TRAFFIC IMPACT REPORT

THE BRICKYARD
CASTLE ROCK, COLORADO

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EXECUTIVE SUMMARY

Confluence Companies is proposing to redevelop a property containing approximately 31.18 acres of land within the jurisdictional limits of the Town of Castle Rock, Colorado. The subject property is currently developed as the now defunct Acme Brick Company. More specifically, the subject property is bound by industrial properties with access to Topeka Way on the north, Prairie Hawk Dr. and several residential properties on the east, undeveloped land to the south, and the proposed Miller's Landing development to the west, which is currently undeveloped. At buildout, the proposed mixed-use development will be known as The Brickyard and will consist of 43 single-family attached housing units, 54 multi-family (low-rise) housing units, 486 multi-family (mid-rise) housing units, a 125-room hotel, 9,000 square feet of commercial/retail space, 24,000 square feet of high turnover (sit-down) restaurant/food hall space, 59,000 total square feet of office space, and a 145,000 square-foot community recreation center.

Vehicular access for the proposed Brickyard development will be provided via an internal roadway network providing connectivity to the external transportation system at the following locations:

- West Access Roadway– A two-lane roadway extending from the west property boundary to intersect with the proposed extension of the realigned Prairie Hawk Dr. through the proposed Miller's Landing development via a proposed two-lane roundabout. Prior to the construction of the roundabout, this two-lane roadway will extend west from the property boundary, then south to intersect with Plum Creek Pkwy. at the Dawson Trails Blvd. intersection.
- NE Access Roadway - A full movement access driveway intersecting the existing Prairie Hawk Dr. approximately 620 feet south of the NE property boundary of the development site.
- SE Access Roadway – A full movement access driveway intersecting the existing Prairie Hawk Dr. approximately 650 feet south of the proposed NE Access Roadway.

Based on these parameters, at buildout, the proposed Brickyard development is projected to generate 10,830 daily vehicle trips of which 860 will occur during the morning peak hour and 970 will occur during the evening peak hour.

Based on the analyses contained herein, recommendations for intersection improvements to accommodate the addition of the proposed Brickyard development traffic were developed, while considering the proposed Miller's Landing development, anticipated Dawson Trails development on the property south of Plum Creek Pkwy., the assumed Castle Meadows development on the property immediately to the south of the proposed Brickyard development, regional traffic volume growth, the construction of the new Crystal Valley Interchange, and planned/anticipated transportation system improvements for the study area roadways and intersections, based on the CRTMP.

The following is a summary of the recommendations to be the responsibility of the developer in order to mitigate the impact of the traffic projected to be generated by the proposed Brickyard development by the 2027 (build-out) analysis horizon:

- **Prairie Hawk Dr. (Existing Alignment)** - The existing alignment of Prairie Hawk Dr. adjacent to the frontage of the proposed Brickyard development shall be modified to a two-lane residential collector roadway with on-street bicycle lanes and on-street angled parking adjacent to the project site. From the north end of the project site to E.

Wolfensberger Rd., Prairie Hawk Dr. will be reconstructed, with new curb and gutter installed along both sides of the roadway.

- **Prairie Hawk Dr. (Realignment)** – A new two-lane roadway will be constructed to extend west from the property boundary at the west site access intersection, then curve south at the future 2-lane roundabout location to intersect with Plum Creek Pkwy. at the Dawson Trails Blvd. intersection.
- **(1) Wolfensberger Rd./Prairie Hawk Dr. Intersection** – The Brickyard developer shall participate in funding the design and construction of the improvements to increase the available storage of the WB left turn lane from 150 feet to 225 feet in order to accommodate the projected queue as a result of the addition of the Brickyard development site generated traffic. The developer will also participate in funding the design and construction of a northbound right turn lane with a minimum of 150 feet of storage.
- **(3) Prairie Hawk Dr./Topeka Way** - The Brickyard developer will be responsible for funding and implementing the restriping of the intersection to include left turn lanes with 100' feet of storage on the northbound and southbound approaches.
- **(11) Plum Creek Pkwy./Prairie Hawk Dr./Dawson Trails Blvd.** – The Brickyard developer will share responsibility for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection will operate under traffic signal control with permitted left turn phasing on the northbound and southbound approaches and protected plus permitted phasing on the eastbound approach. The east leg of the intersection will have one shared left turn/through lane and one right turn lane with 100' feet of storage on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one left turn lane with 150 feet of storage and one shared through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one left turn lane with 150' feet of storage and one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one left turn lane with a minimum of 100 feet of storage and one shared through/right turn lane on the northbound approach, and one southbound departure lane.
- **(13) Prairie Hawk Dr./NE Access Dr. Intersection** – The Brickyard developer will be responsible for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection will have stop sign control on the eastbound approach. The west leg of the intersection will have one left turn lane and one right turn lane on the eastbound approach and one westbound departure lane. The north leg of the intersection will have one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one left turn lane with a minimum of 100 feet of storage and one through lane on the northbound approach, and one southbound departure lane.
- **(14) Prairie Hawk Dr./SE Access Dr. Intersection** – The Brickyard developer will be responsible for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection will have stop sign control on the eastbound approach. The west leg of the intersection will have one left turn lane and one right turn lane on the eastbound approach and one westbound departure lane. The north leg of the intersection will have one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of

the intersection will have one left turn lane with a minimum of 100 feet of storage and one through lane on the northbound approach, and one southbound departure lane.

- **(15) West Site Access Dr./Street "D" Intersection** – The Brickyard developer will be responsible for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection will have stop sign control on the eastbound approach. The west leg of the intersection will have one left turn lane and one right turn lane on the eastbound approach and one westbound departure lane. The north leg of the intersection will have one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one shared left turn/through lane on the northbound approach, and one southbound departure lane.
- **(16) Street "B"/NE Site Access Dr./Street "A" Intersection** – The Brickyard developer will be responsible for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection will have stop sign control on the northbound and southbound approaches. The east leg of the intersection will have one shared left turn/through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one shared left turn/through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one shared left turn/through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one shared left turn/through/right turn lane on the northbound approach, and one southbound departure lane.
- **(17) Street "C"/SE Site Access Dr./Street "A" Intersection** – The Brickyard developer will be responsible for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection will have stop sign control on the northbound and southbound approaches. The east leg of the intersection will have one left turn lane and one shared through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one left turn lane and one shared through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one shared left turn/through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one shared left turn/through/right turn lane on the northbound approach, and one southbound departure lane.

The following is a summary of the recommendations to be the responsibility of others in order to mitigate future traffic impacts caused by existing and future background traffic growth within the study area. These improvements will be needed by the 2050 (long-term) analysis horizon:

- **Prairie Hawk Dr. (Realignment)** - By 2050, Prairie Hawk Dr. is anticipated to be realigned and modified, per the CRTMP, from Wolfensberger Rd. south along its existing alignment and the existing Atchison Way alignment to the intersection of Topeka Way. From Wolfensberger Rd. to Atchison Way, the roadway section will be a 4-lane major arterial. From Atchison Way to Topeka Way, the roadway section will be a 2-lane minor arterial. From Topeka Way, the alignment will continue south through the Miller's Landing property to the proposed roundabout intersection with the proposed West Site Access Roadway for The Brickyard development. From Topeka Way to Plum Creek Pkwy. the roadway section will be a 4-lane arterial.

- **(2) Prairie Hawk Dr./Atchison Way** – By 2050, a new 1-lane roundabout will be constructed at this intersection. The intersection will have yield control on the eastbound, northbound, and southbound approaches. The west leg of the intersection will have one shared left turn/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one through lane and one free-flow bypass right turn lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection will have one bypass through lane on the northbound approach, and one southbound departure lane.
- **(7) Plum Creek Pkwy./I-25 SB Ramps** – By 2050, a new southbound free right turn lane on the north leg of the intersection will be constructed that will include a continuous acceleration/deceleration lane on Plum Creek Pkwy. which will terminate into a free right turn lane onto the new Prairie Hawk Roadway extension.
- **(8) Plum Creek Pkwy./I-25 NB Ramps** – By 2050, the intersection will be modified to include the following. The east leg of the intersection will be modified to have one dedicated right turn lane, one shared through/right turn lane, one through lane, and one through lane that will accommodate the queuing needed for the left turn lane at the adjacent SB ramp intersection. The west leg of the intersection will be modified to include a second eastbound left turn lane to access northbound I-25.
- **(9) Plum Creek Pkwy./S Wilcox St. –** By 2050, it is anticipated that the westbound right turn lane will be converted into a shared through/right turn lane. It is also recommended that right turn overlap be implemented for the northbound and southbound right turn movements.
- **(10) Prairie Hawk Dr./West Site Access –** By 2050, this intersection will be constructed with the realigned Prairie Hawk Dr. extension to the south. The intersection is assumed to be a four-legged two-lane roundabout under yield control on all four approaches. The east and west legs of the roundabout will have one approach/entry lane and one departure/exit lane. The north and south legs of the roundabout will have two approach/entry lanes and two departure/exit lanes.
- **(11) Plum Creek Pkwy./Prairie Hawk Dr./Dawson Trails Blvd. –** By 2050, it is anticipated that the following additional improvements will be in place. The east leg of the intersection will have two left turn lanes with a minimum total of 600 feet of storage, two through lanes and one continuous free-flow right turn lane extending back to the I-25 SB Ramps with a raised channelizing island on the westbound approach, and two eastbound departure lanes plus a northbound to eastbound right turn auxiliary lane from Dawson Trails Blvd. to the I-25 SB ramp. The west leg of the intersection will have one left turn lane with a minimum of 250 feet of storage, two through lanes and one right turn lane with a minimum of 250 feet of storage on the eastbound approach, and two westbound departure lanes. The north leg of the intersection will have two left turn lanes with a minimum total of 500 feet of storage, two through lanes, and one right turn lane with approximately 100 feet of storage on the southbound approach, and two northbound departure lanes plus a westbound to northbound right turn auxiliary lane from Plum Creek Pkwy. to the East/West Collector roadway. The south leg of the intersection will have one left turn lane with a minimum of 200 feet of storage, two through lanes and one channelized free-flow right turn lane with a minimum of 150 feet of storage on the northbound approach, and two southbound departure lanes.

- **(12) Prairie Hawk Dr./East/West/Collector –** By 2050, it is anticipated that this intersection will be constructed to accommodate the Castle Meadows development. The intersection will be limited to three-quarter movement access. The intersection will be a "T" intersection with stop sign control on the east leg. The east leg of the intersection will have one right turn lane on the westbound approach, and one eastbound departure lane. The north leg of the intersection will have one left turn lane, and two through lanes on the southbound approach, and two northbound departure lanes. The south leg of the intersection will have two through lanes and one channelized continuous free-flow right turn lane on the northbound approach, and two southbound departure lanes.

I. INTRODUCTION

A. Purpose of Study

The purpose of this study is to evaluate the impact of the vehicular trips projected to be generated by the proposed Brickyard development on the study area intersections and roadway system. The study includes 2022 (existing), 2027 (year of anticipated project build-out), and 2050 (long-term) analysis horizons.

B. Study Area

The study area encompasses the existing roadway system in the vicinity of the project site. Figure 1 provides a site location map of the proposed project and surrounding transportation system. Figure 2 graphically illustrates the conceptual site plan and proposed access points for the proposed Brickyard development. Specifically, the following roadways and intersections are included in the study:

- Study Area Roadways
  1. Wolfensberger Rd.
  2. Plum Creek Pkwy.
  3. Existing Prairie Hawk Dr.
  4. Atchison Way
  5. Topeka Way
  6. Proposed realigned Prairie Hawk Dr.
  7. East/West Collector (2050 Proposed)
- Study Area Intersections
  1. Wolfensberger Rd./Prairie Hawk Dr. (Signalized)
  2. Prairie Hawk Dr./Atchison Way (TWSC)
  3. Prairie Hawk Dr./Topeka Way (TWSC)
  4. Atchison Way/Topeka Way (TWSC)
  5. Wolfensberger Rd./Plum Creek Pkwy./Coachline Rd. (2-Lane Roundabout)
  6. Plum Creek Pkwy./Auburn Dr. (TWSC)
  7. Plum Creek Pkwy./SB I-25 Ramps (Signalized)
  8. Plum Creek Pkwy./NB I-25 Ramps (Signalized)
  9. Plum Creek Pkwy./Wilcox St. (Signalized)
  10. Prairie Hawk Dr. (Realignment)/West Access Roadway (Proposed Roundabout)
  11. Plum Creek Pkwy./Prairie Hawk Dr. (Realignment)/Dawson Trails Blvd. (Proposed)
  12. Prairie Hawk Dr. (Realignment)/East/West Collector
  13. Prairie Hawk Dr./NE Access (Proposed)

14. Prairie Hawk Dr./SE Access Dr. (Proposed)
15. West Site Access Roadway/Street “D” (Proposed)
16. Street “B”/NE Site Access/Street “A” (Proposed)
17. Street “C”/SE Site Access/Street “A” (Proposed)

II. EXISTING CONDITIONS

A. Existing Traffic Volumes

Existing peak hour intersection turning movement traffic volume counts were collected for this study at the following intersections on Thursday, June 30, 2022:

1. Wolfensberger Rd./Prairie Hawk Dr. (Signalized)
2. Prairie Hawk Dr./Atchison Way (TWSC)
3. Prairie Hawk Dr./Topeka Way (TWSC)
4. Atchison Way/Topeka Way (TWSC)
5. Wolfensberger Rd./Plum Creek Pkwy./Coachline Rd. (2-Lane Roundabout)
6. Plum Creek Pkwy./Auburn Dr. (TWSC)
7. Plum Creek Pkwy./SB I-25 Ramps (Signalized)
8. Plum Creek Pkwy./NB I-25 Ramps (Signalized)
9. Plum Creek Pkwy./Wilcox St. (Signalized)

48-hour directional traffic volume counts were collected for this study at the following locations on Wednesday, June 29, 2022, and Thursday, June 30, 2022:

- Wolfensberger Rd. west of Prairie Hawk Dr.
- Prairie Hawk Dr. south of Wolfensberger Rd.
- Atchison Way west of Prairie Hawk Dr.
- Topeka Way west of Prairie Hawk Dr.
- Plum Creek Pkwy. west of I-25
- Plum Creek Pkwy. south of Wolfensberger Rd.

A summary of the 2022 (existing) peak hour intersection turning movement and daily directional counts are illustrated in Figure 3. Detailed traffic volume count data collected for this study is provided in Appendix “A”.

B. Existing Roadway System

The existing transportation network in the vicinity of the proposed Brickyard development is graphically illustrated in Figure 1. The following narrative provides a description of the study area roadways and associated intersections:

Existing Study Area Roadways:

1. **Wolfensberger Rd.** – Within the study area Wolfensberger Rd. is classified as a major arterial roadway under the jurisdiction of the Town of Castle Rock. From Prairie Hawk Dr. and Red Hawk Dr./Auburn Dr. the roadway section consists of two eastbound travel lanes and one westbound travel lane with a raised center median and curb and gutter along both sides of the roadway. There is a detached sidewalk along the north side of the roadway and an attached sidewalk along the south side of the roadway. The posted speed limit is 45 mph. From Red Hawk Dr./Auburn Dr. to Plum Creek Pkwy. the roadway

section consists of one travel lane in each direction with minimal gravel shoulders and no sidewalks on either side of the roadway. The posted speed limit is 45 mph.

2. **Plum Creek Pkwy.** – Within the study area Plum Creek Pkwy. is classified as a major arterial roadway under the jurisdiction of the Town of Castle Rock. From Wolfensberger Rd. to I-25 the roadway section consists of one travel lane in each direction and is posted at 45 mph. From Wolfensberger Rd. to Auburn Dr. the north side of the roadway has curb & gutter and detached sidewalk. The south side of the roadway has a gravel shoulder and no sidewalk. From Auburn Dr. to I-25 the north de of the roadway has a paved shoulder and no sidewalk. The south side of the roadway has curb and gutter and a detached sidewalk. From I-25 to Wilcox St. the roadway section consists of two travel lanes in each direction with a painted center median and curb and gutter and attached sidewalks on both sides of the roadway and has a posted speed limit of 30 mph.
3. **Prairie Hawk Dr. (Existing Alignment)** – Within the study area, from Wolfensberger Rd. to Atchison Way, the existing Prairie Hawk Dr. alignment is classified as a major arterial roadway under the jurisdiction of the Town of Castle Rock. From Atchison Way south, the existing Prairie Hawk Dr. alignment is classified as a local roadway under the jurisdiction of the Town of Castle Rock. The roadway section consists of one travel lane in each direction with minimal gravel shoulders and no sidewalks on either side of the roadway. The posted speed limit is 30 mph.
4. **Atchison Way** – Within the study area, Prairie Hawk Dr. to Topeka Way, Atchison Way is classified as a major arterial roadway under the jurisdiction of the Town of Castle Rock. The roadway section consists of one travel lane in each direction with curb and gutter on the west side of the roadway and a minimal gravel shoulder on the east side. There are no sidewalks on either side or the roadway. The speed limit is not posted and assumed to be 30 mph.
5. **Topeka Way** – Within the study area, Prairie Hawk Dr. to Atchison Way, Topeka Way is classified as a local roadway under the jurisdiction of the Town of Castle Rock. The roadway section consists of one travel lane in each direction with minimal gravel shoulders and no sidewalks on either side or the roadway. The speed limit is not posted and assumed to be 30 mph.

Existing Study Area Intersections:

1. **Wolfensberger Rd./Prairie Hawk Dr.** – The Wolfensberger Rd./Prairie Hawk Dr. intersection is a four-legged intersection operating under actuated/coordinated traffic signal control with protected/permitted left turn phasing on all four approaches. The east leg of the intersection has one left turn lane with approximately 150 feet of storage, two through lanes, and one right turn lane with approximately 100 feet of storage on the westbound approach, and two eastbound departure lanes. The west leg of the intersection has one left turn lane with approximately 325 feet of storage, one through lane, and one shared through/right turn lane with approximately 325 feet of storage on the eastbound approach, and two westbound departure lanes plus a southbound to westbound right turn acceleration lane. The north leg of the intersection has one left turn lane with approximately 350 feet of storage, one through lane and one right turn lane with approximately 350 feet of storage on the southbound approach and one northbound departure lane. The south leg of the intersection has one left turn lane with approximately 250 feet of storage and one shared through/right turn lane on the northbound approach and one southbound departure lane. Existing signal timing plans for this intersection were provided by the Town of Castle Rock and are included in Appendix “B”.

2. **Prairie Hawk Dr./Atchison Way** – The Prairie Hawk Dr./Atchison Way intersection is a three-legged “T” intersection operating under two-way stop control with the stop-controlled movements on the eastbound approach. The west leg of the intersection has one shared left turn/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection has one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection has one shared left turn/through lane on the northbound approach, and one southbound departure lane.
3. **Prairie Hawk Dr./Topeka Way** – The Prairie Hawk Dr./Topeka Way intersection is a four-legged intersection operating under two-way stop control with the stop-controlled movements on the northbound (Topeka Way) and southbound (private driveway) approaches. The east leg of the intersection has one shared left turn/through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection has one shared left turn/through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection has one shared left turn/through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection has one shared left turn/through/right turn lane on the northbound approach, and one southbound departure lane.
4. **Atchison Way/Topeka Way** – The Atchison Way/Topeka Way intersection is a three-legged “T” intersection operating under two-way stop control with the stop-controlled movements on the southbound approach. The east leg of the intersection has one shared through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection has one shared left turn/through lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection has one shared left turn/right turn lane on the southbound approach, and one northbound departure lane.
5. **Wolfensberger Rd./Plum Creek Pkwy./Coachline Rd.** – The Wolfensberger Rd./Plum Creek Pkwy./Coachline Rd. intersection is a two-lane roundabout operating under yield control. The east leg of the intersection has one shared left turn/through lane with approximately 250 feet of storage and one shared through/right turn lane on the westbound approach, and two eastbound departure lanes. The west leg of the intersection has one shared left turn/through lane and one shared through/right turn lane on the westbound approach, and two eastbound departure lanes. The north leg of the intersection has one shared left turn/through lane with approximately 200 feet of storage and one shared through/right turn lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection has one shared left turn/through lane and one shared through/right turn lane with approximately 150 feet of storage on the northbound approach, and two southbound departure lanes.
6. **Plum Creek Pkwy./Auburn Dr.** - The Plum Creek Pkwy./Auburn Dr. intersection is a three-legged “T” intersection operating under two-way stop control with the stop-controlled movements on the southbound approach. The east leg of the intersection has one shared through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection has one shared left turn/through lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection has one shared left turn/right turn lane on the southbound approach, and one northbound departure lane.
7. **Plum Creek Pkwy./I-25 SB Ramps** - The Plum Creek Pkwy./I-25 SB Ramps intersection is a four-legged intersection operating under actuated/coordinated traffic

signal control with protected/permitted left turn phasing on the westbound approach and protected only left turn phasing on the northbound and southbound approaches. The east leg of the intersection has one left turn lane with approximately 675 feet of storage and two through lanes on the westbound approach, and three eastbound departure lanes. The west leg of the intersection has two through lanes and one shared through/right turn lane on the eastbound approach, and two westbound departure lanes. The north leg of the intersection has two left turn lanes and one shared left turn/through/right turn lane with approximately 225 feet of storage on the southbound approach. The south leg of the intersection has one left turn lane with approximately 375 feet of storage and one right turn lane on the northbound approach, and one southbound departure lane.

