c Ratio	0.48	0.37	0.16	0.50	0.03
Control Delay (s/veh)	28.7	2.5	5.9	6.5	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.7	2.5	5.9	6.5	3.7
LOS	C	A	A	A	A
Approach Delay (s/veh)	11.1		5.9		6.0
Approach LOS	B		A		A

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 59.7	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay (s/veh): 7.8	Intersection LOS: A
Intersection Capacity Utilization 47.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Enderud Blvd & Mikelson Blvd





Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	146	299	254	424	87
v/c Ratio	0.48	0.37	0.16	0.50	0.03
Control Delay (s/veh)	28.7	2.5	5.9	6.5	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.7	2.5	5.9	6.5	3.7
Queue Length 50th (ft)	50	0	8	52	4
Queue Length 95th (ft)	98	28	36	112	12
Internal Link Dist (ft)	4240		3911		2535
Turn Bay Length (ft)	310	305		138	
Base Capacity (vph)	561	969	1542	953	2650
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.26	0.31	0.16	0.44	0.03

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	134	275	75	158	390	80
Future Volume (veh/h)	134	275	75	158	390	80
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	146	299	82	172	424	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	348	568	776	692	817	2383
Arrive On Green	0.19	0.19	0.43	0.43	0.16	0.67
Sat Flow, veh/h	1795	1598	1885	1598	1795	3676
Grp Volume(v), veh/h	146	299	82	172	424	87
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1598	1795	1791
Q Serve(g_s), s	4.6	9.5	1.7	4.4	7.4	0.5
Cycle Q Clear(g_c), s	4.6	9.5	1.7	4.4	7.4	0.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	348	568	776	692	817	2383
V/C Ratio(X)	0.42	0.53	0.11	0.25	0.52	0.04
Avail Cap(c_a), veh/h	520	721	776	692	1047	2383
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	16.3	10.8	11.5	6.3	3.7
Incr Delay (d2), s/veh	0.8	0.8	0.3	0.9	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.2	0.7	1.5	2.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.4	17.1	11.0	12.4	6.9	3.7
LnGrp LOS	C	B	B	B	A	A
Approach Vol, veh/h	445		254			511
Approach Delay, s/veh	19.2		11.9			6.3
Approach LOS	B		B			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.8	32.2				47.0	16.9
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	18.5	19.5				42.5	18.5
Max Q Clear Time (g_c+I1), s	9.4	6.4				2.5	11.5
Green Ext Time (p_c), s	0.9	1.1				0.5	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	12.2
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	467	479	1134
Demand Flow Rate, veh/h	467	479	1168
Vehicles Circulating, veh/h	370	524	109
Vehicles Exiting, veh/h	633	753	728
Ped Vol Crossing Leg, #/h	1	1	1
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	6.5	7.1	7.8
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	L	TR	LT	TR	LT	TR
Assumed Moves	L	TR	LT	TR	LT	TR
RT Channelized						
Lane Util	0.233	0.767	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	109	358	225	254	549	619
Cap Entry Lane, veh/h	960	1037	834	910	1221	1294
Entry HV Adj Factor	1.000	1.000	1.001	0.999	0.971	0.971
Flow Entry, veh/h	109	358	225	254	533	601
Cap Entry, veh/h	960	1036	834	909	1184	1256
V/C Ratio	0.114	0.346	0.270	0.279	0.450	0.479
Control Delay, s/veh	4.8	7.0	7.3	6.9	7.8	7.9
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	2	1	1	2	3

Intersection	
Intersection Delay, s/veh	4.8
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	448	292	354
Demand Flow Rate, veh/h	453	294	354
Vehicles Circulating, veh/h	83	354	148
Vehicles Exiting, veh/h	419	182	500
Ped Vol Crossing Leg, #/h	5	5	5
Ped Cap Adj	0.995	0.996	0.995
Approach Delay, s/veh	5.0	4.9	4.5
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	L	TR	LT	TR	L	TR
RT Channelized						
Lane Util	0.781	0.219	0.469	0.531	0.234	0.766
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	354	99	138	156	83	271
Cap Entry Lane, veh/h	1251	1323	975	1051	1178	1252
Entry HV Adj Factor	0.989	0.990	0.993	0.990	1.000	1.000
Flow Entry, veh/h	350	98	137	155	83	271
Cap Entry, veh/h	1230	1303	964	1037	1172	1246
V/C Ratio	0.285	0.075	0.142	0.149	0.071	0.218
Control Delay, s/veh	5.5	3.4	5.1	4.8	3.7	4.8
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	0	0	1	0	1