8. **Plum Creek Pkwy./I-25 NB Ramps** - The Plum Creek Pkwy./I-25 NB Ramps intersection is a four-legged intersection operating under actuated/coordinated traffic signal control with protected/permitted left turn phasing on the eastbound approach. The east leg of the intersection has one through lane serving as additional storage for the westbound left turn lane to get on I-25 southbound, one shared through/right turn lane and one right turn lane on the westbound approach, and three eastbound departure lanes. The west leg of the intersection has one left turn lane with approximately 650 feet of storage and three through lanes on the eastbound approach, and three westbound departure lanes. The north leg of the intersection has two northbound departure lanes. The south leg of the intersection has one left turn lane with approximately 400 feet of storage, one shared left turn/through/right turn lane, and one right turn lane with approximately 175 feet of storage on the northbound approach.
9. **Plum Creek Pkwy./Wilcox St.** - The Plum Creek Pkwy./Wilcox St. intersection is a four-legged intersection operating under actuated/coordinated traffic signal control with protected/permitted left turn phasing on all four approaches. The east leg of the intersection has one left turn lane with approximately 225 feet of storage, two through lanes and one right turn lane on the westbound approach and two eastbound departure lanes. The west leg of the intersection has one left turn lane with approximately 325 feet of storage, two through lanes and one channelized free-flow right turn lane with approximately 600 feet of storage on the eastbound approach, and two westbound departure lanes. The north leg of the intersection has one left turn lane with approximately 200 feet of storage, one through lane and one right turn lane with approximately 200 feet of storage on the southbound approach, and one northbound departure lane. The south leg of the intersection has two left turn lanes with approximately a total of 450 feet of storage, one through lane and one right turn lane with approximately 250 feet of storage on the northbound approach, and one southbound departure lane plus an eastbound to southbound continuous right turn acceleration lane. Existing signal timing plans for this intersection were provided by the Town of Castle Rock and are included in Appendix “B”.

C. 2022 (Existing) Conditions Operational Analysis

In order to establish a base condition in which to evaluate and compare the impacts of the traffic generated by the proposed Brickyard development on the study area intersections, peak hour capacity analyses were performed for the 2022 (existing) conditions scenario. These analyses utilized the methodologies contained in the *Highway Capacity Manual 7th Edition* (HCM 7) employing *Synchro 12* software and resulted in a qualitative measure of the operational characteristics of the intersection, described by a letter designation ranging from “A” to “F” known as “Level of Service” (LOS). LOS “A” represents free-flow operating conditions, whereas

LOS “F” represents excessive congestion and delay. Unsignalized intersection capacity analysis reports a LOS designation for each impeded intersection movement. Signalized intersection capacity analysis reports the overall LOS designation for the intersection as well as for each lane group and approach. LOS “D” is considered the minimum acceptable standard of operation.

The study area intersections included in the 2022 (existing) conditions analysis are as follows:

1. Wolfensberger Rd./Prairie Hawk Dr. (Signalized)
2. Prairie Hawk Dr./Atchison Way (TWSC)
3. Prairie Hawk Dr./Topeka Way (TWSC)
4. Atchison Way/Topeka Way (TWSC)
5. Wolfensberger Rd./Plum Creek Pkwy./Coachline Rd. (2-Lane Roundabout)
6. Plum Creek Pkwy./Auburn Dr. (TWSC)
7. Plum Creek Pkwy./SB I-25 Ramps (Signalized)
8. Plum Creek Pkwy./NB I-25 Ramps (Signalized)
9. Plum Creek Pkwy./Wilcox St. (Signalized)

The results of the 2022 (existing) conditions operational analysis are summarized in Table 1, below. Figure 4 graphically illustrates the results of the existing conditions analysis and detailed *Synchro 12* software intersection capacity analysis reports are provided in Appendix “C”.

As shown in Table 1, all of the existing study area intersections are shown to be operating at acceptable levels of service (LOS “D” or better), overall, as well as all impeded lane groups.

D. 2022 (Existing) Conditions Queuing Analysis

Queue lengths and associated storage requirements for auxiliary lanes (turn bays) at the existing study area intersections were computed utilizing the *Synchro 12* 95%tile reported queues. Queue length calculations are based on a 25-foot vehicle length and reported as the total cumulative computed queue length for all traffic lanes in the lane group.

Existing storage capacity for auxiliary lane groups (left turn and right turn lanes) is reported as the cumulative capacity of all lanes in the group. Table 2 provides a summary of this analysis and comparison to the actual vehicle storage lengths provided for each of the existing study area intersections.

As shown in Table 2, the following queue related issues are being experienced at the existing study area intersections based on the reported queues in the 2022 (existing) conditions analysis scenario:

- **(7) Plum Creek Pkwy./SB I-25 Ramps** – The SB left turn lanes queue is shown to block the shared left turn/through/right turn lane during the a.m. and p.m. peak hours. Also, the shared left turn/through/right turn lane is shown to exceed its capacity and spill back into the SB left turn lanes during the a.m. and p.m. peak hours.
- **(8) Plum Creek Pkwy./NB I-25 Ramps** – The EB through lanes queue is shown to exceed its capacity and spill back into the upstream intersection during the a.m. peak hour.
- **(9) Plum Creek Pkwy./Wilcox St.** – The EB through lanes queue is shown to block the EB left turn lane during the p.m. peak hour.

TABLE 1
2022 (EXISTING) CONDITIONS
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2022 EXISTING TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
1. Prairie Hawk Dr. & E. Wolfensberger Rd.	**Signal**				
a. EB L (Prot+Perm)		C	29.5	D	35.5
b. EB TR		D	39.5	D	45.0
c. WB L (Prot+Perm)		D	36.1	C	35.0
d. WB T		C	33.6	D	39.5
e. WB R		D	38.1	D	43.4
f. NB L (Prot+Perm)		B	13.6	B	10.8
g. NB TR		B	15.1	B	15.1
h. SB L (Prot+Perm)		B	11.8	B	11.5
i. SB T		B	11.2	B	10.6
j. SB R		B	11.3	B	11.4
k. INTERSECTION		**C**	**30.1**	**C**	**30.8**
2. Prairie Hawk Dr. & Atchison Way	**TWSC**				
a. EB LR	Stop	A	9.8	B	10.7
b. NB LT		A	7.6	A	7.5
c. INTERSECTION		**A**	**1.7**	**A**	**3.9**
3. Prairie Hawk Dr. & Topeka Way	**TWSC**				
a. EB LTR	Stop	A	7.3	A	7.4
b. WB LTR	Stop	A	0.0	A	0.0
c. NB LTR		A	9.6	B	10.3
d. SB LTR		A	8.8	A	9.0
e. INTERSECTION		**A**	**7.8**	**A**	**7.3**
4. Atchison Way & Topeka Way	**TWSC**				
a. EB LT		A	7.3	A	7.3
b. SB LR	Stop	A	8.5	A	8.6
c. INTERSECTION		**A**	**1.3**	**A**	**2.1**
5. Plum Creek Pkwy./Coachline Rd. & W. Wolfensberger Rd.	**Roundabout**				
a. EB LT	Yield	A	4.8	A	4.4
b. EB TR	Yield	A	4.5	A	4.1
c. WB LT	Yield	A	3.6	A	4.6
d. WB TR	Yield	A	3.5	A	4.4
e. NB LT	Yield	A	4.3	A	4.4
f. NB TR	Yield	A	4.0	A	4.2
g. SB LT	Yield	A	4.3	A	4.4
h. SB TR	Yield	A	4.2	A	4.3
i. INTERSECTION		**A**	**4.2**	**A**	**4.3**
6. Plum Creek Pkwy. & Auburn Dr.	**TWSC**				
a. EB LT		A	7.6	A	8.1
b. SB LR	Stop	B	12.6	B	14.9
c. INTERSECTION		**A**	**2.5**	**A**	**1.9**

TABLE 1 (CONTINUED)
2022 (EXISTING) CONDITIONS
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2022 EXISTING TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
7. Plum Creek Pkwy. & I-25 SB Ramps	**Signal**				
a. EB TR		D	42.3	D	42.2
b. WB L (Prot+Perm)		C	32.9	C	29.6
c. WB T		C	32.3	B	13.8
d. NB L (Prot)		D	54.4	D	54.4
e. NB R		A	8.3	A	8.3
f. SB L (Prot) (Dual)		A	8.4	B	12.4
g. SB LTR		B	11.6	B	17.8
h. INTERSECTION		**C**	**22.4**	**B**	**19.4**
8. Plum Creek Pkwy. & I-25 NB Ramps	**Signal**				
a. EB L (Prot+Perm)		D	43.7	D	35.8
b. EB T		A	6.5	A	8.2
c. WB TR		D	44.4	D	36.9
d. WB R		C	34.0	D	42.5
e. NB L (Prot)		C	28.7	C	26.5
f. NB LTR		C	28.7	C	26.5
g. NB R		C	30.6	C	28.8
h. INTERSECTION		**C**	**27.9**	**C**	**24.9**
9. Plum Creek Pkwy. & S. Wilcox St.	**Signal**				
a. EB L (Prot+Perm)		C	30.6	D	46.8
b. EB T		C	23.7	D	37.4
c. EB R (Free)		A	0.0	A	0.0
d. WB L (Prot+Perm)		C	21.4	C	27.2
e. WB T		C	33.9	D	36.7
f. WB R		C	24.9	C	26.3
g. NB L (Prot+Perm) (Dual)		C	20.7	C	22.7
h. NB T		C	24.0	C	29.5
i. NB R		C	22.7	C	27.6
j. SB L (Prot+Perm)		C	24.6	C	24.9
k. SB T		C	28.3	C	31.8
l. SB R		C	31.0	D	41.8
m. INTERSECTION		**C**	**27.7**	**C**	**34.4**

TABLE 2
2022 (EXISTING) CONDITIONS
SUMMARY OF QUEUING ANALYSIS

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING STORAGE (FT)	2022 EXISTING TRAFFIC QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK
1. Prairie Hawk Dr./E. Wolfensberger Rd.			
a. EB L (1)	325	65	46
b. EB TR (2)	1100	308	300
c. WB L (1)	150	94	77
d. WB T (2)	1850	150	277
e. WB R (1)	100	45	54
f. NB L (1)	250	6	22
g. NB TR (1)	250	45	85
h. SB L (1)	350	113	123
i. SB T (1)	875	32	33
j. SB R (1)	350	10	28
2. Prairie Hawk Dr./Atchison Way			
a. EB LR (1)	700	5	18
b. NB LT (1)	425	0	0
3. Prairie Hawk Dr./Topeka Way			
a. EB LTR (1)	200	3	5
b. WB LTR (1)	-	0	0
c. NB LTR (1)	1100	0	0
d. SB LTR (1)	430	8	5
4. Atchison Way/Topeka Way			
a. EB LT (1)	110	0	0
b. SB LR (1)	450	0	0
5. Plum Creek Pkwy./Coachline Rd./ W. Wolfensberger Rd.			
a. EB LT (1)	550	0	0
b. EB TR (1)	550	0	0
c. WB LT (1)	250	0	0
d. WB TR (1)	350	0	0
e. NB LT (1)	500	0	0
f. NB TR (1)	150	0	0
g. SB LT (1)	200	25	0
h. SB TR (1)	2450	25	0
6. Plum Creek Pkwy./Auburn Dr.			
a. EB LT (1)	800	0	0
b. SB LR (1)	275	18	18

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING STORAGE (FT)	2022 EXISTING TRAFFIC QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK
7. Plum Creek Pkwy./I-25 SB Ramps			
a. EB TR (3)	2700	270	273
b. WB L (1)	675	52	139
c. WB T (2)	350	65	165
d. NB L (1)	375	30	30
e. NB R (1)	750	59	52
f. SB L (2)	3300	388	1154
g. SB LTR (1)	225	236	730
8. Plum Creek Pkwy./I-25 NB Ramps			
a. EB L (1)	650	151	122
b. EB T (3)	480	644	500
c. WB TR (1)	625	605	413
d. WB R (1)	400	53	50
e. NB L (1)	400	40	48
f. NB LTR (1)	1700	41	85
g. NB R (1)	175	27	63
9. Plum Creek Pkwy./S. Wilcox St.			
a. EB L (1)	325	140	235
b. EB T (2)	1250	382	916
c. EB R (1)	600	0	0
d. WB L (1)	225	29	42
e. WB T (2)	880	604	621
f. WB R (1)	420	18	50
g. NB L (2)	450	256	305
h. NB T (1)	250	108	142
i. NB R (1)	250	15	30
j. SB L (1)	200	58	132
k. SB T (1)	200	91	121
l. SB R (1)	200	39	71

Legend

- Turn lane queue spills into thru lane
- Queue spills back into upstream intersection
- Through lane queue blocks LT lane
- Through lane queue blocks RT lane
- Through lane queue blocks LT & RT lanes

III. BACKGROUND TRAFFIC

A. Background Traffic Volumes

For the purposes of this study, background traffic volumes were developed incorporating the following methodology. The overall background traffic volumes used in this study are the result of combining two distinct components, “regional” and “local” traffic volumes. The “regional” background traffic volume component accounts for the larger scale traffic growth along the major roadways within the study area. The “regional” background traffic component utilizes regional travel planning models and documents in order to establish an average annual traffic volume growth rate on these roadways. The “local” background traffic volume component accounts for the influence of anticipated future development on properties within in the immediate study area that may not otherwise be captured by the “regional” component.

The background traffic models for the 2027 (build-out) and 2050 (long-term) analysis horizons for this study were developed as follows:

- 2027 (build-out) background traffic volumes - The 2027 (build-out) background traffic volumes were developed employing a two-step process. The first step of the process was to apply a “regional” background traffic growth factor to the 2022 (existing) traffic volumes to forecast the 2027 (build-out) “regional” background traffic volume component. Additionally, it was assumed that the I-25/Crystal Valley Pkwy. interchange (approximately two miles south of the I-25/Plum Creek Pkwy. interchange) will be constructed and in operation by 2027. The I-25/Crystal Valley Pkwy. interchange will serve to divert a portion of the traffic demand away from the I-25/Plum Creek Pkwy. interchange. This traffic volume was deducted after the 2027 (build-out) “regional” background traffic growth factor was applied to the 2022 (existing) traffic volumes. The following assumptions were used in developing the diverted traffic volumes:
    - It was assumed that 60% of the SB I-25/Plum Creek Pkwy. interchange ramp SB through volume will be diverted to the I-25/Crystal Valley Pkwy. interchange.
    - 30% of the SB I-25/Plum Creek Pkwy. interchange ramp SB LT volume will be diverted to the I-25/Crystal Valley Pkwy. interchange based on the proportion of EB RT volume on the EB approach to the Plum Creek Pkwy./Wilcox intersection.
    - 30% of the NB I-25/Plum Creek Pkwy. interchange ramp NB RT volume will be diverted to the I-25/Crystal Valley Pkwy. interchange based on the proportion of EB RT volume on the EB approach to the Plum Creek Pkwy./Wilcox intersection.
    - It was assumed that 10% of the SB I-25/Plum Creek Pkwy. interchange ramp NB RT volume will be diverted to the I-25/Crystal Valley Pkwy. interchange.

  The second step was to develop a “local” background traffic volume model component. It was assumed that there would be no anticipated new developments in place by the 2027 (build-out) analysis horizon that would contribute to the “local” background component.

  Combining the “regional” and “local” background traffic volume components results in the 2027 (build-out) background traffic volume forecast for this study.

- 2050 (long-term) background traffic volumes – The 2050 (long-term) background traffic volumes were developed employing the same two-step process as the 2027 (build-out) background traffic volumes. The first step applied a “regional” background traffic growth factor to the 2027 (build-out) traffic volumes after they were adjusted for the presence of the

I-25/Crystal Valley Pkwy. interchange to forecast the 2050 (long-term) "regional" background traffic volume component.

The second step was to develop the "local" background traffic volume model component for the 2050 (long-term) analysis horizon. This assumes the following:

- It was assumed that the proposed Miller's Landing development and associated roadway improvements will be fully built-out by the 2050 (long-term) analysis horizon. The traffic generated by the proposed Miller's Landing development was taken directly from *Figure 8c – Year 2040 Assignment of Total Site-Generated Traffic* in the study entitled, *Miller's Landing, Traffic Impact Analysis, Castle Rock Colorado, October 31, 2016*, by LSC Transportation Consultants, Inc. (*LSC Study*).
- It was assumed that the property south of Plum Creek Pkwy. (referred to herein as the Dawson Trails property), that will be accessed via the extension of the realigned Prairie Hawk Dr. (referred to as Dawson Trails Blvd.), will be fully developed by the 2050 (long-term) analysis horizon. The trips generated by this area were developed based on *Figure 10 – 2040 Full Build Traffic Forecasts with all Base Assumption Projects* in the *Town of Castle Rock Transportation Master Plan, October 2017 (CRTMP).*
- It was assumed that the anticipated Castle Meadows development and associated roadway improvements will be in place prior to the 2050 (long-term) analysis horizon. The proposed Castle Meadows development was assumed to consist of 960 multi-family dwelling units, with approximately 30% of these dwelling units being built within the Millers Landing property. In addition, it was assumed that access will be provided via the proposed East/West Collector to the realigned Prairie Hawk Dr., as well as via the existing Prairie Hawk Dr.

Combining the "regional" and "local" background traffic volume components results in the 2050 (long-term) background traffic volume forecast for this study.

More specifically, the following describes the development of the 2027 (build-out) and 2050 (long-term) analysis horizons background traffic models.

- "Regional" Background Traffic Volumes:
  - Based on the current DRCOG 2020 and 2050 travel models for the roadways within the study area, Plum Creek Pkwy. and Wolfensberger Rd. are forecasting an average annual traffic volume growth rate (AGR) of approximately 0.61% and 1.1%, respectively. Based on this data an AGR of 1% was employed for all of the existing study area roadways. An AGR of 1% results in a 5-year (2022 to 2027) growth factor of 1.051 and a 23-year (2027 to 2050) growth factor of 1.257.
  - The appropriate AGR factors were applied to the 2022 (existing) traffic volumes in order to develop the forecast 2027 (build-out) and 2050 (long-term) "regional" background traffic volumes.
  - For the purposes of this study, it was assumed that the distribution of the regional intersection approach traffic (left turn, through, right turn) will remain static through the 2045 (long-term) analysis horizon.
  - Figure 5 graphically illustrates the forecast 2027 (build-out) analysis horizon "regional" background traffic volumes on the study area roadways and intersections.
  - Figure 6 graphically illustrates the forecast 2050 (long-term) analysis horizon "regional" background traffic volumes on the study area roadways and intersections.

- "Local" Background Traffic Volumes:
    - Since it is not anticipated that there would be any new developments in place by the 2027 (build-out) analysis horizon that would contribute to the "local" background component, a 2027 (build-out) analysis horizon "local" background traffic volume component was not developed.
    - A "local" background traffic component was developed for the 2050 (long-term) analysis horizon background traffic models based on the anticipated Miller's Landing development, Dawson Trails property development, and Castle Meadows multi-family development, as described above.
    - The proposed Miller's Landing development is situated immediately to the west of the proposed Brickyard development between the Industrial Tributary on the north, Plum Creek Pkwy. and the Industrial Tributary on the east , and Plum Creek Pkwy. to the south. The forecast site traffic generated by the proposed Miller's Landing development was assigned to the study area roadways and intersections utilizing the *LSC Study*, referenced above. For the 2050 (long-term) analysis horizon, the traffic generated by the anticipated full build-out of the proposed Miller's Landing development was taken directly from *Figure 8c – Year 2040 Assignment of Total Site-Generated Traffic* of the *LSC Study*.
    - The Dawson Trails property is situated to the west of I-25 south of Plum Creek Pkwy. to Tomah Rd. This property is assumed to have its primary northern access point via the extension of the realigned Prairie Hawk Dr. (referred to as Dawson Trails Blvd.) south from Plum Creek Pkwy. Other access points to the south will include the Tomah Rd./I-25 Interchange and the future I-25/Crystal Valley Pkwy. Interchange. The traffic forecast to be generated by the Dawson Trails property that would utilize the proposed Plum Creek Pkwy./Prairie Hawk Dr./Dawson Trails Blvd. intersection and the other study area roadways and intersections was developed as follows:
        - It was assumed that the Dawson Trails property will be fully developed by the 2050 (long-term analysis horizon.
        - Based on the *CRTMP, Figure 10 – 2040 Full Build Traffic Forecasts with all Base Assumption Projects*, Dawson Trails Blvd. is forecast to have an AADT of 37,200vpd between Plum Creek Pkwy. and Tomah Rd. Assuming that 25% of this traffic would access the Dawson Trails property via the proposed Plum Creek Pkwy./Prairie Hawk Dr./Dawson Trails Blvd. intersection it was projected that Dawson Trails Blvd. just south of the intersection would have an AADT of 9,300vpd. Assuming a "K" factor (proportion of AADT occurring in the peak hour) of 0.085 and a "D" factor (proportion of peak hour traffic in the peak direction) of 0.6 it was projected that Dawson Trails Blvd. just south of Plum creek Pkwy. would have an a.m. peak hour volume of 474vph northbound and 316vph southbound. During the p.m. peak hour, it was projected that Dawson Trails Blvd. just south of Plum creek Pkwy. would have a volume of 316vph northbound and 474vph southbound.
        - The projected peak hour traffic volumes on the proposed Dawson Trails Blvd. just south of Plum Creek Pkwy. was distributed to the study area roadways and intersections utilizing the same proportional distributions as the proposed Miller's Landing development site generated traffic.