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	103	2	20	0	208	116	20	191	15
Future Vol, veh/h	0	0	0	103	2	20	0	208	116	20	191	15
Conflicting Peds, #/hr	0	0	0	4	0	4	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	214	-	-	164	-	-
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, %	0	0	0	2	2	2	1	1	1	1	1	1
Mvmt Flow	0	0	0	112	2	22	0	226	126	22	208	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	377	615	116	444	561	184	224	0	0	356	0	0
Stage 1	259	259	-	293	293	-	-	-	-	-	-	-
Stage 2	118	356	-	151	267	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.54	6.54	6.94	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.52	4.02	3.32	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	560	409	921	497	435	827	1349	-	-	1206	-	-
Stage 1	729	697	-	691	669	-	-	-	-	-	-	-
Stage 2	880	632	-	836	686	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	530	400	917	484	426	820	1349	-	-	1202	-	-
Mov Cap-2 Maneuver	530	400	-	484	426	-	-	-	-	-	-	-
Stage 1	715	684	-	688	666	-	-	-	-	-	-	-
Stage 2	850	630	-	818	674	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	14.42	0	0.71
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1349	-	-	-	517	1202	-	-
HCM Lane V/C Ratio	-	-	-	-	0.263	0.018	-	-
HCM Control Delay (s/veh)	0	-	-	0	14.4	8.1	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	1	0.1	-	-

Intersection	
Int Delay, s/veh	8.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	359	65	10	609	125
Future Vol, veh/h	10	359	65	10	609	125
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	0	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	11	390	71	11	662	136

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1536	76	0	0	82	0
Stage 1	76	-	-	-	-	-
Stage 2	1460	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.1	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.2	-
Pot Cap-1 Maneuver	128	985	-	-	1529	-
Stage 1	947	-	-	-	-	-
Stage 2	213	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	72	985	-	-	1529	-
Mov Cap-2 Maneuver	72	-	-	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	121	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.45	0	7.58
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	72	985	1529	-
HCM Lane V/C Ratio	-	-	0.15	0.396	0.433	-
HCM Control Delay (s/veh)	-	-	63.3	11	9.1	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	1.9	2.2	-

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Approach	NB	SE	NW
Entry Lanes	2	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	841	745	520
Demand Flow Rate, veh/h	849	752	536
Vehicles Circulating, veh/h	335	301	329
Vehicles Exiting, veh/h	301	564	855
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	8.3	2.8	9.3
Approach LOS	A	A	A

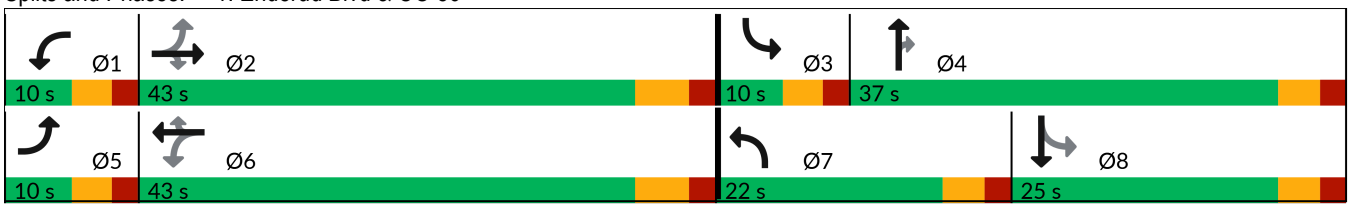
Lane	Left	Right	Left	Bypass	Left
Designated Moves	L	LTR	T	R	LT
Assumed Moves	L	TR	T		LT
RT Channelized				Free	
Lane Util	0.388	0.612	1.000		1.000
Follow-Up Headway, s	2.667	2.535	2.535		2.535
Critical Headway, s	4.645	4.328	4.328		4.328
A (Intercept)	1350	1420	1420		1420
B (Slope)	9.199e-4	8.501e-4	8.501e-4		8.501e-4
Entry Flow, veh/h	329	520	335	417	536
Cap Entry Lane, veh/h	992	1068	1099	1919	1074
Entry HV Adj Factor	0.991	0.990	0.990	0.990	0.970
Flow Entry, veh/h	326	515	332	413	520
Cap Entry, veh/h	983	1058	1089	1900	1042
V/C Ratio	0.332	0.487	0.305	0.217	0.499
Control Delay, s/veh	7.1	9.0	6.3	0.0	9.3
LOS	A	A	A	A	A
95th %tile Queue, veh	1	3	1	1	3

Intersection Capacity Worksheets: 2045 Background + Project With Improvements

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	40	225	248	95	500	15	463	75	219	30	55
Future Volume (vph)	40	225	248	95	500	15	463	75	219	30	55
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6			4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	30.0	30.0	10.0	25.0
Total Split (s)	10.0	43.0	43.0	10.0	43.0	43.0	22.0	37.0	37.0	10.0	25.0
Total Split (%)	10.0%	43.0%	43.0%	10.0%	43.0%	43.0%	22.0%	37.0%	37.0%	10.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	42.2	37.3	37.3	43.2	39.3	39.3	16.1	26.4	26.4	16.0	10.9
Actuated g/C Ratio	0.48	0.42	0.42	0.49	0.45	0.45	0.18	0.30	0.30	0.18	0.12
v/c Ratio	0.14	0.32	0.33	0.19	0.66	0.02	0.79	0.15	0.37	0.13	0.61
Control Delay (s/veh)	12.6	20.1	3.8	12.8	26.2	0.1	45.9	26.0	5.4	21.2	29.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.6	20.1	3.8	12.8	26.2	0.1	45.9	26.0	5.4	21.2	29.8
LOS	B	C	A	B	C	A	D	C	A	C	C
Approach Delay (s/veh)		11.6			23.5			32.2			28.4
Approach LOS		B			C			C			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 88.2	
Natural Cycle: 85	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 24.2	Intersection LOS: C
Intersection Capacity Utilization 71.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

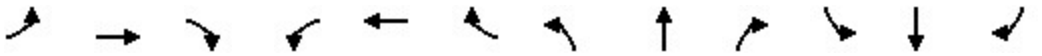




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	43	245	270	103	543	16	503	82	238	33	169
v/c Ratio	0.14	0.32	0.33	0.19	0.66	0.02	0.79	0.15	0.37	0.13	0.61
Control Delay (s/veh)	12.6	20.1	3.8	12.8	26.2	0.1	45.9	26.0	5.4	21.2	29.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.6	20.1	3.8	12.8	26.2	0.1	45.9	26.0	5.4	21.2	29.8
Queue Length 50th (ft)	11	93	0	28	252	0	141	37	0	12	47
Queue Length 95th (ft)	31	168	49	61	418	0	#231	73	54	31	111
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	250		120	185	
Base Capacity (vph)	306	772	812	541	822	784	673	688	735	263	444
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.32	0.33	0.19	0.66	0.02	0.75	0.12	0.32	0.13	0.38