- The Castle Meadows property is situated immediately to the south of the proposed Brickyard development site, west of I-25, north of Plum Creek Pkwy., and east of the proposed Miller's Landing development site. The traffic projected to be generated by Castle Meadows property was developed and distributed to the study area roadways and intersections as follows:
  - It was assumed that the Castle Meadows property will be fully built out by the 2050 (long-term) analysis horizon as a 960-unit multi-family development, with approximately 30% of these dwelling units being built within the Millers Landing property.
  - Traffic generated by the assumed Castle Meadows development was distributed to the study area roadways and intersections via the proposed East/West Collector to the realigned Prairie Hawk Dr., as well as via the existing Prairie Hawk Dr.
- Figure 7 graphically illustrates the forecast 2050 (long-term) analysis horizon "local" background traffic volumes on the study area roadways and intersections, respectively.

- 2027 (build-out) Total Background Traffic Volumes:
  - The 2027 (build-out) total background traffic volumes for this study are the sum of the 2027 (build-out) "regional" background traffic volumes plus the 2027 (build-out) "local" background traffic volumes. Figure 8 graphically illustrates the 2027 (build-out) total background traffic volumes on the study area roadways and intersections.

- 2050 (Long-Term) Total Background Traffic Volumes
  - The 2050 (long-term) total background traffic volumes for this study are the sum of the 2050 (long-term) "regional" background traffic volumes plus the 2050 (long-term) "local" background traffic volumes. Figure 9 graphically illustrates the 2050 (long-term) total background traffic volumes on the study area roadways and intersections.

B. Background Traffic Roadway System

It was assumed that the existing roadway network within the study area of the proposed Brickyard development will be modified by the 2027 (build-out) and 2050 (long-term) analysis horizons as follows:

- **Study Area Roadways:**
  - **Prairie Hawk Dr. (Realignment)**
    - 2027 (Build-Out) Analysis Horizon – A new two-lane roadway segment of Prairie Hawk Dr. is anticipated to be constructed from the west site access intersection to extend west from the property boundary, then curve south at the future 2-lane roundabout location to intersect with Plum Creek Pkwy. at the Dawson Trails Blvd. intersection. This alignment lies entirely within the Miller's Landing property.
    - 2050 (Long-Term) Analysis Horizon – By 2050, Prairie Hawk Dr. is anticipated to be realigned and modified, per the CRTMP, from Wolfensberger Rd. south along its existing alignment and the existing Atchison Way alignment to the intersection of Topeka Way. From Wolfensberger Rd. to Atchison Way, the roadway section will be a 4-lane major arterial. From Atchison Way to Topeka Way, the roadway section will be a 2-lane minor arterial. From Topeka Way, the alignment will

continue south through the Miller's Landing property to the proposed roundabout intersection with the proposed West Site Access Roadway for The Brickyard development. From Topeka Way to Plum Creek Pkwy. the roadway section will be a 4-lane arterial.

- **Plum Creek Pkwy.**
  - 2027 (Build-Out) Analysis Horizon – It is not anticipated that any operational or capacity improvements will be made to Plum Creek Pkwy. within the study area through the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that Plum Creek Pkwy. will be improved to a 4-lane major arterial roadway from Wolfensberger Rd. to I-25 based on the CRTMP. It is also anticipated that a continuous westbound acceleration/deceleration lane from the I-25 SB Ramp intersection to the new Prairie Hawk roadway extension will be constructed. This lane will terminate into a free right turn lane at Prairie Hawk Dr. There will also be a continuous 3rd eastbound travel lane from the Prairie Hawk Dr. intersection to Wilcox St.
- **Wolfensberger Rd.**
  - 2027 (Build-Out) Analysis Horizon – By the 2027 (build-out) analysis horizon, the developer shall participate in funding the design and construction of the improvements to increase the available storage of the WB left turn lane from 150 feet to 225 feet at the Prairie Hawk Dr. intersection in order to accommodate the projected queue as a result of the addition of the Brickyard development site generated traffic. It is not anticipated that any other operational or capacity improvements will be made to Wolfensberger Rd. within the study area through the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that Wolfensberger Rd. will be improved, within the study area, to a 4-lane major arterial roadway from Plum Creek Pkwy. to Prairie Hawk Dr. based on the CRTMP.
- **Dawson Trails Blvd.**
  - 2027 (Build-Out) Analysis Horizon – By the 2027 (build-out) analysis horizon, It is assumed that with the construction of the Crystal Valley Interchange, an access roadway south of Plum Creek Pkwy will be constructed to provide access at the new Prairie Hawk Dr./Plum Creek Pkwy intersection.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that Dawson Trails Blvd. will be fully in place as a 4-lane major arterial roadway extending south from the Plum Creek Pkwy./Prairie Hawk Dr. intersection based on the CRTMP.
- **East/West Collector**
  - 2027 (Build-Out) Analysis Horizon – It is assumed that the East/West Collector will not be constructed by the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the East/West Collector will be constructed as a 2-lane collector extending westerly from the existing Prairie Hawk Dr. alignment along the southern boundary of the proposed Brickyard development to intersect with the anticipated new Prairie Hawk Dr. alignment in the Miller's Landing property.

- **Study Area Intersections:**
  - **(1) Wolfensberger Rd./Prairie Hawk Dr.**
    - 2027 (Build-Out) Analysis Horizon – By the 2027 (build-out) analysis horizon, the developer shall participate in funding the design and construction of the improvements to increase the available storage of the WB left turn lane from 150 feet to 225 feet at the Prairie Hawk Dr. intersection in order to accommodate the projected queue as a result of the addition of the Brickyard development site generated traffic. No other major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be modified as follows in order to accommodate the anticipated Prairie Hawk Dr. roadway improvements. The intersection will remain under actuated/coordinated traffic signal control. The east leg of the intersection will be modified so that the westbound left turn storage length is increased to 225 feet. No other modifications will be made to the east leg. The west leg of the intersection will have one left turn lane, two through lanes, and one right turn lane on the eastbound approach, and two westbound departure lanes. The north leg of the intersection will have dual left turn lanes, one through lane and one shared through/right turn lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection will have one left turn lane, two through lanes and one right turn lane on the northbound approach, and two southbound departure lanes.
  - **(2) Prairie Hawk Dr./Atchison Way**
    - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be reconstructed as a 1-lane roundabout to accommodate the anticipated Prairie Hawk Dr. roadway realignment and improvements. The intersection will have yield control on the eastbound, northbound, and southbound approaches. The west leg of the intersection will have one shared left turn/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one through lane and one free-flow bypass right turn lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection will have one bypass through lane on the northbound approach, and one southbound departure lane.
  - **(3) Prairie Hawk Dr./Topeka Way**
    - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2050 (long-term) analysis horizon.
  - **(4) Atchison Way/Topeka Way**
    - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be modified as follows in order to accommodate the anticipated Prairie Hawk Dr. roadway realignment and improvements. The intersection will have two-way stop control on the eastbound and westbound approaches. The east leg of the intersection will have one left

turn lane and one shared through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one left turn lane and one shared through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one left turn lane, and one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one left turn lane, one through lane and one right turn lane on the northbound approach, and two southbound departure lanes.

- **(5) Wolfensberger Rd./Plum Creek Pkwy./Coachline Rd.**
  - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2050 (long-term) analysis horizon.
- **(6) Plum Creek Pkwy./Auburn Dr.**
  - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be modified as follows in order to accommodate the anticipated Plum Creek Pkwy. roadway improvements. The intersection will have stop control on the southbound approach. The east leg of the intersection will have one right turn lane and two through lanes on the westbound approach, and two eastbound departure lanes. The west leg of the intersection will have one left turn lane and two through lanes on the eastbound approach, and two westbound departure lanes. The north leg of the intersection will have one shared left turn/right turn lane on the southbound approach, and one northbound departure lane.
- **(7) Plum Creek Pkwy./I-25 SB Ramps**
  - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be modified as follows. The northbound lanes will be removed at this intersection. The east leg of the intersection will remain unchanged. The west leg of the intersection will be modified to have three through lanes and a continuous free flow right turn lane with a raised channelizing island on the eastbound approach. The north leg will be modified to have dual left turn lanes, a shared left turn/through lane and a free flow right turn lane with a raised channelizing island on the southbound approach. The south leg will be modified to have only one southbound departure lane. Due to the westbound left turn queues at this intersection exceeding the capacity under the I-25 bridge, additional queueing capacity is needed beyond the northbound ramp intersection.
- **(8) Plum Creek Pkwy./I-25 NB Ramps**
  - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be modified as follows. The east leg of the intersection will be modified to have one dedicated right turn lane, one shared through/right turn lane, one through lane, and one through lane that will accommodate the queuing needed for the left turn lane at the adjacent SB ramp

intersection. The west leg of the intersection will be modified to include a second eastbound left turn lane to access northbound I-25. The north leg will be modified to have an additional northbound departure lane. The south leg will remain unchanged. Constructing these additional lanes will require widening Plum Creek Pkwy. to accommodate the additional roadway width needed.

- **(9) Plum Creek Pkwy./Wilcox St.**
  - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon, it is anticipated that the westbound right turn lane will be converted into a shared through/right turn lane. It is also recommended that right turn overlap be implemented for the northbound and southbound right turn movements. These modifications would help alleviate queueing issues and mitigate the potential operational issues for these movements in the 2050 (long-term) analysis horizon.
- **(10) Prairie Hawk Dr./West Site Access**
  - 2027 (Build-Out) Analysis Horizon – This intersection is not anticipated to be constructed by the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (Long-Term) analysis horizon it is anticipated that this intersection will constructed be as follows. The intersection is assumed to be a four-legged two-lane roundabout under yield control on all four approaches. The east and west legs of the roundabout will have one approach/entry lane and one departure/exit lane. The north and south legs of the roundabout will have two approach/entry lanes and two departure/exit lanes.

- **(11) Plum Creek Pkwy./Prairie Hawk Dr./Dawson Trails Blvd.**
  - 2027 (Build-Out) Analysis Horizon – The intersection is anticipated to be constructed by the 2027 (build-out) analysis horizon to include the following. The intersection will operate under traffic signal control with permitted left turn phasing on the northbound and southbound approaches and protected plus permitted phasing on the eastbound approach. The east leg of the intersection will have one shared left turn/through lane and one right turn lane with 100’ feet of storage on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one left turn lane with 150 feet of storage and one shared through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one left turn lane with 150’ feet of storage and one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one left turn lane with a minimum of 100 feet of storage and one shared through/right turn lane on the northbound approach, and one southbound departure lane. The south leg of the intersection will be constructed by others as Dawson Trails Blvd. to provide access from the Crystal Valley interchange.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (Long-Term) analysis horizon it is anticipated that the following modifications will be made. The intersection will remain under actuated/coordinated traffic signal control. The east leg of the intersection will have two left turn lanes, two through lanes and one continuous free-flow right turn lane on the westbound approach, and two eastbound departure lanes plus a northbound to eastbound right turn acceleration lane. The west leg of the intersection will have one left turn lane, two through lanes and

one right turn lane on the eastbound approach, and two westbound departure lanes. The north leg of the intersection will have two left turn lanes, two through lanes and one right turn lane on the southbound approach, and two northbound departure lanes plus a westbound to northbound right turn auxiliary lane. The south leg of the intersection will be modified to have one left turn lane, two through lanes and one channelized continuous free-flow right turn lane on the northbound approach, and two southbound departure lanes.

- **(12) Prairie Hawk Dr./East/West Collector**
  - 2027 (Build-Out) Analysis Horizon – This intersection is not anticipated to be constructed by the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (Long-Term) analysis horizon it is anticipated that this intersection will be constructed to accommodate the Castle Meadows development. The intersection will be limited to a three-quarter movement access intersection. The intersection will be a "T" intersection with stop sign control on the east leg. The east leg of the intersection will have one right turn lane on the westbound approach, and one eastbound departure lane. The north leg of the intersection will have one left turn lane, two through lanes on the southbound approach, and two northbound departure lanes. The south leg of the intersection will have two through lanes and one channelized continuous free-flow right turn lane on the northbound approach, and two southbound departure lanes.

C. Background Traffic Operational Analysis

The following study area intersections were analyzed for the 2027 (build-out) and 2050 (long-term) total background traffic analysis horizons in order to provide a basis for comparison of their operational characteristics with and without the proposed Brickyard development:

1. Wolfensberger Rd./Prairie Hawk Dr. (Signalized)
2. Prairie Hawk Dr./Atchison Way (TWSC)
3. Prairie Hawk Dr./Topeka Way (TWSC)
4. Atchison Way/Topeka Way (TWSC)
5. Wolfensberger Rd./Plum Creek Pkwy./Coachline Rd. (2-Lane Roundabout)
6. Plum Creek Pkwy./Auburn Dr. (TWSC)
7. Plum Creek Pkwy./SB I-25 Ramps (Signalized)
8. Plum Creek Pkwy./NB I-25 Ramps (Signalized)
9. Plum Creek Pkwy./Wilcox St. (Signalized)
10. Prairie Hawk Dr. (Realignment)/West Access Roadway (Proposed Roundabout)
11. Plum Creek Pkwy./Prairie Hawk Dr. (Realignment)/Dawson Trails Blvd. (Proposed)
12. Prairie Hawk Dr. (Realignment)/East/West Collector

The results of the background traffic operational analyses are summarized graphically for the 2027 (build-out) and 2050 (long-term) background traffic analysis horizons in Figures 10, and 11, respectively. A summary of the results of the intersection capacity analyses is provided in Table 3 and detailed *Synchro 12* software intersection capacity analysis reports in Appendix "C".

As shown in Table 3, all of the existing study area intersections as well as all of their individual lane groups are projected to operate at acceptable levels of service (LOS "D" or better), overall, during the 2027 (build-out) and 2050 (long-term) analysis horizon background traffic scenarios with the exception of the following:

- (6) Plum Creek Pkwy./Auburn Dr.
  - By the 2050 (long-term) analysis horizon the southbound shared left turn/right turn lane is projected to experience a poor level of service (LOS “E”) during the p.m. peak hour.
- (8) Plum Creek Pkwy./NB I-25 Ramps
  - By the 2050 (long-term) analysis horizon the westbound shared through/right turn lane is projected to experience a failing level of service (LOS “F”) during the p.m. peak hour.

D. Background Traffic Queuing Analysis

Queue lengths and associated storage requirements for auxiliary lanes (turn bays) at the existing study area intersections were computed for the 2027 (build-out) and 2050 (long-term) analysis horizon background traffic scenarios. Table 4 provides a summary of this analysis and comparison to the actual vehicle storage lengths provided for each of the existing study area intersections.

As shown in Table 4, there are no queue related issues projected to be experienced at the study area intersections based on the reported queues in the 2027 (build-out) and 2050 (long-term) analysis horizon background traffic analysis scenarios with the exception of the following:

- (1) Wolfensberger Rd./Prairie Hawk Dr.
  - 2027 (Build-Out) Analysis Horizon - During the p.m. peak hour the WB through lane group queue is projected to block the WB RT Lane group.
  - 2050 (Long-Term) Analysis Horizon – During the p.m. peak hour the WB through lane group queue is projected to continue to block the WB RT Lane group.
- (7) Plum Creek Pkwy./SB I-25 Ramps
  - 2027 (Build-Out) Analysis Horizon – During the p.m. peak hour, the SB left turn lane group queue is projected to block the shared left turn/through/right turn lane group, and the SB shared left turn/through/right turn lane group queue is projected to spill back into the SB left turn lane group.
  - 2050 (Long-Term) Analysis Horizon – During the a.m. peak hour, the WB through lane group queue is projected to spill back into the upstream intersection. During the p.m. peak hour, the SB left turn lane group queue is projected to block the shared left turn/through/right turn lane group, and the SB shared left turn/through/right turn lane group queue is projected to spill back into the SB left turn lane group. Additional queuing capacity will be needed on the east and north legs of the intersection in order to help alleviate the projected queuing issues.
- (8) Plum Creek Pkwy./NB I-25 Ramps
  - 2027 (Build-Out) Analysis Horizon - During the p.m. peak hour the WB shared through/right turn lane group queue is projected to spill back into the upstream intersection.
  - 2050 (Long-Term) Analysis Horizon – During the p.m. peak hour, the EB through lane group queue and WB shared through/right turn lane group queue are both projected to spill back into the upstream intersection. Additional queuing capacity will be needed on the east and west legs of the intersection in order to help alleviate the projected queuing issues.

- (9) Plum Creek Pkwy./Wilcox St.
  - 2027 (Build-Out) Analysis Horizon - During the p.m. peak hour, the EB through lane group queue is projected to block the EB left turn lane group and the WB through lane group queue is projected to block the WB left turn lane group.
  - 2050 (Long-Term) Analysis Horizon – During both the a.m. and p.m. peak hours the EB left turn lane queue is projected to spill back into the through lane group. During the p.m. peak hour, the EB through lane queue is projected to block the left turn lane group. During both the a.m. and p.m. peak hours the WB through lane group queue is projected to block the WB left turn lane group. During the p.m. peak hour, the NB left turn lane queue is projected to spill back into the NB through lane group and the SB left turn lane queue is projected to spill back into the SB through lane group.

TABLE 3
2027 (BUILD-OUT) & 2050 (LONG-TERM) BACKGROUND TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2027 BACKGROUND TRAFFIC				2050 BACKGROUND TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
1. Prairie Hawk Dr. & E. Wolfensberger Rd.	**Signal**								
a. EB L (Prot+Perm)		C	28.7	C	33.9	C	25.8	C	32.3
b. EB TR		D	39.1	D	41.6	-	-	-	-
c. EB T		-	-	-	-	D	35.9	D	41.1
d. EB R		-	-	-	-	C	29.4	C	34.9
e. WB L (Prot+Perm)		C	29.4	D	35.0	C	29.2	C	32.8
f. WB T		C	31.0	D	39.3	C	26.3	C	32.0
g. WB R		C	34.4	D	43.3	C	29.3	C	34.1
h. NB L (Prot+Perm)		B	15.4	B	12.4	C	20.2	B	16.3
i. NB TR		B	17.2	B	17.5	-	-	-	-
j. NB T		-	-	-	-	C	21.7	B	19.0
k. NB R		-	-	-	-	C	28.7	C	27.0
l. SB L (Prot+Perm)		B	14.1	B	11.2	-	-	-	-
m. SB L (Prot+Perm) (Dual)		-	-	-	-	B	16.9	B	15.3
n. SB T		B	12.9	B	10.9	-	-	-	-
o. SB R		B	13.0	B	11.8	-	-	-	-
p. SB TR		-	-	-	-	B	18.6	B	18.2
q. INTERSECTION		**C**	**29.1**	**C**	**30.4**	**C**	**27.3**	**C**	**28.9**
2. Prairie Hawk Dr. & Atchison Way	**TWSC**								
a. EB LR	Stop	A	9.9	B	10.9	-	-	-	-
b. NB LT		A	7.6	A	7.6	-	-	-	-
c. INTERSECTION		**A**	**1.7**	**A**	**4.0**	**-**	**-**	**-**	**-**
2.A. Prairie Hawk Dr. & Atchison Way	**Roundabout**								
a. EB LR	Yield	-	-	-	-	A	4.8	A	5.9
b. NB T	Free	-	-	-	-	A	4.7	A	5.9
c. SB T	Yield	-	-	-	-	A	3.7	A	3.5
d. SB R	Free	-	-	-	-	A	0.0	A	0.0
e. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**3.0**	**A**	**3.8**
3. Prairie Hawk Dr. & Topeka Way	**TWSC**								
a. EB LTR	Stop	A	7.2	A	7.2	A	7.3	A	7.4
b. WB LTR	Stop	A	7.4	A	7.3	A	0.0	A	0.0
c. NB LTR		A	9.1	A	9.3	B	10.6	B	11.3
d. SB LTR		A	8.4	A	8.4	A	9.6	B	11.0
e. INTERSECTION		**A**	**3.5**	**A**	**5.8**	**A**	**9.2**	**A**	**9.2**

TABLE 3 (CONTINUED)
2027 (BUILD-OUT) & 2050 (LONG-TERM) BACKGROUND TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2027 BACKGROUND TRAFFIC				2050 BACKGROUND TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
4. Atchison Way & Topeka Way	**TWSC**								
a. EB LT		A	7.3	A	7.3	-	-	-	-
b. EB L	Stop	-	-	-	-	B	11.5	B	11.3
c. EB TR	Stop	-	-	-	-	B	11.4	B	11.6
d. WB L	Stop	-	-	-	-	A	0.0	A	0.0
e. WB TR	Stop	-	-	-	-	B	11.6	B	11.1
f. NB L		-	-	-	-	A	0.0	A	0.0
g. SB LR	Stop	A	8.5	A	8.6	-	-	-	-
h. SB L		-	-	-	-	A	0.0	A	7.6
i. INTERSECTION		**A**	**1.3**	**A**	**2.1**	**A**	**1.6**	**A**	**2.3**
5. Plum Creek Pkwy./Coachline Rd. & W. Wolfensberger Rd.	**Roundabout**								
a. EB LT	Yield	A	4.9	A	4.5	A	8.9	A	6.7
b. EB TR	Yield	A	4.6	A	4.2	A	8.5	A	6.4
c. WB LT	Yield	A	3.7	A	4.8	A	5.1	A	7.2
d. WB TR	Yield	A	3.5	A	4.6	A	5.0	A	6.9
e. NB LT	Yield	A	4.4	A	4.5	A	7.7	A	7.0
f. NB TR	Yield	A	4.1	A	4.3	A	7.1	A	6.6
g. SB LT	Yield	A	4.4	A	4.5	A	6.9	A	7.1
h. SB TR	Yield	A	4.3	A	4.4	A	6.6	A	6.6
i. INTERSECTION		**A**	**4.3**	**A**	**4.5**	**A**	**7.0**	**A**	**6.8**
6. Plum Creek Pkwy. & Auburn Dr.	**TWSC**								
a. EB LT		A	7.6	A	8.2	-	-	-	-
b. EB L		-	-	-	-	A	8.5	A	9.5
c. SB LR	Stop	B	13.0	C	15.5	D	28.3	E	35.4
d. INTERSECTION		**A**	**2.5**	**A**	**1.9**	**A**	**3.1**	**A**	**2.9**
7. Plum Creek Pkwy. & I-25 SB Ramps	**Signal**								
a. EB TR		D	40.5	D	42.7	-	-	-	-
b. EB T		-	-	-	-	C	30.3	D	51.1
c. EB R (Free)		-	-	-	-	A	0.0	A	0.0
d. WB L (Prot+Perm)		D	42.9	D	40.4	C	32.1	D	43.7
e. WB T		B	19.3	B	14.0	B	17.9	B	14.4
f. NB L (Prot)		D	54.1	D	54.1	-	-	-	-
g. NB R		A	4.3	A	7.7	-	-	-	-
h. SB L (Prot) (Dual)		A	6.3	B	10.1	C	20.1	D	40.0
i. SB LTR		A	9.3	B	14.1	-	-	-	-
j. SB LT		-	-	-	-	C	27.2	C	33.4
k. SB R (Free)		-	-	-	-	A	0.0	A	0.0
l. INTERSECTION		**C**	**22.9**	**C**	**21.0**	**C**	**24.6**	**D**	**36.0**
8. Plum Creek Pkwy. & I-25 NB Ramps	**Signal**								
a. EB L (Prot+Perm)		D	42.3	D	36.7	-	-	-	-
b. EB L (Prot+Perm) (Dual)		-	-	-	-	D	37.3	D	42.6
c. EB T		A	5.3	A	6.1	A	6.7	A	6.9
d. WB TR		D	40.8	C	33.7	C	33.5	F	59.7
e. WB R		C	31.7	D	38.9	D	42.6	C	27.9
f. NB L (Prot)		C	28.8	C	29.0	D	43.9	D	42.4
g. NB LTR		C	28.8	C	29.0	D	43.9	D	42.4
h. NB R		C	30.0	C	30.1	D	40.7	D	40.8
i. INTERSECTION		**C**	**27.4**	**C**	**24.4**	**C**	**30.2**	**C**	**28.6**

TABLE 3 (CONTINUED)
2027 (BUILD-OUT) & 2050 (LONG-TERM) BACKGROUND TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2027 BACKGROUND TRAFFIC				2050 BACKGROUND TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
9. Plum Creek Pkwy. & S. Wilcox St.	**Signal**								
a. EB L (Prot+Perm)		C	34.1	D	40.1	D	46.5	D	46.9
b. EB T		C	24.1	D	35.7	C	31.9	D	42.2
c. EB R (Free)		A	0.0	A	0.0	A	0.0	A	0.0
d. WB L (Prot+Perm)		C	21.8	C	27.2	B	19.5	D	38.3
e. WB T		D	38.4	D	40.1	-	-	-	-
f. WB R		C	25.4	C	26.4	-	-	-	-
g. WB TR		-	-	-	-	D	37.9	D	42.3
h. NB L (Prot+Perm) (Dual)		C	23.0	C	25.4	D	38.5	D	48.4
i. NB T		C	24.1	C	31.7	D	35.1	D	39.8
j. NB R		C	22.8	C	29.6	-	-	-	-
k. NB R (Perm+ov)		-	-	-	-	C	28.9	C	31.8
l. SB L (Prot+Perm)		C	21.4	C	24.7	C	31.9	D	51.7
m. SB T		C	24.7	C	31.5	D	37.7	D	52.7
n. SB R		C	27.0	D	41.9	-	-	-	-
o. SB R (Perm+ov)		-	-	-	-	C	29.2	D	43.8
p. INTERSECTION		**C**	**29.6**	**C**	**34.7**	**C**	**28.0**	**D**	**43.3**
10. Prairie Hawk Dr./West Site Access	**Roundabout**								
a. EB LTR	Yield	-	-	-	-	A	4.0	A	3.5
b. WB LTR	Yield	-	-	-	-	A	3.3	A	3.3
c. NB LT	Yield	-	-	-	-	A	3.6	A	3.6
d. NB TR	Yield	-	-	-	-	A	3.5	A	3.5
e. SB LT	Yield	-	-	-	-	A	3.4	A	3.4
f. SB TR	Yield	-	-	-	-	A	3.2	A	3.2
g. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**3.6**	**A**	**3.5**
11. Plum Creek Pkwy. & Prairie Hawk Dr./ Dawson Trails Blvd.	**Signal**								
a. EB L (Prot+Perm)		-	-	-	-	C	25.2	C	24.0
b. EB T		-	-	-	-	C	33.6	D	39.7
c. EB R		-	-	-	-	C	26.3	C	26.8
d. WB L (Prot+Perm) (Dual)		-	-	-	-	C	23.9	C	24.7
e. WB T		-	-	-	-	C	33.4	C	29.5
f. WB R (Free)		-	-	-	-	A	0.0	A	0.0
g. NB L (Prot+Perm)		-	-	-	-	B	14.4	B	18.3
h. NB T		-	-	-	-	C	25.3	C	26.2
i. NB R (Free)		-	-	-	-	A	0.0	A	0.0
j. SB L (Prot+Perm) (Dual)		-	-	-	-	B	14.8	B	14.9
k. SB T		-	-	-	-	C	25.4	C	22.3
l. SB R		-	-	-	-	C	27.9	C	24.6
m. INTERSECTION		**-**	**-**	**-**	**-**	**C**	**27.9**	**C**	**28.5**
12. Prairie Hawk Dr./East/West Collector	**TWSC**								
a. WB R	Stop	-	-	-	-	B	12.0	B	10.0
b. SB L		-	-	-	-	A	9.1	A	8.3
c. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**1.3**	**A**	**0.7**

TABLE 4
2027 (BUILD-OUT) & 2050 (LONG-TERM) BACKGROUND TRAFFIC
SUMMARY OF QUEUING ANALYSIS

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING/PROPOSED STORAGE (FT)	2027 BACKGROUND TRAFFIC QUEUE LENGTH (FT) 95TH%		2050 BACKGROUND TRAFFIC QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK	AM PEAK	PM PEAK
1. Prairie Hawk Dr./E. Wolfensberger Rd.					
a. EB L (1)	325	63	51	62	48
b. EB TR (2)	1100	319	304	-	-
c. EB T (2)	1100	-	-	367	355
d. EB R (1)	150	-	-	12	13
e. WB L (1)	225	91	88	128	151
f. WB T (2)	1850	156	310	163	344
g. WB R (1)	100	50	58	47	56
h. NB L (1)	250	7	20	16	41
i. NB TR (1)	250	49	79	-	-
j. NB T (2)	500	-	-	108	146
k. NB R (1)	150	-	-	63	74
l. SB L (1/2)	350/700	130	115	178	176
m. SB T (1)	875	36	31	-	-
n. SB R (1)	350	10	19	-	-
o. SB TR (2)	1225	-	-	133	125
2. Prairie Hawk Dr./Atchison Way (TWSC)					
a. EB LR (1)	700	5	20	-	-
b. NB LT (1)	425	0	0	-	-
2.A. Prairie Hawk Dr./Atchison Way (Roundabout)					
a. EB LR (1)	700	-	-	25	25
b. NB T (1)	425	-	-	25	25
c. SB T (1)	125	-	-	0	0
d. SB R (1)	150	-	-	0	25
3. Prairie Hawk Dr./Topeka Way					
a. EB LTR (1)	200	3	8	3	5
b. WB LTR (1)	-	0	0	0	0
c. NB LTR (1)	1100	0	0	13	8
d. SB LTR (1)	430	0	0	15	18
4. Atchison Way/Topeka Way					
a. EB LT (1)	150	0	0	-	-
b. EB L (1)	150	-	-	0	3
c. EB TR (1)	-	-	-	3	5
d. WB L (1)	150	-	-	0	0
e. WB TR (1)	-	-	-	5	3
f. NB L (1)	150	-	-	0	0
g. SB LR (1)	-	0	0	-	-
h. SB L (1)	150	-	-	0	0
5. Plum Creek Pkwy./Coachline Rd./W. Wolfensberger Rd.					
a. EB LT (1)	550	0	0	50	25
b. EB TR (1)	550	0	0	50	25
c. WB LT (1)	250	0	0	25	25
d. WB TR (1)	350	0	0	25	25
e. NB LT (1)	500	0	0	25	25
f. NB TR (1)	150	0	0	25	25
g. SB LT (1)	200	25	0	25	25
h. SB TR (1)	2450	25	25	25	25
6. Plum Creek Pkwy./Auburn Dr.					
a. EB LT (1)	800	0	0	-	-
b. EB L (1)	150	-	-	0	0
c. SB LR (1)	275	18	20	70	70

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING/PROPOSED STORAGE (FT)	2027 BACKGROUND TRAFFIC QUEUE LENGTH (FT) 95TH%		2050 BACKGROUND TRAFFIC QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK	AM PEAK	PM PEAK
7. Plum Creek Pkwy./I-25 SB Ramps					
a. EB TR (3)	2700	278	339	-	-
b. EB T (3)	2700	-	-	770	1278
c. EB R (1)	-	-	-	0	0
d. WB L (1)	675	139	208	204	289
e. WB T (2)	350	181	236	409	331
f. NB L (1)	375	31	31	-	-
g. NB R (1)	750	48	58	-	-
h. SB L (2)	3300	298	502	315	886
i. SB LTR (1)	225	179	318	-	-
j. SB LT (1)	225	-	-	203	551
k. SB R (1)	-	-	-	0	0
8. Plum Creek Pkwy./I-25 NB Ramps					
a. EB L (1/2)	650/800	145	121	464	341
b. EB T (3)	480	191	311	379	576
c. WB TR (1/2)	625/820	592	696	451	1269
d. WB R (1)	400	61	73	131	325
e. NB L (1)	400	43	52	235	191
f. NB LTR (1)	1700	37	39	234	196
g. NB R (1)	175	29	32	90	86
9. Plum Creek Pkwy./S. Wilcox St.					
a. EB L (1)	325	193	269	333	454
b. EB T (2)	1250	447	1028	295	1623
c. EB R (1)	600	0	0	0	0
d. WB L (1)	225	34	45	33	80
e. WB T (2)	880	718	697	-	-
f. WB R (1)	420	39	28	-	-
g. WB TR (3)	1300	-	-	1119	1193
h. NB L (2)	450	246	314	438	570
i. NB T (1)	250	104	146	154	195
j. NB R (1)	250	15	32	15	23
k. SB L (1)	200	55	135	85	246
l. SB T (1)	200	76	110	117	171
m. SB R (1)	200	46	63	111	153
10. Prairie Hawk Dr./West Site Access					
a. EB LTR (1)	-	-	-	0	0
b. WB LTR (1)	-	-	-	0	0
c. NB LT (1)	-	-	-	0	0
d. NB TR (1)	-	-	-	0	0
e. SB LT (1)	-	-	-	0	0
f. SB TR (1)	-	-	-	0	0
11. Plum Creek Pkwy./Prairie Hawk Dr./Dawson Trails Blvd.					
a. EB L (1)	250	-	-	78	62
b. EB T (2)	-	-	-	426	551
c. EB R (1)	250	-	-	40	51
d. WB L (2)	600	-	-	130	177
e. WB T (2)	-	-	-	428	471
f. WB R (1)	-	-	-	0	0
g. NB L (1)	200	-	-	78	54
h. NB T (2)	-	-	-	51	70
i. NB R (1)	-	-	-	0	0
j. SB L (2)	500	-	-	194	200
k. SB T (2)	-	-	-	60	80
l. SB R (1)	100	-	-	45	53
12. Prairie Hawk Dr./East/West Collector					
a. WB R (1)	-	-	-	20	8
b. SB L (1)	150	-	-	25	25

Legend

- Turn lane queue spills into thru lane
- Queue spills back into upstream intersection
- Through lane queue blocks LT lane
- Through lane queue blocks RT lane
- Through lane queue blocks LT & RT lanes

IV. PROJECT DEVELOPMENT

A. Trip Generation

The trip generation projections for the proposed Brickyard development were forecast utilizing the publication *Trip Generation, 11th Edition*, by the Institute of Transportation Engineers (ITE). Estimates of total daily traffic volumes and a.m. and p.m. peak hour traffic volumes were calculated. Site generated vehicular trip reductions as a result of internal trip capture were considered and have been incorporated into the projections. Due to the location of the proposed development site generated vehicular trip reductions as a result of transit use was not considered. Adjustments have also been incorporated into the assignment of the site generated vehicular trips on the study area roadways and intersections in order to account for the influence of pass-by trips.

Internal trip capture is that portion of trips generated by a mixed-use development that both begin and end within the development. The importance of internal trip capture is that those trips satisfy a portion of the total development's trip generation and they do so without using the external roadway system. The methodology presented in *Trip Generation Handbook, 3rd Edition,* by the ITE was utilized to estimate internal trip capture rates for the proposed Brickyard development. Based on the conceptual site plan for the proposed development, the projected site generated trips captured internally can be considered non-vehicular trips and therefore can be deducted from the overall site generated trip totals. Based on engineering judgement, the computed ITE internal trip capture rates were capped at a maximum of 20% to be more conservative and applicable to the nature of the proposed development and surrounding land uses. The unadjusted vehicular trip generation projections for the proposed Brickyard development are summarized in Table 5. The internal trip capture rates and resulting site generated vehicular trip reductions and adjusted vehicular trip generation projections are summarized in Table 5A. Appendix “D” provides detailed internal trip capture worksheets for the proposed Brickyard development.

Pass-by trips can be defined as an intermediate stop on the way from an origin to a primary trip destination (I.e., home to work) without route diversion. For example, a commuter whose primary trip is home to work makes an intermediate stop for vehicle fueling, fast-food, etc. and continues on their way without any route diversion. These site generated trips already exist in the background traffic volume and are only added to the sites access intersections with the external roadway network and internal roadway system. The methodology presented in *Trip Generation Handbook, 3rd Edition,* by the ITE was utilized to estimate pass-by trip rates and volumes for the proposed Brickyard development. For the purposes of this study, site generated pass-by trips were incorporated into the assignment of the site generated vehicular trips to the study area roadways and intersections utilizing the same trip distribution methodology as for the distribution of the site generated trips for each specific land use. Site generated pass-by trips for the proposed Brickyard development have been computed for the commercial/retail land use and summarized in Table 5B.

For the purposes of this study, it was assumed that the proposed Brickyard development will be fully built out by 2027 and will consist of 43 single-family attached housing units, 54 multi-family (low-rise) housing units, 486 multi-family (mid-rise) housing units, a 125-room hotel, 9,000 square feet of commercial/retail space, 24,000 square feet of high turnover (sit-down) restaurant/food hall space, 59,000 total square feet of office space, and a 145,000 square-foot community recreation center. Based on these parameters, at buildout, the proposed Brickyard development is projected to generate 10,830 daily vehicle trips of which 860 are projected to be

generated during the a.m. peak hour and 970 are projected to be generated during the p.m. peak hour.

TABLE 5
THE BRICKYARD – TRIP GENERATION SUMMARY

Land Use	Intensity		ITE Code	Daily (vpd)	AM Peak Hour (vph)			PM Peak Hour (vph)		
					Total	In	Out	Total	In	Out
Single-Family Attached Housing	43	DU	215	277	17	4	13	22	13	9
Multi-family Housing (Low-Rise) (2-3 floors)	54	DU	220	421	40	10	30	44	28	16
Multi-family Housing (Mid-Rise) (4-10 floors)	486	DU	221	2272	202	46	156	190	116	74
Hotel	125	Rooms	310	931	55	31	24	65	33	32
Recreational Community Center	145	KSF	495	4013	277	183	94	345	162	183
Retail Plaza (<40k)	9	KSF	822	609	27	16	11	72	36	36
General Office Building	42	KSF	710	546	79	70	9	81	14	67
Medical-Dental Office Building	17	KSF	720	622	49	39	10	66	20	46
High Turnover (Sit-Down) Restaurant	24	KSF	932	2573	230	127	103	217	132	85
Combined (Unadjusted) Total				**12,264**	**976**	**526**	**450**	**1,102**	**554**	**548**

TABLE 5A
THE BRICKYARD – ADJUSTED TRIP GENERATION SUMMARY

The Brickyard Mixed Use - Trip Generation (Adjusted for Internal Trip Capture)										
Land Use	**Intensity**		**ITE Code**	**Daily (vpd)**	**A.M. Peak Hour (vph)**			**P.M. Peak Hour (vph)**		
					Total	**In**	**Out**	**Total**	**In**	**Out**
Residential										
Residential - Total (Unadjusted)	583	DU	215	2970	259	60	199	256	157	99
Residential - Internal Trip Capture %*				16%		7%	15%		17%	20%
Residential - Internal Trip Capture**				475	34	4	30	47	27	20
Residential - Site Trips (Adjusted for Internal Trip Capture)				2,495	225	56	169	209	130	79
Residential - Total Adjusted Trips				**2,495**	**225**	**56**	**169**	**209**	**130**	**79**
Hotel										
Hotel - Total (Unadjusted)	125	Rooms	310	931	55	31	24	65	33	32
Hotel - Internal Trip Capture %*				16%		3%	20%		20%	20%
Hotel - Internal Trip Capture**				149	6	1	5	13	7	6
Hotel - Site Trips (Adjusted for Internal Trip Capture)				782	49	30	19	52	26	26
Hotel - Total Adjusted Trips				**782**	**49**	**30**	**19**	**52**	**26**	**26**
Recreational Community Center										
Rec Center - Total (Unadjusted)	145	KSF	495	4013	277	183	94	345	162	183
Rec - Internal Trip Capture %***				0%		0%	0%		0%	0%
Rec - Internal Trip Capture***				0	0	0	0	0	0	0
Rec Center - Site Trips (Adjusted for Internal Trip Capture)				4,013	277	183	94	345	162	183
Recreational Community Center - Total Adjusted Trips				**4,013**	**277**	**183**	**94**	**345**	**162**	**183**
Commercial/Retail										
Commercial/Retail - Total (Unadjusted)	9	KSF	822	609	27	16	11	72	36	36
Commercial/Retail - Internal Trip Capture %*				20%		20%	20%		20%	20%
Commercial/Retail - Internal Trip Capture**				122	5	3	2	14	7	7
Commercial/Retail - Site Trips (Adjusted for Internal Trip Capture)				487	22	13	9	58	29	29
Commercial/Retail - Total Adjusted Trips				**487**	**22**	**13**	**9**	**58**	**29**	**29**
Office										
Office - Total (Unadjusted)	59	KSF	710	1168	128	109	19	147	34	113
Office - Internal Trip Capture %*				17%		20%	20%		20%	7%
Office - Internal Trip Capture**				199	26	22	4	15	7	8
Office - Site Trips (Adjusted for Internal Trip Capture)				969	102	87	15	132	27	105
Office - Total Adjusted Trips				**969**	**102**	**87**	**15**	**132**	**27**	**105**
High Turnover (Sit-Down) Restaurant										
High Turnover (Sit-Down) Restaurant - Total (Unadjusted)	24	KSF	932	2573	230	127	103	217	132	85
High Turnover (Sit-Down) Restaurant - Internal Trip Capture %*				19%		20%	19%		20%	20%
High Turnover (Sit-Down) Restaurant - Internal Trip Capture**				489	45	25	20	43	26	17
High Turnover (Sit-Down) - Site Trips (Adjusted for Internal Trip Capture)				2,084	185	102	83	174	106	68
High Turnover (Sit-Down) Restaurant - Total Adjusted Trips				**2,084**	**185**	**102**	**83**	**174**	**106**	**68**
Summary of Adjusted Site Generated Trips										
Brickyard - Total Trips (Unadjusted)				12,264	976	526	450	1,102	554	548
Brickyard - Total Internal Trip Capture & Multimodal Trips**				1,434	116	55	61	132	74	58
Total Adjusted Site Generated Trips				**10,830**	**860**	**471**	**389**	**970**	**480**	**490**
% Reduction in Total Site Generated Trips				**11.7%**	**11.9%**	**10.5%**	**13.6%**	**12.0%**	**13.4%**	**10.6%**

* Internal trip capture % capped at 20%.

** Projections of daily internal trip capture utilizes the average of the a.m. and p.m. internal trip capture %.

*** ITE has no data or methodology that includes internal trip capture for a rec center as it relates to other land uses (residential, office, retail, etc.). Therefore, Internal trip capture is not included in the trip generation adjustments.