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	225	248	95	500	15	463	75	219	30	55	100
Future Volume (veh/h)	40	225	248	95	500	15	463	75	219	30	55	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	43	245	270	103	543	16	503	82	238	33	60	109
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	3	3	3	1	1	1	2	2	2
Cap, veh/h	307	764	645	457	797	675	587	503	426	274	77	139
Arrive On Green	0.04	0.41	0.41	0.05	0.43	0.43	0.17	0.27	0.27	0.03	0.13	0.13
Sat Flow, veh/h	1753	1841	1556	1767	1856	1570	3483	1885	1598	1781	592	1075
Grp Volume(v), veh/h	43	245	270	103	543	16	503	82	238	33	0	169
Grp Sat Flow(s),veh/h/ln	1753	1841	1556	1767	1856	1570	1742	1885	1598	1781	0	1667
Q Serve(g_s), s	1.2	8.0	11.0	2.9	21.0	0.5	12.5	3.0	11.4	1.4	0.0	8.8
Cycle Q Clear(g_c), s	1.2	8.0	11.0	2.9	21.0	0.5	12.5	3.0	11.4	1.4	0.0	8.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.64
Lane Grp Cap(c), veh/h	307	764	645	457	797	675	587	503	426	274	0	216
V/C Ratio(X)	0.14	0.32	0.42	0.23	0.68	0.02	0.86	0.16	0.56	0.12	0.00	0.78
Avail Cap(c_a), veh/h	341	764	645	465	797	675	664	676	573	318	0	374
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.0	17.6	18.5	13.9	20.5	14.7	36.0	25.1	28.2	32.0	0.0	37.6
Incr Delay (d2), s/veh	0.2	1.1	2.0	0.2	4.7	0.1	9.9	0.2	1.1	0.2	0.0	6.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.2	4.1	1.0	8.8	0.2	5.9	1.3	4.4	0.6	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.3	18.7	20.5	14.1	25.2	14.7	45.9	25.2	29.3	32.2	0.0	43.7
LnGrp LOS	B	B	C	B	C	B	D	C	C	C		D
Approach Vol, veh/h		558			662			823			202	
Approach Delay, s/veh		19.4			23.2			39.0			41.8	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	43.0	7.8	28.8	8.3	44.3	20.0	16.6
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	37.0	5.0	32.0	5.0	37.0	17.0	20.0
Max Q Clear Time (g_c+I1), s	4.9	13.0	3.4	13.4	3.2	23.0	14.5	10.8
Green Ext Time (p_c), s	0.0	2.0	0.0	1.1	0.0	2.5	0.5	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	29.7
HCM 7th LOS	C

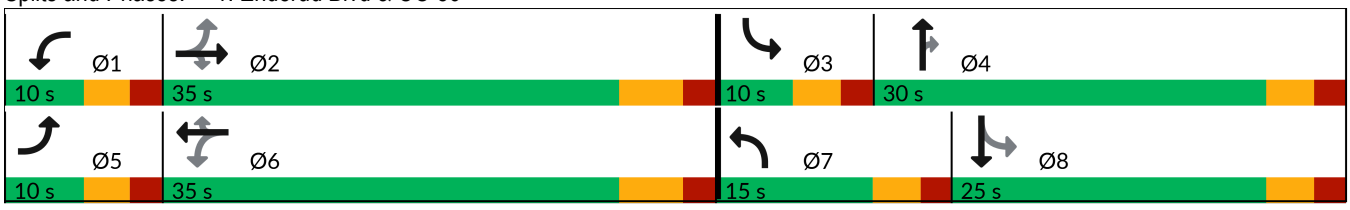
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	55	510	454	161	425	25	341	20	109	15	35
Future Volume (vph)	55	510	454	161	425	25	341	20	109	15	35
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		7	4		3	8
Permitted Phases	2		2	6		6			4	8	
Detector Phase	5	2	2	1	6	6	7	4	4	3	8
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	8.0	5.0	8.0
Minimum Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	10.0	25.0	25.0	10.0	25.0
Total Split (s)	10.0	35.0	35.0	10.0	35.0	35.0	15.0	30.0	30.0	10.0	25.0
Total Split (%)	11.8%	41.2%	41.2%	11.8%	41.2%	41.2%	17.6%	35.3%	35.3%	11.8%	29.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	35.3	29.2	29.2	37.4	33.5	33.5	10.1	18.8	18.8	11.7	8.6
Actuated g/C Ratio	0.50	0.41	0.41	0.53	0.47	0.47	0.14	0.26	0.26	0.16	0.12
v/c Ratio	0.14	0.72	0.52	0.54	0.53	0.03	0.76	0.04	0.22	0.06	0.35
Control Delay (s/veh)	9.2	25.3	3.9	16.6	18.7	0.1	42.5	21.1	2.9	18.3	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.2	25.3	3.9	16.6	18.7	0.1	42.5	21.1	2.9	18.3	20.2
LOS	A	C	A	B	B	A	D	C	A	B	C
Approach Delay (s/veh)		14.9			17.4			32.4			19.9
Approach LOS		B			B			C			B