TABLE 5B
THE BRICKYARD – SUMMARY OF PASS-BY TRIPS

The Brickyard Mixed-Use Development - Pass-By Trips										
Land Use	**Intensity**		**ITE Code**	**Daily (vpd)**	**A.M. Peak Hour (vph)**			**P.M. Peak Hour (vph)**		
					Total	**In**	**Out**	**Total**	**In**	**Out**
Retail Plaza (<40K) Pass-By Trips (% Based on Figure E.7 & Table E.9 - ITE Trip Generation Handbook, 3rd Edition)										
Commercial/Retail (Shopping Plaza) - Total Adjusted Trips	9	KSF	822	487	22	13	9	58	29	29
Commercial/Retail - Pass-By Trip %				-		0%	0%		34%	34%
Commercial/Retail - Pass-By Trips				-	0	0	0	20	10	10
Commercial/Retail - Non-Pass-By Trips				-	22	13	9	38	19	19
High Turnover (Sit-Down) Restaurant Pass-By Trips (% Based on Table E.30 - ITE Trip Generation Handbook, 3rd Edition)										
High Turnover (Sit Down) - Total Adjusted Trips	24	KSF	932	2084	185	102	83	174	106	68
High Turnover (Sit-Down) - Pass-By Trip %				-		0%	0%		43%	43%
High Turnover (Sit-Down) - Pass-By Trips (Rounded to nearest 5)				-	0	0	0	75	45	30
High Turnover (Sit-Down) - Non-Pass-By Trips				-	185	102	83	99	61	38

B. Trip Distribution

The distribution of the projected vehicular trips generated by the proposed Brickyard development was established based on the following:

- Current and projected future traffic patterns on the surrounding transportation system.
- Efficiency of access to principal transportation corridors such as Wolfensberger Rd., Plum Creek Pkwy., I-25, Prairie Hawk Dr., etc.
- Potential trip origins/destinations for the proposed land uses such as surrounding shopping centers, schools, and employment centers.

It was determined based on the traffic volume counts collected for this study and the observed traffic distribution patterns in the vicinity of the project site that the majority of the projected vehicular trips generated by the proposed development would utilize Plum Creek Pkwy. rather than Wolfensberger to access the project site. For this reason, the Wolfensberger interchange was not included in this analysis. Even without any improvements to Plum Creek Pkwy. or the Plum Creek Pkwy. and I-25 interchange, it would still be anticipated that the majority of the projected vehicular trips generated by the proposed development would utilize Plum Creek Pkwy. rather than Wolfensberger to access the project site as Plum Creek Pkwy. provides more direct and efficient access.

Figures 12 - 17 graphically illustrate the projected trip distribution patterns for the proposed Brickyard development residential, commercial/retail, hotel, recreation center, office space, and restaurant land uses 2027 (build-out) analysis horizon, respectively. Figures 18 - 23 graphically illustrate the projected trip distribution patterns for the proposed Brickyard development residential, commercial/retail, hotel, recreation center, office space, and restaurant land uses 2050 (long-term) analysis horizon, respectively.

C. Trip Assignment

The vehicular traffic volumes projected to be generated by the proposed Brickyard development, shown in Table 5A, were assigned to the study area roadways and intersections utilizing the trip distribution methodology described above. Figures 24 and 25 graphically illustrate the site generated trip assignment for the proposed Brickyard development 2027 (build-out) and 2050 (long-term) analysis horizons, respectively. Site generated pass-by trips for the proposed Brickyard development, computed for the commercial/retail and restaurant land uses 2027 (build-out) and 2050 (long-term) analysis horizons are graphically illustrated in Figures 26 and 27, respectively.

V. TOTAL TRAFFIC

Total traffic forecasts for the 2027 (build-out) and 2050 (long-term) analysis horizons were computed by combining the associated 2027 (build-out) and 2050 (long-term) background traffic volumes with the projected site generated traffic volumes. Figures 28 & 29 graphically illustrate the total traffic projections for the study area intersections for the 2027 (build-out) and 2050 (long-term) analysis horizons, respectively.

VI. PROJECT ANALYSIS

A. Operational Analysis

In order to evaluate the impact of the proposed Brickyard development on the study area roadway system, peak hour intersection capacity analyses for the total traffic conditions were performed for the 2027 (build-out) and 2050 (long-term) analysis horizon total traffic scenarios at each of the study area intersections listed below:

1. Wolfensberger Rd./Prairie Hawk Dr. (Signalized)
2. Prairie Hawk Dr./Atchison Way (TWSC/Roundabout)
3. Prairie Hawk Dr./Topeka Way (TWSC)
4. Atchison Way/Topeka Way (TWSC)
5. Wolfensberger Rd./Plum Creek Pkwy./Coachline Rd. (2-Lane Roundabout)
6. Plum Creek Pkwy./Auburn Dr. (TWSC)
7. Plum Creek Pkwy./SB I-25 Ramps (Signalized)
8. Plum Creek Pkwy./NB I-25 Ramps (Signalized)
9. Plum Creek Pkwy./Wilcox St. (Signalized)
10. Prairie Hawk Dr. (Realignment)/West Access Roadway (Proposed Roundabout)
11. Plum Creek Pkwy./Prairie Hawk Dr. (Realignment)/Dawson Trails Blvd. (Proposed)
12. Prairie Hawk Dr. (Realignment)/East/West Collector
13. Prairie Hawk Dr./NE Access Dr. (Proposed)
14. Prairie Hawk Dr./SE Access Dr. (Proposed)
15. West Site Access Roadway/Street “D” (Proposed)
16. Street “B”/NE Site Access/Street “A” (Proposed)
17. Street “C”/SE Site Access/Street “A” (Proposed)

The results of the total traffic operational analyses are summarized in Table 6, below. Figures 30 and 31 graphically illustrate the 2027 (build-out) and 2050 (long-term) analysis horizon total traffic scenarios operational analyses, respectively. Detailed *Synchro 12* software intersection capacity analysis reports are provided in Appendix “C”.

A comparative analysis of the 2027 (build-out) and 2050 (long-term) analysis horizons background and total traffic scenarios operational analyses was performed to evaluate the level of impact, as measured by level of service, the proposed Brickyard development will have on the study area intersections. Based on the comparative analyses, there are no study area intersections, overall, or individual lane groups that are projected to deteriorate from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the traffic projected to be generated by the proposed Brickyard development in either the 2027 (build-out) or 2050 (long-term) analysis horizons total traffic conditions scenarios. Those intersections with poor or failing overall or individual lane group levels of service in the background traffic scenarios are projected to remain with poor to failing levels of service in the total traffic scenarios. The developer will however be making intersection and roadway improvements and contributing to improvements so that traffic impacts from the proposed development will not exceed Town LOS and roadway standards.

Table 7 provides a side-by-side comparative summary of the 2027 (build-out) and 2050 (long-term) analysis horizons background and total traffic scenarios operational analyses.

TABLE 6
2027 (BUILD-OUT) & 2050 (LONG-TERM) TOTAL TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2027 TOTAL TRAFFIC				2050 TOTAL TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
1.* Prairie Hawk Dr. & E. Wolfensberger Rd.	**Signal**								
a. EB L (Prot+Perm)		C	27.8	C	34.4	C	25.8	C	32.3
b. EB TR		D	38.5	D	44.7	-	-	-	-
c. EB T		-	-	-	-	D	35.8	D	41.1
d. EB R		-	-	-	-	C	29.8	D	35.5
e. WB L (Prot+Perm)		D	39.3	D	39.0	D	36.5	D	39.0
f. WB T		C	29.7	D	36.3	C	25.3	C	29.4
g. WB R		C	32.6	D	38.9	C	28.0	C	31.3
h. NB L (Prot+Perm)		B	15.5	B	12.0	C	20.9	B	18.0
i. NB T		B	17.7	B	15.1	C	23.3	C	21.5
j. NB R		B	19.4	B	18.2	D	35.7	D	35.0
k. SB L (Prot+Perm)		B	15.9	B	13.4	-	-	-	-
l. SB L (Prot+Perm) (Dual)		-	-	-	-	B	18.2	B	17.2
m. SB T		B	15.7	B	13.7	-	-	-	-
n. SB R		B	14.8	B	13.9	-	-	-	-
o. SB TR		-	-	-	-	C	20.7	C	20.8
P. INTERSECTION		**C**	**28.6**	**C**	**29.0**	**C**	**29.0**	**C**	**30.2**
2. Prairie Hawk Dr. & Atchison Way	**TWSC**								
a. EB LR	Stop	B	13.1	C	17.1	-	-	-	-
b. NB LT		A	8.1	A	8.0	-	-	-	-
c. INTERSECTION		**A**	**1.0**	**A**	**3.2**	**-**	**-**	**-**	**-**
2.A." Prairie Hawk Dr. & Atchison Way	**Roundabout**								
a. EB LR	Yield	-	-	-	-	A	5.8	A	7.3
b. NB T	Free	-	-	-	-	A	6.0	A	7.9
c. SB T	Yield	-	-	-	-	A	4.3	A	4.1
d. SB R	Free	-	-	-	-	A	0.0	A	0.0
e. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**3.8**	**A**	**4.9**
3. Prairie Hawk Dr. & Topeka Way	**TWSC**								
a. EB LTR	Stop	A	7.6	A	7.4	A	7.3	A	7.4
b. WB LTR	Stop	A	7.8	A	7.3	A	0.0	A	0.0
c. NB L		B	12.3	B	12.8	B	11.9	B	13.2
d. SB L		A	9.1	B	12.8	B	11.2	B	13.3
e. INTERSECTION		**A**	**1.3**	**B**	**11.6**	**B**	**10.8**	**B**	**11.7**
4." Atchison Way & Topeka Way	**TWSC**								
a. EB LT		A	7.3	A	7.3	-	-	-	-
b. EB L	Stop	-	-	-	-	B	12.5	B	12.4
c. EB TR	Stop	-	-	-	-	B	12.3	B	12.6
d. WB L	Stop	-	-	-	-	B	12.2	B	12.6
e. WB TR	Stop	-	-	-	-	B	12.5	B	11.9
f. NB L		-	-	-	-	A	0.0	A	0.0
g. SB LR	Stop	A	8.5	A	8.6	-	-	-	-
h. SB L		-	-	-	-	A	0.0	A	7.7
i. INTERSECTION		**A**	**1.3**	**A**	**2.1**	**A**	**1.4**	**A**	**2.2**

TABLE 6 (CONTINUED)
2027 (BUILD-OUT) & 2050 (LONG-TERM) TOTAL TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2027 TOTAL TRAFFIC				2050 TOTAL TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
5. Plum Creek Pkwy./Coachline Rd. & W. Wolfensberger Rd.	**Roundabout**								
a. EB LT	Yield	A	5.4	A	4.8	A	9.8	A	7.2
b. EB TR	Yield	A	5.1	A	4.5	A	9.3	A	6.9
c. WB LT	Yield	A	3.9	A	5.2	A	5.3	A	7.7
d. WB TR	Yield	A	3.7	A	5.0	A	5.2	A	7.5
e. NB LT	Yield	A	4.8	A	4.9	A	8.5	A	7.5
f. NB TR	Yield	A	4.5	A	4.6	A	7.7	A	7.1
g. SB LT	Yield	A	4.7	A	5.0	A	7.4	A	7.7
h. SB TR	Yield	A	4.6	A	4.8	A	7.1	A	7.2
i. INTERSECTION		**A**	**4.6**	**A**	**4.8**	**A**	**7.6**	**A**	**7.3**
6." Plum Creek Pkwy. & Auburn Dr.	**TWSC**								
a. EB LT		A	7.8	A	8.4	-	-	-	-
b. EB L		-	-	-	-	A	8.7	A	9.8
c. SB LR	Stop	C	15.4	C	18.8	D	34.6	E	46.6
d. INTERSECTION		**A**	**2.4**	**A**	**2.0**	**A**	**3.5**	**A**	**3.6**
7. " Plum Creek Pkwy. & I-25 SB Ramps	**Signal**								
a. EB TR		D	43.0	D	37.3	-	-	-	-
b. EB T		-	-	-	-	C	29.7	D	51.2
c. EB R (Free)		-	-	-	-	A	0.0	A	0.0
d. WB L (Prot+Perm)		D	39.2	D	47.3	C	25.3	D	53.7
e. WB T		B	15.1	B	11.0	B	17.0	B	12.4
f. NB L (Prot)		D	54.1	D	54.1	-	-	-	-
g. NB R		A	5.3	A	8.5	-	-	-	-
h. SB L (Prot) (Dual)		A	8.3	B	12.3	C	21.5	D	37.3
i. SB LTR		B	12.2	B	17.7	-	-	-	-
j. SB LT		-	-	-	-	C	29.5	D	36.9
k. SB R (Free)		-	-	-	-	A	0.0	A	0.0
l. INTERSECTION		**C**	**24.2**	**C**	**22.3**	**C**	**23.9**	**D**	**37.4**
8." Plum Creek Pkwy. & I-25 NB Ramps	**Signal**								
a. EB L (Prot+Perm)		D	50.1	D	53.7	-	-	-	-
b. EB L (Prot+Perm) (Dual)		-	-	-	-	D	50.4	D	49.5
c. EB T		A	3.8	A	4.1	A	5.8	A	6.0
d. WB TR		D	47.7	C	34.6	D	48.8	F	74.0
e. WB R		D	39.9	D	44.3	D	48.1	C	27.9
f. NB L (Prot)		C	33.9	D	35.1	D	52.3	D	52.0
g. NB LTR		C	34.0	D	35.3	D	52.3	D	52.0
h. NB R		D	36.3	D	38.0	D	44.3	D	44.6
i. INTERSECTION		**C**	**32.4**	**C**	**26.9**	**D**	**37.0**	**C**	**32.8**

TABLE 6 (CONTINUED)
2027 (BUILD-OUT) & 2050 (LONG-TERM) TOTAL TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2027 TOTAL TRAFFIC				2050 TOTAL TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
9." Plum Creek Pkwy. & S. Wilcox St.	**Signal**								
a. EB L (Prot+Perm)		C	33.3	D	40.6	D	43.6	D	50.5
b. EB T		C	23.7	D	35.6	C	21.2	D	39.6
c. EB R (Free)		A	0.0	A	0.0	A	0.0	A	0.0
d. WB L (Prot+Perm)		C	21.5	C	27.3	B	19.2	D	41.7
e. WB T		D	38.9	D	42.4	-	-	-	-
f. WB R		C	25.0	C	26.4	-	-	-	-
g. WB TR		-	-	-	-	D	37.6	D	42.4
h. NB L (Prot+Perm) (Dual)		C	24.0	C	26.7	D	38.8	D	54.1
i. NB T		C	24.7	C	32.3	D	36.0	D	40.2
j. NB R		C	23.3	C	30.1	-	-	-	-
k. NB R (Perm+ov)		-	-	-	-	C	29.6	C	32.5
l. SB L (Prot+Perm)		C	21.9	C	25.0	D	35.0	D	52.5
m. SB T		C	25.3	C	32.0	D	41.9	D	53.4
n. SB R		C	28.0	D	44.4	-	-	-	-
o. SB R (Perm+ov)		-	-	-	-	C	33.0	D	45.3
p. INTERSECTION		**C**	**29.8**	**D**	**35.7**	**C**	**28.0**	**D**	**43.8**
10.^ Prairie Hawk Dr./West Site Access	**Roundabout**								
a. EB LTR	Yield	-	-	-	-	A	5.7	A	5.3
b. WB LTR	Yield	-	-	-	-	A	6.3	A	7.3
c. NB LT	Yield	-	-	-	-	A	4.6	A	4.6
d. NB TR	Yield	-	-	-	-	A	4.4	A	4.5
e. SB LT	Yield	-	-	-	-	A	4.7	A	5.3
f. SB TR	Yield	-	-	-	-	A	4.5	A	4.9
g. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**5.2**	**A**	**5.7**
11.^ Plum Creek Pkwy. & Prairie Hawk Dr./ Dawson Trails Blvd.	**Signal**								
a. EB L (Prot+Perm)		C	27.0	C	24.9	C	33.4	C	25.2
b. EB TR		C	28.5	C	24.2	-	-	-	-
c. EB T		-	-	-	-	C	30.8	D	38.5
d. EB R		-	-	-	-	C	24.7	C	26.8
e. WB LT (Perm)		D	37.6	D	35.8	-	-	-	-
f. WB L (Prot+Perm) (Dual)		-	-	-	-	C	23.2	C	25.9
g. WB T		-	-	-	-	C	33.2	C	33.8
h. WB R		C	34.8	C	30.1	-	-	-	-
i. WB R (Free)		-	-	-	-	A	0.0	A	0.0
j. NB L (Perm)		A	0.0	A	0.0	-	-	-	-
k. NB L (Prot+Perm)		-	-	-	-	B	15.7	B	14.8
l. NB TR		B	18.4	A	9.5	-	-	-	-
m. NB T		-	-	-	-	C	27.2	C	26.6
n. NB R (Free)		-	-	-	-	A	0.0	A	0.0
o. SB L (Perm)		C	23.0	B	12.2	-	-	-	-
p. SB L (Prot+Perm) (Dual)		-	-	-	-	B	17.5	B	17.6
q. SB TR		B	19.5	B	10.5	-	-	-	-
r. SB T		-	-	-	-	C	27.0	C	27.0
s. SB R		-	-	-	-	C	31.9	C	34.1
t. INTERSECTION		**C**	**30.3**	**C**	**25.4**	**C**	**27.6**	**C**	**29.3**
12.^ Prairie Hawk Dr./East/West Collector	**TWSC**								
a. WB R	Stop	-	-	-	-	B	13.5	B	10.9
b. SB L		-	-	-	-	A	9.8	A	9.0
c. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**1.1**	**A**	**0.5**

TABLE 6 (CONTINUED)
2027 (BUILD-OUT) & 2050 (LONG-TERM) TOTAL TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2027 TOTAL TRAFFIC				2050 TOTAL TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
13.^ Prairie Hawk Dr. & NE Site Acccess	**TWSC**								
a. EB L	Stop	B	10.5	B	10.8	B	10.4	B	10.5
b. EB R	Stop	A	0.0	A	0.0	A	0.0	A	0.0
c. NB L		A	0.0	A	0.0	A	0.0	A	0.0
d. INTERSECTION		**A**	**2.3**	**A**	**2.2**	**A**	**2.7**	**A**	**2.2**
14.^ Prairie Hawk Dr. & SE Site Acccess	**TWSC**								
a. EB L	Stop	A	9.2	A	9.4	B	13.2	B	13.1
b. EB R	Stop	A	0.0	A	0.0	A	0.0	A	0.0
c. NB L		A	0.0	A	0.0	A	7.7	A	7.7
d. INTERSECTION		**A**	**3.6**	**A**	**4.5**	**A**	**6.5**	**A**	**5.0**
15.^ West Site Access & Street "D"	**TWSC**								
a. EB L	Stop	B	12.4	C	16.4	B	13.7	C	22.0
b. EB R	Stop	A	9.8	A	9.6	A	9.5	A	9.2
c. NB LT		A	7.7	A	7.8	A	7.8	A	8.0
d. INTERSECTION		**A**	**8.1**	**A**	**8.8**	**A**	**7.6**	**A**	**9.5**
16. ^ Street "B"/NE Site Access & Street "A"	**TWSC**								
a. EB LTR		A	0.0	A	0.0	A	7.2	A	7.3
b. WB LTR		A	7.4	A	7.3	A	7.3	A	7.3
c. NB LTR	Stop	A	8.6	A	8.6	A	8.5	A	8.5
d. SB LTR	Stop	B	10.0	A	9.9	A	8.8	A	8.8
e. INTERSECTION		**A**	**5.6**	**A**	**5.7**	**A**	**6.8**	**A**	**6.4**
17. ^ Street "C"/SE Site Access & Street "A"	**TWSC**								
a. EB L		A	7.6	A	7.5	A	7.7	A	7.6
b. WB L		A	7.6	A	7.6	A	7.6	A	7.6
c. NB LTR	Stop	C	15.7	C	18.6	C	16.1	C	19.3
d. SB LTR	Stop	B	11.9	B	12.0	B	10.5	B	10.6
e. INTERSECTION		**A**	**7.2**	**A**	**9.6**	**A**	**6.6**	**A**	**9.1**

*** = intersection to undergo multiple modifications. See text for details.**

" = intersection to be modified by 2050

^ = new proposed intersection

TABLE 7
2027 (BUILD-OUT) & 2050 (LONG-TERM) BACKGROUND & TOTAL TRAFFIC OPERATIONAL ANALYSIS COMPARISON

INTERSECTION	CONTROL	2027 (BUILD-OUT)								2050 (LONG-TERM)							
		BACKGROUND				TOTAL				BACKGROUND				TOTAL			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
1.* Prairie Hawk Dr. & E. Wolfensberger Rd.	**Signal**																
a. EB L (Prot+Perm)		C	28.7	C	33.9	C	27.8	C	34.4	C	25.8	C	32.3	C	25.8	C	32.3
b. EB TR		D	39.1	D	41.6	D	38.5	D	44.7	-	-	-	-	-	-	-	-
c. EB T		-	-	-	-	-	-	-	-	D	35.9	D	41.1	D	35.8	D	41.1
d. EB R		-	-	-	-	-	-	-	-	C	29.4	C	34.9	C	29.8	D	35.5
e. WB L (Prot+Perm)		C	29.4	D	35.0	D	39.3	D	39.0	C	29.2	C	32.8	D	36.5	D	39.0
f. WB T		C	31.0	D	39.3	C	29.7	D	36.3	C	26.3	C	32.0	C	25.3	C	29.4
g. WB R		C	34.4	D	43.3	C	32.6	D	38.9	C	29.3	C	34.1	C	28.0	C	31.3
h. NB L (Prot+Perm)		B	15.4	B	12.4	B	15.5	B	12.0	C	20.2	B	16.3	C	20.9	B	18.0
i. NB TR		B	17.2	B	17.5	-	-	-	-	-	-	-	-	-	-	-	-
j. NB T		-	-	-	-	B	17.7	B	15.1	C	21.7	B	19.0	C	23.3	C	21.5
k. NB R		-	-	-	-	B	19.4	B	18.2	C	28.7	C	27.0	D	35.7	D	35.0
l. SB L (Prot+Perm)		B	14.1	B	11.2	B	15.9	B	13.4	-	-	-	-	-	-	-	-
m. SB L (Prot+Perm) (Dual)		-	-	-	-	-	-	-	-	B	16.9	B	15.3	B	18.2	B	17.2
n. SB T		B	12.9	B	10.9	B	15.7	B	13.7	-	-	-	-	-	-	-	-
o. SB R		B	13.0	B	11.8	B	14.8	B	13.9	-	-	-	-	-	-	-	-
p. SB TR		-	-	-	-	-		-	-	B	18.6	B	18.2	C	20.8	C	20.8
q. INTERSECTION		**C**	**29.1**	**C**	**30.4**	**C**	**28.6**	**C**	**29.0**	**C**	**27.3**	**C**	**28.9**	**C**	**29.0**	**C**	**30.2**
2. Prairie Hawk Dr. & Atchison Way	**TWSC**																
a. EB LR	Stop	A	9.9	B	10.9	B	13.1	C	17.1	-	-	-	-	-	-	-	-
b. NB LT		A	7.6	A	7.6	A	8.1	A	8.0	-	-	-	-	-	-	-	-
c. INTERSECTION		**A**	**1.7**	**A**	**4.0**	**A**	**1.0**	**A**	**3.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
2.A." Prairie Hawk Dr. & Atchison Way	**Roundabout**																
a. EB LR	Yield	-	-	-	-	-	-	-	-	A	4.8	A	5.9	A	5.8	A	7.3
b. NB T	Free	-	-	-	-	-	-	-	-	A	4.7	A	5.9	A	6.0	A	7.9
c. SB T	Yield	-	-	-	-	-	-	-	-	A	3.7	A	3.5	A	4.3	A	4.1
d. SB R	Free	-	-	-	-	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0
e. INTERSECTION		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**A**	**3.0**	**A**	**3.8**	**A**	**3.8**	**A**	**4.9**
3. Prairie Hawk Dr. & Topeka Way	**TWSC**																
a. EB LTR	Stop	A	7.2	A	7.2	A	7.6	A	7.4	A	7.3	A	7.4	A	7.3	A	7.4
b. WB LTR	Stop	A	7.4	A	7.3	A	7.8	A	7.3	A	0.0	A	0.0	A	0.0	A	0.0
c. NB L		A	9.1	A	9.3	B	12.4	B	12.8	B	10.6	B	11.3	B	11.9	B	13.2
d. SB L		A	8.4	A	8.4	A	9.2	B	12.8	A	9.6	B	11.0	B	11.2	B	13.4
e. INTERSECTION		**A**	**3.5**	**A**	**5.8**	**A**	**1.3**	**B**	**11.6**	**A**	**9.2**	**A**	**9.2**	**B**	**10.8**	**B**	**11.7**
4." Atchison Way & Topeka Way	**TWSC**																
a. EB LT		A	7.3	A	7.3	A	7.3	A	7.3	-	-	-	-	-	-	-	-
b. EB L	Stop	-	-	-	-	-	-	-	-	B	11.5	B	11.3	B	12.5	B	12.4
c. EB TR	Stop	-	-	-	-	-	-	-	-	B	11.4	B	11.6	B	12.3	B	12.6
d. WB L	Stop	-	-	-	-	-	-	-	-	A	0.0	A	0.0	B	12.2	B	12.6
e. WB TR	Stop	-	-	-	-	-	-	-	-	B	11.6	B	11.1	B	12.5	B	11.9
f. NB L		-	-	-	-	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0
g. SB LR	Stop	A	8.5	A	8.6	A	8.5	A	8.6	-	-	-	-	-	-	-	-
h. SB L		-	-	-	-	-	-	-	-	A	0.0	A	7.6	A	0.0	A	7.7
i. INTERSECTION		**A**	**1.3**	**A**	**2.1**	**A**	**1.3**	**A**	**2.1**	**A**	**1.6**	**A**	**2.3**	**A**	**1.4**	**A**	**2.2**
5. Plum Creek Pkwy./Coachline Rd. & W. Wolfensberger Rd.	**Roundabout**																
a. EB LT	Yield	A	4.9	A	4.5	A	5.4	A	4.8	A	8.9	A	6.7	A	9.8	A	7.2
b. EB TR	Yield	A	4.6	A	4.2	A	5.1	A	4.5	A	8.5	A	6.4	A	9.3	A	6.9
c. WB LT	Yield	A	3.7	A	4.8	A	3.9	A	5.2	A	5.1	A	7.2	A	5.3	A	7.7
d. WB TR	Yield	A	3.5	A	4.6	A	3.7	A	5.0	A	5.0	A	6.9	A	5.2	A	7.5
e. NB LT	Yield	A	4.4	A	4.5	A	4.8	A	4.9	A	7.7	A	7.0	A	8.5	A	7.5
f. NB TR	Yield	A	4.1	A	4.3	A	4.5	A	4.6	A	7.1	A	6.6	A	7.7	A	7.1
g. SB LT	Yield	A	4.4	A	4.5	A	4.7	A	5.0	A	6.9	A	7.1	A	7.4	A	7.7
h. SB TR	Yield	A	4.3	A	4.4	A	4.6	A	4.8	A	6.6	A	6.6	A	7.1	A	7.2
i. INTERSECTION		**A**	**4.3**	**A**	**4.5**	**A**	**4.6**	**A**	**4.8**	**A**	**7.0**	**A**	**6.8**	**A**	**7.6**	**A**	**7.3**
6." Plum Creek Pkwy. & Auburn Dr.	**TWSC**																
a. EB LT		A	7.6	A	8.2	A	7.8	A	8.4	-	-	-	-	-	-	-	-
b. EB L		-	-	-	-	-	-	-	-	A	8.5	A	9.5	A	8.7	A	9.8
c. SB LR	Stop	B	13	C	15.5	C	15.4	C	18.8	D	28.3	E	35.4	D	34.6	E	46.6
d. INTERSECTION		**A**	**2.5**	**A**	**1.9**	**A**	**2.4**	**A**	**2.0**	**A**	**3.1**	**A**	**2.9**	**A**	**3.5**	**A**	**3.6**

TABLE 7 (CONTINUED)
2027 (BUILD-OUT) & 2050 (LONG-TERM) BACKGROUND & TOTAL TRAFFIC OPERATIONAL ANALYSIS COMPARISON

INTERSECTION	CONTROL	2027 (BUILD-OUT)								2050 (LONG-TERM)							
		BACKGROUND				TOTAL				BACKGROUND				TOTAL			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
7." Plum Creek Pkwy. & I-25 SB Ramps	**Signal**																
a. EB TR		D	40.5	D	42.7	D	43.0	D	37.3	-	-	-	-	-	-	-	-
b. EB T		-	-	-	-	-	-	-	-	C	30.3	D	51.1	C	29.7	D	51.2
c. EB R (Free)		-	-	-	-	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0
d. WB L (Prot+Perm)		D	42.9	D	40.4	D	39.2	D	47.3	C	32.1	D	43.7	C	25.3	D	53.7
e. WB T		B	19.3	B	14.0	B	15.1	B	11.0	B	17.9	B	14.4	B	17.0	B	12.4
f. NB L (Prot)		D	54.1	D	54.1	D	54.1	D	54.1	-	-	-	-	-	-	-	-
g. NB R		A	4.3	A	7.7	A	5.3	A	8.5	-	-	-	-	-	-	-	-
h. SB L (Prot) (Dual)		A	6.3	B	10.1	A	8.3	B	12.3	C	20.1	D	40.0	C	21.5	D	37.3
i. SB LTR		A	9.3	B	14.1	B	12.2	B	17.7	-	-	-	-	-	-	-	-
j. SB LT		-	-	-	-	-	-	-	-	C	27.2	C	33.4	C	29.5	D	36.9
k. SB R (Free)		-	-	-	-	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0
l. INTERSECTION		**C**	**22.9**	**C**	**21.0**	**C**	**24.2**	**C**	**22.3**	**C**	**24.6**	**D**	**36.0**	**C**	**23.9**	**D**	**37.4**
8." Plum Creek Pkwy. & I-25 NB Ramps	**Signal**																
a. EB L (Prot+Perm)		D	42.3	D	36.7	D	50.1	D	53.7	-	-	-	-	-	-	-	-
b. EB L (Prot+Perm) (Dual)		-	-	-	-	-	-	-	-	D	37.3	D	42.6	D	50.4	D	49.5
c. EB T		A	5.3	A	6.1	A	3.8	A	4.1	A	6.7	A	6.9	A	5.8	A	6.0
d. WB TR		D	40.8	C	33.7	D	47.7	C	34.6	C	33.5	F	59.7	D	48.8	F	74.0
e. WB R		C	31.7	D	38.9	D	39.9	D	44.3	D	42.6	C	27.9	D	48.1	C	27.9
f. NB L (Prot)		C	28.8	C	29.0	C	33.9	D	35.1	D	43.9	D	42.4	D	52.3	D	52.0
g. NB LTR		C	28.8	C	29.0	C	34.0	D	35.3	D	43.9	D	42.4	D	52.3	D	52.0
h. NB R		C	30.0	C	30.1	D	36.3	D	38.0	D	40.7	D	40.8	D	44.3	D	44.6
i. INTERSECTION		**C**	**27.4**	**C**	**24.4**	**C**	**32.4**	**C**	**26.9**	**C**	**30.2**	**C**	**28.6**	**D**	**37.0**	**C**	**32.8**
9." Plum Creek Pkwy. & S. Wilcox St.	**Signal**																
a. EB L (Prot+Perm)		C	34.1	D	40.1	C	33.3	D	40.6	D	46.5	D	46.9	D	43.6	D	50.5
b. EB T		C	24.1	D	35.7	C	23.7	D	35.6	C	31.9	D	42.2	C	21.2	D	39.6
c. EB R (Free)		A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
d. WB L (Prot+Perm)		C	21.8	C	27.2	C	21.5	C	27.3	B	19.5	D	38.3	B	19.2	D	41.7
e. WB T		D	38.4	D	40.1	D	38.9	D	42.4	-	-	-	-	-	-	-	-
f. WB R		C	25.4	C	26.4	C	25.0	C	26.4	-	-	-	-	-	-	-	-
g. WB TR		-	-	-	-	-	-	-	-	D	37.9	D	42.3	D	37.6	D	42.4
h. NB L (Prot+Perm) (Dual)		C	23.0	C	25.4	C	24.0	C	26.7	D	38.5	D	48.4	D	38.8	D	54.1
i. NB T		C	24.1	C	31.7	C	24.7	C	32.3	D	35.1	D	39.8	D	36.0	D	40.2
j. NB R		C	22.8	C	29.6	C	23.4	C	30.1	-	-	-	-	-	-	-	-
k. NB R (Perm+ov)		-	-	-	-	-	-	-	-	C	28.9	C	31.8	C	29.6	C	32.5
l. SB L (Prot+Perm)		C	21.4	C	24.7	C	21.9	C	25.0	C	31.9	D	51.7	D	35.0	D	52.5
m. SB T		C	24.7	C	31.5	C	25.3	C	32.0	D	37.7	D	52.7	D	41.9	D	53.4
n. SB R		C	27.0	D	41.9	C	28.0	D	44.4	-	-	-	-	-	-	-	-
o. SB R (Perm+ov)		-	-	-	-	-	-	-	-	C	29.2	D	43.8	C	33.0	D	45.3
p. INTERSECTION		**C**	**29.6**	**C**	**34.7**	**C**	**29.8**	**D**	**35.7**	**C**	**28.0**	**D**	**43.3**	**C**	**28.0**	**D**	**43.8**
10.^ Prairie Hawk Dr./West Site Access	**Roundabout**																
a. EB LTR	Yield	-	-	-	-	-	-	-	-	A	4.0	A	3.5	A	5.7	A	5.3
b. WB LTR	Yield	-	-	-	-	-	-	-	-	A	3.3	A	3.3	A	6.3	A	7.3
c. NB LT	Yield	-	-	-	-	-	-	-	-	A	3.6	A	3.6	A	4.6	A	4.6
d. NB TR	Yield	-	-	-	-	-	-	-	-	A	3.5	A	3.5	A	4.4	A	4.5
e. SB LT	Yield	-	-	-	-	-	-	-	-	A	3.4	A	3.4	A	4.7	A	5.3
f. SB TR	Yield	-	-	-	-	-	-	-	-	A	3.2	A	3.2	A	4.5	A	4.9
g. INTERSECTION		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**A**	**3.6**	**A**	**3.5**	**A**	**5.2**	**A**	**5.7**
11.^ Plum Creek Pkwy. & Prairie Hawk Dr./ Dawson Trails Blvd.	**Signal**																
a. EB L (Prot+Perm)		-	-	-	-	C	27.0	C	24.9	C	25.2	C	24.0	C	33.4	C	25.2
b. EB TR		-	-	-	-	C	28.5	C	24.2	-	-	-	-	-	-	-	-
c. EB T		-	-	-	-	-	-	-	-	C	33.6	D	39.7	C	30.8	D	38.5
d. EB R		-	-	-	-	-	-	-	-	C	26.3	C	26.8	C	24.7	C	26.8
e. WB LT		-	-	-	-	D	37.6	D	35.8	-	-	-	-	-	-	-	-
f. WB L (Prot+Perm) (Dual)		-	-	-	-	-	-	-	-	C	23.9	C	24.7	C	23.2	C	25.9
g. WB T		-	-	-	-	-	-	-	-	C	33.4	C	29.5	C	33.2	C	33.8
h. WB R		-	-	-	-	C	34.8	C	30.1	-	-	-	-	-	-	-	-
i. WB R (Free)		-	-	-	-	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0
j. NB L (Perm)		-	-	-	-	A	0.0	A	0.0	-	-	-	-	-	-	-	-
k. NB L (Prot+Perm)		-	-	-	-	-	-	-	-	B	14.4	B	18.3	B	15.7	B	14.8
l. NB TR		-	-	-	-	B	18.4	A	9.5	-	-	-	-	-	-	-	-
m. NB T		-	-	-	-	-	-	-	-	C	25.3	C	26.2	C	27.2	C	26.6
n. NB R (Free)		-	-	-	-	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0
o. SB L (Perm)		-	-	-	-	C	23.0	B	12.2	-	-	-	-	-	-	-	-
p. SB L (Prot+Perm) (Dual)		-	-	-	-	-	-	-	-	B	14.8	B	14.9	B	17.6	B	17.6
q. SB TR		-	-	-	-	B	19.5	B	10.5	-	-	-	-	-	-	-	-
r. SB T		-	-	-	-	-	-	-	-	C	25.4	C	22.3	C	27.0	C	27.0
s. SB R		-	-	-	-	-	-	-	-	C	27.9	C	24.6	C	31.9	C	34.1
t. INTERSECTION		**-**	-	**-**	-	**C**	**30.3**	**C**	**25.4**	**C**	**27.9**	**C**	**28.5**	**C**	**27.6**	**C**	**29.3**

TABLE 7 (CONTINUED)
2027 (BUILD-OUT) & 2050 (LONG-TERM) BACKGROUND & TOTAL TRAFFIC OPERATIONAL ANALYSIS COMPARISON

INTERSECTION	CONTROL	2027 (BUILD-OUT)								2050 (LONG-TERM)							
		BACKGROUND				TOTAL				BACKGROUND				TOTAL			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
12.^ Prairie Hawk Dr./East/West Collector	**TWSC**																
a. WB R	Stop	-	-	-	-	-	-	-	-	B	12.0	B	10.0	B	13.5	B	10.9
b. SB L		-	-	-	-	-	-	-	-	A	9.1	A	8.3	A	9.8	A	9.0
c. INTERSECTION		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**A**	**1.3**	**A**	**0.7**	**A**	**1.1**	**A**	**0.5**
13.^ Prairie Hawk Dr. & NE Site Acccess	**TWSC**																
a. EB L	Stop	-	-	-	-	B	10.5	B	10.8	-	-	-	-	B	10.4	B	10.5
b. EB R	Stop	-	-	-	-	A	0.0	A	0.0	-	-	-	-	A	0.0	A	0.0
c. NB L		-	-	-	-	A	0.0	A	0.0	-	-	-	-	A	0.0	A	0.0
d. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**2.3**	**A**	**2.2**	**-**	**-**	**-**	**-**	**A**	**2.7**	**A**	**2.2**
14.^ Prairie Hawk Dr. & SE Site Acccess	**TWSC**																
a. EB L	Stop	-	-	-	-	A	9.2	A	9.4	-	-	-	-	B	13.2	B	13.1
b. EB R	Stop	-	-	-	-	A	0.0	A	0.0	-	-	-	-	A	0.0	A	0.0
c. NB L		-	-	-	-	A	0.0	A	0.0	-	-	-	-	A	7.7	A	7.7
d. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**3.6**	**A**	**4.5**	**-**	**-**	**-**	**-**	**A**	**6.5**	**A**	**5.0**
15.^ West Site Access & Street "D"	**TWSC**																
a. EB L	Stop	-	-	-	-	B	12.4	C	16.4	-	-	-	-	B	13.7	C	22.0
b. EB R	Stop	-	-	-	-	A	9.8	A	9.6	-	-	-	-	A	9.5	A	9.2
c. NB LT		-	-	-	-	A	7.7	A	7.8	-	-	-	-	A	7.8	A	8.0
d. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**8.1**	**A**	**8.8**	**-**	**-**	**-**	**-**	**A**	**7.6**	**A**	**9.5**
16.^ Street "B"/NE Site Access & Street "A"	**TWSC**																
a. EB LTR		-	-	-	-	A	0.0	A	0.0	-	-	-	-	A	7.2	A	7.3
b. WB LTR		-	-	-	-	A	7.4	A	7.3	-	-	-	-	A	7.3	A	7.3
c. NB LTR	Stop	-	-	-	-	A	8.6	A	8.6	-	-	-	-	A	8.5	A	8.5
d. SB LTR	Stop	-	-	-	-	B	10.0	A	9.9	-	-	-	-	A	8.8	A	8.8
e. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**5.7**	**A**	**5.7**	**-**	**-**	**-**	**-**	**A**	**6.8**	**A**	**6.4**
17.^ Street "C"/SE Site Access & Street "A"	**TWSC**																
a. EB L		-	-	-	-	A	7.6	A	7.5	-	-	-	-	A	7.7	A	7.6
b. WB L		-	-	-	-	A	7.6	A	7.6	-	-	-	-	A	7.6	A	7.6
c. NB LTR	Stop	-	-	-	-	C	15.7	C	18.6	-	-	-	-	C	16.1	C	19.3
d. SB LTR	Stop	-	-	-	-	B	11.9	B	12.0	-	-	-	-	B	10.5	B	10.6
e. INTERSECTION		**-**	**-**	**-**	**-**	**A**	**7.2**	**A**	**9.6**	**-**	**-**	**-**	**-**	**A**	**6.6**	**A**	**9.1**

*** = intersection to undergo multiple modifications. See text for details.**
" = intersection to be modified by 2050
^ = new proposed intersection

B. Queuing Analysis

Queue lengths and associated storage requirements for through and auxiliary lanes (turn bays) at the study area intersections were computed utilizing the *Synchro 12* 95%tile reported queues for the 2027 (build-out) and 2050 (long-term) analysis horizons total traffic scenarios. Queue length calculations are based on a 25-foot vehicle length and reported as the total cumulative computed queue length for all traffic lanes in the lane group. Table 8 provides a summary of this analysis and comparison to the actual vehicle storage lengths provided for each of the existing study area intersections.

As shown in Table 8, the following additional queue related issues, beyond those identified in the background traffic scenarios, are projected to be experienced at the study area intersections, based on the reported queues, with the addition of the site generated traffic from the proposed Brickyard development in the 2027 (build-out) and 2050 (long-term) analysis horizons total traffic scenarios:

- **(7) Plum Creek Pkwy./I-25 SB Ramps**
  - 2050 (Long-Term) Analysis Horizon:
    - The WB through lane group queue is projected to exceed its capacity and spill back into the upstream intersection during the p.m. peak hour. The ability to increase the WB through lane group storage is limited due to the location of the I-25 NB Ramps intersection. Optimizing the traffic signal timings for actual traffic conditions will be the most effective means to mitigate this issue.