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 71	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay (s/veh): 19.6	Intersection LOS: B
Intersection Capacity Utilization 65.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Enderud Blvd & CO 86

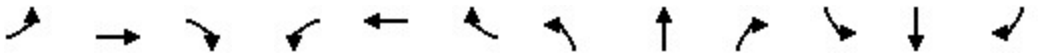




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	60	554	493	175	462	27	371	22	118	16	87
v/c Ratio	0.14	0.72	0.52	0.54	0.53	0.03	0.76	0.04	0.22	0.06	0.35
Control Delay (s/veh)	9.2	25.3	3.9	16.6	18.7	0.1	42.5	21.1	2.9	18.3	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.2	25.3	3.9	16.6	18.7	0.1	42.5	21.1	2.9	18.3	20.2
Queue Length 50th (ft)	12	207	0	37	162	0	85	7	0	5	16
Queue Length 95th (ft)	29	#355	56	#74	271	0	#155	27	19	17	55
Internal Link Dist (ft)		1178			1294			2535			817
Turn Bay Length (ft)	575		360	370		375	250		120	185	
Base Capacity (vph)	436	774	947	323	879	810	487	660	669	258	520
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.72	0.52	0.54	0.53	0.03	0.76	0.03	0.18	0.06	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	510	454	161	425	25	341	20	109	15	35	45
Future Volume (veh/h)	55	510	454	161	425	25	341	20	109	15	35	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	60	554	493	175	462	27	371	22	118	16	38	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	1	1	1
Cap, veh/h	394	750	634	301	783	662	458	423	358	274	84	108
Arrive On Green	0.05	0.40	0.40	0.07	0.42	0.42	0.13	0.23	0.23	0.02	0.11	0.11
Sat Flow, veh/h	1795	1885	1594	1781	1870	1583	3456	1870	1585	1795	744	959
Grp Volume(v), veh/h	60	554	493	175	462	27	371	22	118	16	0	87
Grp Sat Flow(s),veh/h/ln	1795	1885	1594	1781	1870	1583	1728	1870	1585	1795	0	1702
Q Serve(g_s), s	1.4	18.2	19.6	4.2	13.9	0.7	7.6	0.7	4.5	0.6	0.0	3.5
Cycle Q Clear(g_c), s	1.4	18.2	19.6	4.2	13.9	0.7	7.6	0.7	4.5	0.6	0.0	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	394	750	634	301	783	662	458	423	358	274	0	191
V/C Ratio(X)	0.15	0.74	0.78	0.58	0.59	0.04	0.81	0.05	0.33	0.06	0.00	0.45
Avail Cap(c_a), veh/h	430	750	634	301	783	662	474	642	544	364	0	467
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.7	18.7	19.1	14.9	16.4	12.5	30.7	22.1	23.6	27.7	0.0	30.2
Incr Delay (d2), s/veh	0.2	6.4	9.1	2.8	3.3	0.1	9.9	0.1	0.5	0.1	0.0	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	7.7	8.2	1.5	5.5	0.3	3.6	0.3	1.7	0.2	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.9	25.1	28.2	17.7	19.6	12.6	40.6	22.1	24.1	27.8	0.0	31.9
LnGrp LOS	B	C	C	B	B	B	D	C	C	C		C
Approach Vol, veh/h		1107			664			511			103	
Approach Delay, s/veh		25.8			18.8			36.0			31.3	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	35.0	6.4	21.5	8.5	36.5	14.7	13.2
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	29.0	5.0	25.0	5.0	29.0	10.0	20.0
Max Q Clear Time (g_c+I1), s	6.2	21.6	2.6	6.5	3.4	15.9	9.6	5.5
Green Ext Time (p_c), s	0.0	2.9	0.0	0.4	0.0	2.1	0.1	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	26.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.