TABLE 8
2027 (BUILD-OUT) & 2050 (LONG-TERM) TOTAL TRAFFIC
SUMMARY OF QUEUING ANALYSIS

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING/PROPOSED STORAGE (FT)	2027 TOTAL TRAFFIC QUEUE LENGTH (FT) 95TH%		2050 TOTAL TRAFFIC QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK	AM PEAK	PM PEAK
1. Prairie Hawk Dr./E. Wolfensberger Rd.					
a. EB L (1)	325	61	48	62	48
b. EB TR (2)	1100	333	314	-	-
c. EB T (2)	1100	-	-	367	353
d. EB R (1)	150	-	-	18	20
e. WB L (1)	225	146	137	201	210
f. WB T (2)	1850	154	306	163	334
g. WB R (1)	100	49	58	47	56
h. NB L (1)	250	19	38	25	54
i. NB T (1/2)	250/500	82	123	143	194
j. NB R (1)	150	40	61	91	125
k. SB L (1/2)	350/700	133	127	178	176
l. SB T (1)	875	100	88	-	-
m. SB R (1)	350	15	21	-	-
n. SB TR (2)	1225	-	-	190	167
2. Prairie Hawk Dr./Atchison Way (TWSC)					
a. EB LR (1)	700	8	38	-	-
b. NB LT (1)	425	0	0	-	-
2.A. Prairie Hawk Dr./Atchison Way (Roundabout)					
a. EB LR (1)	700	-	-	25	50
b. NB T (1)	425	-	-	25	50
c. SB T (1)	125	-	-	25	25
d. SB R (1)	150	-	-	25	25
3. Prairie Hawk Dr./Topeka Way					
a. EB LTR (1)	200	8	5	3	5
b. WB LTR (1)	-	0	0	0	0
c. NB L (1)	100	0	33	30	30
d. SB L (1)	100	0	40	33	43
4. Atchison Way/Topeka Way					
a. EB LT (1)	150	0	0	-	-
b. EB L (1)	150	-	-	0	3
c. EB TR (1)	-	-	-	3	8
d. WB L (1)	150	-	-	0	0
e. WB TR (1)	-	-	-	5	5
f. NB L (1)	150	-	-	0	0
g. SB LR (1)	-	0	0	-	-
h. SB L (1)	150	-	-	0	0
5. Plum Creek Pkwy./Coachline Rd./W. Wolfensberger Rd.					
a. EB LT (1)	550	25	0	50	25
b. EB TR (1)	550	25	0	50	25
c. WB LT (1)	250	0	25	25	50
d. WB TR (1)	350	0	25	25	50
e. NB LT (1)	500	0	25	25	25
f. NB TR (1)	150	0	25	25	25
g. SB LT (1)	200	25	25	25	25
h. SB TR (1)	2450	25	25	25	25
6. Plum Creek Pkwy./Auburn Dr.					
a. EB LT (1)	800	0	0	-	-
b. EB L (1)	150	-	-	0	0
c. SB LR (1)	275	25	28	83	90
7. Plum Creek Pkwy./I-25 SB Ramps					
a. EB TR (3)	2700	328	325	-	-
b. EB T (3)	2700	-	-	871	1469
c. EB R (1)	-	-	-	0	0
d. WB L (1)	675	135	235	210	345
e. WB T (2)	350	251	315	467	494
f. NB L (1)	375	31	31	-	-
g. NB R (1)	750	55	57	-	-
h. SB L (2)	3300	331	530	315	1096
i. SB LTR (1)	225	167	417	-	-
j. SB LT (1)	225	-	-	203	563
k. SB R (1)	-	-	-	0	0

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING/PROPOSED STORAGE (FT)	2027 TOTAL TRAFFIC QUEUE LENGTH (FT) 95TH%		2050 TOTAL TRAFFIC QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK	AM PEAK	PM PEAK
8. Plum Creek Pkwy./I-25 NB Ramps					
a. EB L (1/2)	650/800	244	245	617	497
b. EB T (3)	480	168	291	377	573
c. WB TR (1/2)	625/820	619	737	593	1341
d. WB R (1)	400	201	179	331	275
e. NB L (1)	400	86	91	284	249
f. NB LTR (1)	1700	54	47	309	256
g. NB R (1)	175	37	40	95	91
9. Plum Creek Pkwy./S. Wilcox St.					
a. EB L (1)	325	182	270	349	471
b. EB T (2)	1250	445	1034	334	1634
c. EB R (1)	600	0	0	0	0
d. WB L (1)	225	32	44	33	87
e. WB T (2)	880	743	752	-	-
f. WB R (1)	420	39	28	-	-
g. WB TR (3)	1300	-	-	1133	1212
h. NB L (2)	450	272	338	534	611
i. NB T (1)	250	110	147	154	195
j. NB R (1)	250	15	32	15	23
k. SB L (1)	200	57	137	85	248
l. SB T (1)	200	78	112	121	172
m. SB R (1)	200	48	65	125	182
10. Prairie Hawk Dr./West Site Access					
a. EB LTR (1)	-	-	-	25	0
b. WB LTR (1)	-	-	-	25	50
c. NB LT (1)	-	-	-	25	25
d. NB TR (1)	-	-	-	25	25
e. SB LT (1)	-	-	-	0	0
f. SB TR (1)	-	-	-	0	0
11. Plum Creek Pkwy./Prairie Hawk Dr./Dawson Trails Blvd.					
a. EB L (1)	150/200	57	47	169	107
b. EB TR (1)	-	227	197	-	-
c. EB T (2)	-	-	-	424	534
d. EB R (1)	250	-	-	50	22
e. WB LT (1)	-	86	335	-	-
f. WB L (2)	600	-	-	105	175
g. WB T (2)	-	-	-	444	488
h. WB R (1)	100/-	22	32	0	0
i. NB L (1)	-	0	0	-	-
j. NB TR (1)	-	6	11	-	-
k. NB T (2)	-	-	-	106	110
l. NB R (1)	150	-	-	0	0
m. SB L (1/2)	250/500	129	158	299	293
n. SB TR (1)	-	23	34	-	-
o. SB T (2)	-	-	-	96	136
p. SB R (1)	100	-	-	36	55
12. Prairie Hawk Dr./East/West Collector					
a. WB R (1)	-	-	-	23	8
b. SB L (1)	150	-	-	25	25
13. Prairie Hawk Dr./NE Site Access					
a. EB L (1)	-	10	10	5	5
b. EB R (1)	100	0	0	0	0
c. NB L (1)	100	0	0	0	0
14. Prairie Hawk Dr./SE Site Access					
a. EB L (1)	-	8	10	8	13
b. EB R (1)	100	0	0	0	0
c. NB L (1)	100	0	0	8	8
15. West Site Access/Street "D"					
a. EB L (1)	-	3	13	8	28
b. EB R (1)	100	30	25	20	18
c. NB LT (1)	-	10	18	13	23
16. Street "B"/NE Site Access/Street "A"					
a. EB LTR (1)	-	0	0	0	0
b. WB LTR (1)	-	3	3	3	3
c. NB LTR (1)	-	3	5	3	3
d. SB LTR (1)	-	0	0	3	0
17. Street "C"/SE Site Access/Street "A"					
a. EB L (1)	100	8	8	5	5
b. WB L (1)	100	3	3	5	5
c. NB LTR (1)	-	23	53	23	55
d. SB LTR (1)	-	20	28	15	25

Legend

- Turn lane queue spills into thru lane
- Queue spills back into upstream intersection
- Through lane queue blocks LT lane
- Through lane queue blocks RT lane
- Through lane queue blocks LT & RT lanes

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C. Multimodal Assessment

The proposed Brickyard development has the potential to incorporate various multimodal and travel demand management (TDM) strategies and amenities that encourage and promote multimodal travel options. Incorporating multimodal and TDM strategies and amenities can help offset the impacts of the traffic generated by the development, as well enhance the overall safety, mobility, and environment of the surrounding transportation system. Some of the options may include:

- Enhanced Wayfinding – Enhanced route/guide signing to existing/proposed pedestrian, bicycle, transit, commercial/retail and recreational facilities.
    - The abutting Industrial Tributary Trail will connect the proposed development to the MAC and to downtown Castle Rock
- Resident Communications System – On-site resident communication system that provide residents with a conduit to share information on a variety of topics including ridesharing, car sharing, and bike sharing. The format of the system may incorporate on-site kiosks, newsletters, web site, etc.
- Electric Vehicle Charging Stations – On-site electric vehicle charging stations.
- Bicycle Amenities – On-site bicycle amenities such as long-term storage, bike racks, repair/maintenance shop, and wash areas.
- Bike, Scooter, Car Share Station(s) – Bike, scooter, and/or car sharing station(s) adjacent to or near the proposed development to encourage multimodal travel among residents.
- Improving existing and/or adding ADA compliant sidewalks and accessible routes.
- Adding crosswalk markings at strategic locations.
- Adding pavement markings and signage for on-street bicycle lanes.
- Adding a crosswalk to Prairie Hawk Dr. at one of the site accesses with RRFB's to enhance pedestrian safety.

As the development process moves forward, the Confluence development team looks forward to working collaboratively with Town staff to develop a plan that provides appropriate and beneficial on-site amenities, as well as off-site enhancements to encourage and promote multimodal options in the travel decisions made by the residents of the proposed Brickyard development.

D. Summary of Operational Analysis & Recommended Improvements

The following is a summary of analysis and recommendations for improvements to the existing and proposed study area intersections and roadways based on the proposed Brickyard development:

Study Area Roadways:

- **Prairie Hawk Dr. (Realignment)** - The following describes the geometric or operational improvements recommended for the Prairie Hawk Dr. (Realignment):
    - 2027 (Build-Out) Analysis Horizon – A new two-lane roadway segment of Prairie Hawk Dr. is anticipated to be constructed from the west site access intersection to extend west from the property boundary, then curve south at the future 2-lane roundabout location to intersect with Plum Creek Pkwy. at the Dawson Trails Blvd. intersection.

- 2050 (Long-Term) Analysis Horizon – By 2050, Prairie Hawk Dr. is anticipated to be realigned and modified, per the CRTMP, from Wolfensberger Rd. south along its existing alignment and the existing Atchison Way alignment to the intersection of Topeka Way. From Wolfensberger Rd. to Atchison Way, the roadway section will be a 4-lane major arterial. From Atchison Way to Topeka Way, the roadway section will be a 2-lane minor arterial. From Topeka Way, the alignment will continue south through the Miller's Landing property to the proposed roundabout intersection with the proposed West Site Access Roadway for The Brickyard development. From Topeka Way to Plum Creek Pkwy. the roadway section will be a 4-lane arterial.

- **Prairie Hawk Dr. (Existing Alignment)** – The following describes the geometric or operational modifications recommended for the existing Prairie Hawk Dr. alignment:
  - 2027 (Build-Out) Analysis Horizon – The existing alignment of Prairie Hawk Dr. adjacent to the frontage of the proposed Brickyard development shall be modified to a two-lane residential collector roadway with on-street bicycle lanes and on-street angled parking adjacent to the project site. From the north end of the project site to E. Wolfensberger Rd., Prairie Hawk Dr. will be repaved and restriped, with new curb and gutter installed along both sides of the roadway.
  - 2050 (Long-Term) Analysis Horizon – There are no other geometric or operational modifications or improvements anticipated through the 2050 (long-term) analysis horizon.
- **Plum Creek Pkwy.** - There are no geometric or operational modifications recommended for Plum Creek Pkwy. within the study area as a result of the proposed Brickyard development. It is anticipated that the following improvements will be implemented on Plum Creek Pkwy. within the study area:
  - 2027 (Build-Out) Analysis Horizon – It is not anticipated that any operational or capacity improvements will be made to Plum Creek Pkwy. within the study area through the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that Plum Creek Pkwy. will be improved to a 4-lane major arterial roadway from Wolfensberger Rd. to I-25 based on the CRTMP. It is also anticipated that a continuous westbound acceleration/deceleration lane from the I-25 SB Ramp intersection to the new Prairie Hawk roadway extension will be constructed. This lane will terminate into a free right turn lane at Prairie Hawk Dr. There will also be a continuous 3rd eastbound travel lane from the Prairie Hawk Dr. intersection to Wilcox St.
- **Wolfensberger Rd.** – There are no geometric or operational modifications recommended for Wolfensberger Rd. within the study area as a result of the proposed Brickyard development. It is anticipated that the following regional improvements will be implemented on Wolfensberger Rd. within the study area:
  - 2027 (Build-Out) Analysis Horizon – It is not anticipated that any operational or capacity improvements will be made to Wolfensberger Rd. within the study area through the 2027 (build-out) analysis horizon.
  - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that Wolfensberger Rd. will be improved, within the study area, to a 4-lane major arterial roadway from Plum Creek Pkwy. to Prairie Hawk Dr. based on the CRTMP.

- **Dawson Trails Blvd. -** It is anticipated that the following regional improvements will be implemented on Dawson Trails Blvd. within the study area:
    - 2027 (Build-Out) Analysis Horizon – By the 2027 (build-out) analysis horizon, it is assumed that with the construction of the Crystal Valley Interchange, Dawson Trails Blvd. will be constructed as an access roadway south of Plum Creek Pkwy.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that Dawson Trails Blvd. will be fully constructed and in place as a 4-lane major arterial roadway extending south from the Plum Creek Pkwy./Prairie Hawk Dr. intersection based on the CRTMP.
- **East/West Collector -** It is anticipated that the following improvements will be implemented on the East/West Collector within the study area:
    - 2027 (Build-Out) Analysis Horizon – It is assumed that the East/West Collector will not be constructed by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the East/West Collector will be constructed as a 2-lane collector extending westerly from the existing Prairie Hawk Dr. alignment approximately along the southern boundary of the proposed Brickyard development to intersect with the anticipated new Prairie Hawk Dr. alignment in the Miller's Landing property.

Study Area Intersections:

- **(1) Wolfensberger Rd./Prairie Hawk Dr.** – The following summarizes the geometric and operational conditions anticipated for the Wolfensberger Rd./Prairie Hawk Dr. intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site generated traffic.
    - 2027 (Build-Out) Analysis Horizon – By the 2027 (build-out) analysis horizon, it is anticipated that the south leg of the intersection will be modified to include a right turn lane with approximately 150 feet of storage. The south leg of the intersection will then have one left turn lane with a minimum of 250 feet of storage, one through lane, and one right turn lane with approximately 150 feet of storage on the northbound approach, and one southbound departure lane. Additionally, the westbound left turn lane storage will be increased from 150 feet to 225 feet in order to accommodate the projected queue as a result of the addition of the Brickyard development site generated traffic. No additional intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be modified as follows in order to accommodate the anticipated Prairie Hawk Dr. roadway improvements. The intersection will remain under actuated/coordinated traffic signal control with protected/permitted left turn phasing on all four approaches. The east leg of the intersection will have one left turn lane with approximately 225 feet of storage, two through lanes, and one right turn lane with approximately 100 feet of storage on the westbound approach, and two eastbound departure lanes. The west leg of the intersection will have one left turn lane with approximately 325 feet of storage, two through lanes, and one right turn lane with a minimum of 150 feet of storage on the eastbound approach, and two westbound departure lanes. The north leg of the intersection will have dual left turn

lanes with a total of approximately 700 feet of storage, one through lane and one shared through/right turn lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection will have one left turn lane with a minimum of 250 feet of storage, two through lanes, and one right turn lane with approximately 150 feet of storage on the northbound approach, and two southbound departure lanes.

Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS "D" or better) to a poor or failing level of service (LOS "E" or "F") with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenario. Based on the queuing analysis, there are no additional projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS "D" or better) to a poor or failing level of service (LOS "E" or "F") with the addition of the site generated traffic. Based on the queuing analysis, the available storage for the WB left turn queue will need to be increased from 150 feet to a minimum of 225 feet in order to accommodate the projected queue as a result of the addition of the Brickyard development site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(2) Prairie Hawk Dr./Atchison Way** – The following summarizes the geometric and operational conditions anticipated for the Prairie Hawk Dr./Atchison Way intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site generated traffic.
    - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be reconstructed as a 1-lane roundabout. The intersection will have yield control on the eastbound, northbound, and southbound approaches. The west leg of the intersection will have one shared left turn/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one through lane and one free-flow bypass right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one bypass through lane on the northbound approach, and one southbound departure lane. There are no other geometric or operational modifications or improvements anticipated through the 2050 (long-term) analysis horizon.

  Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall will not experience a decline from an acceptable level of service (LOS "D" or better) to a poor or failing level of service (LOS "E" or "F") with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no additional projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

  By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service

(LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic. There are no additional projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(3) Prairie Hawk Dr./Topeka Way** – The following summarizes the geometric and operational conditions anticipated for the Prairie Hawk Dr./Topeka Way intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site generated traffic.
    - 2027 (Build-Out) Analysis Horizon – By the 2027 (build-out) analysis horizon, it is anticipated that the intersection will be restriped to include left turn lanes with 100’ feet of storage on the northbound and southbound approaches. No other intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2050 (long-term) analysis horizon.

  Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

  By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic. There are no projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(4) Atchison Way/Topeka Way** – The following summarizes the geometric and operational conditions anticipated for the Atchison Way/Topeka Way intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site generated traffic.
    - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be modified as follows in order to accommodate the anticipated Prairie Hawk Dr. roadway realignment and improvements. The intersection will have two-way stop control on the eastbound and westbound approaches. The east leg of the intersection will have one left turn lane with a minimum of 150 feet of storage and one shared through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one left turn lane with a minimum of 150 feet of storage and one shared through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one left turn lane with a minimum of 150 feet of storage, one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the

intersection will have one left turn lane and one shared through/right turn lane on the northbound approach, and two southbound departure lanes.

Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic. There are no projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(5) Wolfensberger Rd./Plum Creek Pkwy./Coachline Rd.** – The following summarizes the geometric and operational conditions anticipated for the Wolfensberger Rd./Plum Creek Pkwy./Coachline Rd. intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site generated traffic.
    - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2050 (long-term) analysis horizon.

  Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

  By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic. There are no projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(6) Plum Creek Pkwy./Auburn Dr.** – The following summarizes the geometric and operational conditions anticipated for the Plum Creek Pkwy./Auburn Dr. intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site generated traffic.
    - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be modified as follows, in order to accommodate the anticipated Plum Creek Pkwy. roadway improvements. The intersection will have

stop control on the southbound approach. The east leg of the intersection will have one right turn lane and two through lanes on the westbound approach, and two eastbound departure lanes. The west leg of the intersection will have one left turn lane with a minimum of 150 feet of storage and two through lanes on the eastbound approach, and two westbound departure lanes. The north leg of the intersection will have one shared left turn/right turn lane on the southbound approach, and one northbound departure lane.

Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no additional projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic. However, it is projected that the SB shared left turn/right turn lane group will experience a poor level of service (LOS “E”) during the p.m. peak hour in both the background and total traffic scenarios. This is a typical situation when a side street intersects a busy arterial roadway under stop-controlled conditions. There are no additional projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenario.

- **(7) Plum Creek Pkwy./I-25 SB Ramps** – The following summarizes the geometric and operational conditions anticipated for the Plum Creek Pkwy./I-25 SB Ramps intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site traffic.
    - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be modified as follows. The intersection will remain under actuated/coordinated signalized control with protected/permitted left turn phasing on the westbound approach. The northbound lanes will be removed at this intersection. The east leg of the intersection will have one left turn lane with approximately 675 feet of storage and two through lanes on the westbound approach, and three eastbound departure lanes. The west leg of the intersection will be modified to have three through lanes and a continuous free flow right turn lane extending back to Dawson Trails Blvd. with a raised channelizing island on the eastbound approach. The north leg will be modified to have dual left turn lanes, one shared left turn/through lane and one free flow right turn lane with a raised channelizing island on the southbound approach. The south leg will be modified to have only one southbound departure lane.

  Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected

queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenario.

By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic. However, the WB through lane group queue is projected to exceed its capacity and spill back into the upstream intersection during the p.m. peak hour. The ability to increase the WB through lane group storage is limited due to the location of the I-25 NB Ramps intersection. Optimizing the traffic signal timings for actual traffic conditions will be the most effective means to mitigate this issue.

- **(8) Plum Creek Pkwy./I-25 NB Ramps** – The following summarizes the geometric and operational conditions anticipated for the Plum Creek Pkwy./I-25 NB Ramps intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site traffic.
    - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon it is anticipated that the intersection will be modified as follows. The intersection will remain a four-legged intersection operating under actuated/coordinated traffic signal control with protected/permitted left turn phasing on the eastbound approach. The east leg of the intersection will be modified to have one dedicated right turn lane, one shared through/right turn lane, one through lane, and one through lane that will accommodate the queuing needed for the left turn lane at the adjacent SB ramp intersection. The west leg of the intersection will be modified to have dual left turn lanes with a total of approximately 800 feet of storage and three through lanes on the eastbound approach, and two westbound departure lanes. The north leg will be modified to have an additional northbound departure lane. The south leg will remain unchanged.

  Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no additional projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

  By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic. However, it is projected that the westbound shared through/ right turn lane group will experience a failing level of service (LOS “F”) during both the background and total traffic scenarios in the PM peak hour. Optimizing the traffic signal timing for actual traffic conditions will be the most effective means to mitigate this issue. There are no additional projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(9) Plum Creek Pkwy./Wilcox St.** – The following summarizes the geometric and operational conditions anticipated for the Plum Creek Pkwy./Wilcox St. intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site traffic.
    - 2027 (Build-Out) Analysis Horizon – No major intersection modifications or improvements are anticipated by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon, it is anticipated that the westbound right turn lane will be converted into a shared through/right turn lane. It is also recommended that right turn overlap be implemented for the northbound and southbound right turn movements. These modifications would help alleviate queueing issues and mitigate the potential operational issues for these movements in the 2050 (long-term) analysis horizon.

  Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS "D" or better) to a poor or failing level of service (LOS "E" or "F") with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no additional projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

  By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS "D" or better) to a poor or failing level of service (LOS "E" or "F") with the addition of the site generated traffic. Based on the queuing analysis, there are no additional projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(10) Prairie Hawk Dr./West Site Access** – The following summarizes the geometric and operational conditions anticipated for the Prairie Hawk Dr./West Site Access Roadway Intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site traffic.
    - 2027 (Build-Out) Analysis Horizon – This intersection is not anticipated to be constructed by the 2027 (build-out) analysis horizon. In its place will be the new two-lane roadway segment of Prairie Hawk Dr. constructed from the west site access intersection to extend west from the property boundary, then curve south at the future 2-lane roundabout location to then intersect with Plum Creek Pkwy. at the Dawson Trails Blvd. intersection.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (long-term) analysis horizon, it is anticipated that the intersection will be constructed as follows. The intersection is assumed to be a four-legged two-lane roundabout under yield control on all four approaches. The east and west legs of the roundabout will have one approach/entry lane and one departure/exit lane. The north and south legs of the roundabout will have two approach/entry lanes and two departure/exit lanes. No additional modifications or improvements are anticipated by the 2050 (long-term) analysis horizon.

  By the 2050 (long-term) analysis horizon it is projected that the roundabout, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2050 (long-term) analysis horizon

total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(11) Plum Creek Pkwy./Prairie Hawk Dr./Dawson Trails Blvd.** – The following summarizes the geometric and operational conditions anticipated for the Plum Creek Pkwy./Prairie Hawk Dr./Dawson Trails Blvd. intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site traffic.
    - 2027 (Build-Out) Analysis Horizon – The intersection is anticipated to be constructed by the 2027 (build-out) analysis horizon to include the following. The intersection will operate under traffic signal control with permitted left turn phasing on the northbound and southbound approaches and protected plus permitted phasing on the eastbound approach. The east leg of the intersection will have one shared left turn/through lane and one right turn lane with 100' feet of storage on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one left turn lane with 150 feet of storage and one shared through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one left turn lane with 150' feet of storage and one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one left turn lane with a minimum of 100 feet of storage and one shared through/right turn lane on the northbound approach, and one southbound departure lane. The south leg of the intersection will be constructed by others as Dawson Trails Blvd. to provide access from the Crystal Valley interchange.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (Long-Term) Analysis Horizon it is anticipated the following additional improvements will be in place. The intersection will operate under actuated/coordinated traffic signal control with protected plus permitted left turn phasing on all four approaches. The east leg of the intersection will have two left turn lanes with a minimum total of 600 feet of storage, two through lanes and one continuous free-flow right turn lane extending back to the I-25 SB Ramps with a raised channelizing island on the westbound approach, and two eastbound departure lanes plus a northbound to eastbound right turn auxiliary lane from Dawson Trails Blvd. to the I-25 SB ramp. The west leg of the intersection will have one left turn lane with a minimum of 250 feet of storage, two through lanes and one right turn lane with a minimum of 250 feet of storage on the eastbound approach, and two westbound departure lanes. The north leg of the intersection will have two left turn lanes with a minimum total of 500 feet of storage, two through lanes, and one right turn lane with approximately 100 feet of storage on the southbound approach, and two northbound departure lanes plus a westbound to northbound right turn auxiliary lane from Plum Creek Pkwy. to the East/West Collector roadway. The south leg of the intersection will have one left turn lane with a minimum of 200 feet of storage, two through lanes and one channelized free-flow right turn lane with a minimum of 150 feet of storage on the northbound approach, and two southbound departure lanes.

  Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there

are no projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will not experience a decline from an acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the site generated traffic. Based on the queuing analysis, there are no additional projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(12) Prairie Hawk Dr./East/West Collector** – The following summarizes the geometric and operational conditions anticipated for the Prairie Hawk Dr./East/West Collector intersection. They include both any planned regional improvements, as well as any recommended as a result of the addition of the proposed Brickyard development site traffic.
    - 2027 (Build-Out) Analysis Horizon – This intersection is not anticipated to be constructed by the 2027 (build-out) analysis horizon.
    - 2050 (Long-Term) Analysis Horizon – By the 2050 (Long-Term) analysis horizon it is anticipated that this intersection will be constructed to accommodate the Castle Meadows development. The intersection will be limited to three-quarter movement access. The intersection will be a “T” intersection with stop sign control on the east leg. The east leg of the intersection will have one right turn lane on the westbound approach, and one eastbound departure lane. The north leg of the intersection will have one left turn lane, and two through lanes on the southbound approach, and two northbound departure lanes. The south leg of the intersection will have two through lanes and one channelized continuous free-flow right turn lane extending to Plum Creek Pkwy. on the northbound approach, and two southbound departure lanes.

  Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS “D” or better) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

  By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS “D” or better) with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(13) Prairie Hawk Dr./NE Site Access Dr.** – The following summarizes the geometric and operational conditions anticipated for the Prairie Hawk Dr./NE Access Dr. intersection.
    - 2027 (Build-Out) Analysis Horizon – The intersection will be constructed concurrently with the Brickyard development by the developer to include the following. The intersection will have stop sign control on the eastbound approach. The west leg of the intersection will have one left turn lane and one right turn lane on the eastbound approach and one westbound departure lane. The north leg of the intersection will have one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one left turn

lane with a minimum of 100 feet of storage and one through lane on the northbound approach, and one southbound departure lane.

- 2050 (Long-Term) Analysis Horizon – No additional modifications or improvements are anticipated by the 2050 (long-term) analysis horizon.

Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenario. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(14) Prairie Hawk Dr./SE Access Dr.** – The following summarizes the geometric and operational conditions anticipated for the Prairie Hawk Dr./SE Access Dr. intersection.
  - 2027 (Build-Out) Analysis Horizon – The intersection will be constructed concurrently with the Brickyard development by the developer to include the following. The intersection will have stop sign control on the eastbound approach. The west leg of the intersection will have one left turn lane and one right turn lane on the eastbound approach and one westbound departure lane. The north leg of the intersection will have one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one left turn lane with a minimum of 100 feet of storage and one through lane on the northbound approach, and one southbound departure lane.
  - 2050 (Long-Term) Analysis Horizon – No additional modifications or improvements are anticipated by the 2050 (long-term) analysis horizon.

  Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

  By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenario. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(15) West Site Access Dr./Street "D"** – The following summarizes the geometric and operational conditions anticipated for the West Site Access Dr./Street "D" intersection.
  - 2027 (Build-Out) Analysis Horizon – The intersection will be constructed with the Brickyard development by the developer to include the following. The intersection will have stop sign control on the eastbound approach. The west leg of the intersection

will have one left turn lane and one right turn lane on the eastbound approach and one westbound departure lane. The north leg of the intersection will have one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one shared left turn/through lane on the northbound approach, and one southbound departure lane.

- 2050 (Long-Term) Analysis Horizon – No additional modifications or improvements are anticipated by the 2050 (long-term) analysis horizon.

Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(16) Street "B"/NE Site Access Dr./Street "A"** – The following summarizes the geometric and operational conditions anticipated for the Street "B"/NE Site Access Dr./Street "A" intersection.
  - 2027 (Build-Out) Analysis Horizon – The intersection will be constructed concurrently with the Brickyard development by the developer to include the following. The intersection will have stop sign control on the northbound and southbound approaches. The east leg of the intersection will have one shared left turn/through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one shared left turn/through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one shared left turn /through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one shared left turn/through/right turn lane on the northbound approach, and one southbound departure lane.
  - 2050 (Long-Term) Analysis Horizon – No additional modifications or improvements are anticipated by the 2050 (long-term) analysis horizon.

Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

- **(17) Street "C"/SE Site Access Dr./Street "A"** – The following summarizes the geometric and operational conditions anticipated for the Street "C"/SE Site Access Dr./Street "A" intersection.
    - 2027 (Build-Out) Analysis Horizon – The intersection will be constructed concurrently with the Brickyard development by the developer to include the following. The intersection will have stop sign control on the northbound and southbound approaches. The east leg of the intersection will have one left turn lane and one shared through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one left turn lane and one shared through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one shared left turn/through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one shared left turn/through/right turn lane on the northbound approach, and one southbound departure lane.
    - 2050 (Long-Term) Analysis Horizon – No additional modifications or improvements are anticipated by the 2050 (long-term) analysis horizon.

    Based on these parameters and the forecast total traffic volumes, it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2027 (build-out) analysis horizon total traffic scenarios.

    By the 2050 (long-term) analysis horizon it is projected that the intersection, overall, as well as all lane groups will operate with acceptable levels of service (LOS "D" or better) with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios. Based on the queuing analysis, there are no projected queue related issues associated with the addition of the site generated traffic by the 2050 (long-term) analysis horizon total traffic scenarios.

VII. CONCLUSIONS

Confluence Companies is proposing to redevelop a property containing approximately 31.18 acres of land within the jurisdictional limits of the Town of Castle Rock, Colorado. The subject property is currently developed as the now defunct Acme Brick Company. More specifically, the subject property is bound by industrial properties with access to Topeka Way on the north, Prairie Hawk Dr. and several residential properties on the east, undeveloped land to the south, and the proposed Miller' Landing development to the west which is currently undeveloped. At buildout, the proposed Brickyard development will consist of 43 single-family attached housing units, 54 multi-family (low-rise) housing units, 486 multi-family (mid-rise) housing units, a 125-room hotel, 9,000 square feet of commercial/retail space, 24,000 square feet of high turnover (sit-down) restaurant/food hall space, 59,000 total square feet of office space, and a 145,000 square-foot community recreation center.

Vehicular access for the proposed Brickyard development will be provided via an internal roadway network providing connectivity to the external transportation system at the following locations:

- West Access Roadway– A two-lane roadway extending from the west property boundary to intersect with the proposed extension of the realigned Prairie Hawk Dr. through the

proposed Miller's Landing development via a proposed two-lane roundabout. Prior to the construction of the roundabout, this two-lane roadway will extend west from the property boundary, then south to intersect with Plum Creek Pkwy. at the Dawson Trails Blvd. intersection.

- NE Access Roadway - A full movement access driveway intersecting the existing Prairie Hawk Dr. approximately 620 feet south of the NE property boundary of the development site.
- SE Access Roadway – A full movement access driveway intersecting the existing Prairie Hawk Dr. approximately 650 feet south of the proposed NE Access Roadway.

Based on these parameters, at buildout, the proposed Brickyard development is projected to generate 10,830 daily vehicle trips of which 860 are projected to be generated during the a.m. peak hour and 970 are projected to be generated during the p.m. peak hour.

The purpose of this study is to evaluate the impact of the vehicular trips projected to be generated by the proposed Brickyard development on the study area intersections and roadway system. The study includes 2022 (existing), 2027 (year of anticipated project build-out), and 2050 (long-term) analysis horizons.

Based on the analyses contained herein, recommendations for intersection improvements to accommodate the addition of the proposed Brickyard development traffic were developed, while considering the proposed Miller's Landing development, anticipated Dawson Trails development on the property south of Plum Creek Pkwy., the assumed Castle Meadows development on the property immediately to the south of the proposed Brickyard development, regional traffic volume growth, the construction of the new Crystal Valley Interchange, and planned/anticipated transportation system improvements for the study are roadways and intersections, based on the CRTMP.

The following is a summary of the recommendations to be the responsibility of the developer in order to mitigate the impact of the traffic projected to be generated by the proposed Brickyard development by the 2027 (build-out) analysis horizon:

- **Prairie Hawk Dr. (Existing Alignment)** - The existing alignment of Prairie Hawk Dr. adjacent to the frontage of the proposed Brickyard development shall be modified to a two-lane residential collector roadway with on-street bicycle lanes and on-street angled parking adjacent to the project site. From the north end of the project site to E. Wolfensberger Rd., Prairie Hawk Dr. will be repaved and restriped, with new curb and gutter installed along both sides of the roadway.
- **Prairie Hawk Dr. (Realignment)** – A new two-lane roadway will be constructed to extend west from the property boundary at the west site access intersection, then curve south at the future 2-lane roundabout location to intersect with Plum Creek Pkwy. at the Dawson Trails Blvd. intersection.
- **(1) Wolfensberger Rd./Prairie Hawk Dr. Intersection** – The Brickyard developer shall participate in funding the design and construction of the improvements to increase the available storage of the WB left turn lane from 150 feet to 225 feet in order to accommodate the projected queue as a result of the addition of the Brickyard development site generated traffic. The developer will also participate in funding the design and construction of a northbound right turn lane with a minimum of 150 feet of storage.

- **(3) Prairie Hawk Dr./Topeka Way** - The Brickyard developer will be responsible for funding and implementing the restriping of the intersection to include left turn lanes with 100' feet of storage on the northbound and southbound approaches.
- **(11) Plum Creek Pkwy./Prairie Hawk Dr./Dawson Trails Blvd.** – The Brickyard developer will share responsibility for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection will operate under traffic signal control with permitted left turn phasing on the northbound and southbound approaches and protected plus permitted phasing on the eastbound approach. The east leg of the intersection will have one shared left turn/through lane and one right turn lane with 100' feet of storage on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one left turn lane with 150 feet of storage and one shared through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one left turn lane with 150' feet of storage and one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one left turn lane with a minimum of 100 feet of storage and one shared through/right turn lane on the northbound approach, and one southbound departure lane.
- **(13) Prairie Hawk Dr./NE Access Dr. Intersection** – The Brickyard developer will be responsible for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection will have stop sign control on the eastbound approach. The west leg of the intersection will have one left turn lane and one right turn lane on the eastbound approach and one westbound departure lane. The north leg of the intersection will have one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one left turn lane with a minimum of 100 feet of storage and one through lane on the northbound approach, and one southbound departure lane.
- **(14) Prairie Hawk Dr./SE Access Dr. Intersection** – The Brickyard developer will be responsible for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection will have stop sign control on the eastbound approach. The west leg of the intersection will have one left turn lane and one right turn lane on the eastbound approach and one westbound departure lane. The north leg of the intersection will have one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one left turn lane with a minimum of 100 feet of storage and one through lane on the northbound approach, and one southbound departure lane.
- **(15) West Site Access Dr./Street "D" Intersection** – The Brickyard developer will be responsible for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection will have stop sign control on the eastbound approach. The west leg of the intersection will have one left turn lane and one right turn lane on the eastbound approach and one westbound departure lane. The north leg of the intersection will have one shared through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one shared left turn/through lane on the northbound approach, and one southbound departure lane.
- **(16) Street "B"/NE Site Access Dr./Street "A" Intersection** – The Brickyard developer will be responsible for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection

will have stop sign control on the northbound and southbound approaches. The east leg of the intersection will have one shared left turn/through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one shared left turn/through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one shared left turn/through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one shared left turn/through/right turn lane on the northbound approach, and one southbound departure lane.

- **(17) Street "C"/SE Site Access Dr./Street "A" Intersection** – The Brickyard developer will be responsible for the design and construction of the intersection concurrently with the Brickyard development to include the following. The intersection will have stop sign control on the northbound and southbound approaches. The east leg of the intersection will have one left turn lane and one shared through/right turn lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection will have one left turn lane and one shared through/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one shared left turn/through/right turn lane on the southbound approach, and one northbound departure lane. The south leg of the intersection will have one shared left turn/through/right turn lane on the northbound approach, and one southbound departure lane.

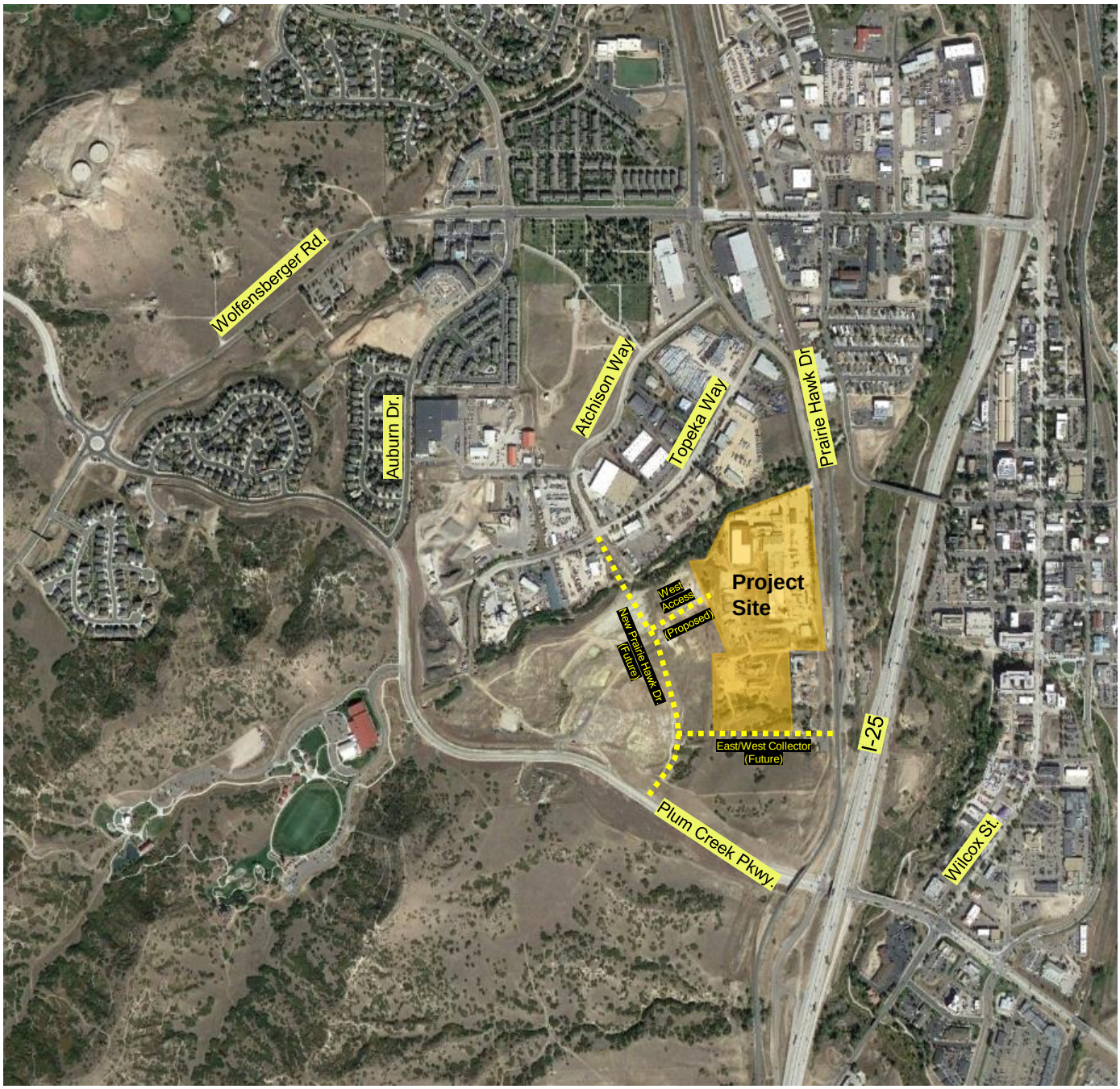
The following is a summary of the recommendations to be the responsibility of others in order to mitigate future traffic impacts caused by existing and future background traffic growth within the study area. These improvements will be needed by the 2050 (long-term) analysis horizon:

- **Prairie Hawk Dr. (Realignment)** - By 2050, Prairie Hawk Dr. is anticipated to be realigned and modified, per the CRTMP, from Wolfensberger Rd. south along its existing alignment and the existing Atchison Way alignment to the intersection of Topeka Way. From Wolfensberger Rd. to Atchison Way, the roadway section will be a 4-lane major arterial. From Atchison Way to Topeka Way, the roadway section will be a 2-lane minor arterial. From Topeka Way, the alignment will continue south through the Miller's Landing property to the proposed roundabout intersection with the proposed West Site Access Roadway for The Brickyard development. From Topeka Way to Plum Creek Pkwy. the roadway section will be a 4-lane arterial.

- **(2) Prairie Hawk Dr./Atchison Way** – By 2050, a new 1-lane roundabout will be constructed at this intersection. The intersection will have yield control on the eastbound, northbound, and southbound approaches. The west leg of the intersection will have one shared left turn/right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will have one through lane and one free-flow bypass right turn lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection will have one bypass through lane on the northbound approach, and one southbound departure lane.
- **(7) Plum Creek Pkwy./I-25 SB Ramps** – By 2050, a new southbound free right turn lane on the north leg of the intersection will be constructed that will include a continuous acceleration/deceleration lane on Plum Creek Pkwy. which will terminate into a free right turn lane onto the new Prairie Hawk Roadway extension.
- **(8) Plum Creek Pkwy./I-25 NB Ramps** – By 2050, the intersection will be modified to include the following. The east leg of the intersection will be modified to have one dedicated right turn lane, one shared through/right turn lane, one through lane, and one

through lane that will accommodate the queuing needed for the left turn lane at the adjacent SB ramp intersection. The west leg of the intersection will be modified to include a second eastbound left turn lane to access northbound I-25.

- **(9) Plum Creek Pkwy./S Wilcox St. –** By 2050, it is anticipated that the westbound right turn lane will be converted into a shared through/right turn lane. It is also recommended that right turn overlap be implemented for the northbound and southbound right turn movements.
- **(10) Prairie Hawk Dr./West Site Access –** By 2050, this intersection will be constructed with the realigned Prairie Hawk Dr. extension to the south. The intersection is assumed to be a four-legged two-lane roundabout under yield control on all four approaches. The east and west legs of the roundabout will have one approach/entry lane and one departure/exit lane. The north and south legs of the roundabout will have two approach/entry lanes and two departure/exit lanes.
- **(11) Plum Creek Pkwy./Prairie Hawk Dr./Dawson Trails Blvd. –** By 2050, it is anticipated that the following additional improvements will be in place. The east leg of the intersection will have two left turn lanes with a minimum total of 600 feet of storage, two through lanes and one continuous free-flow right turn lane extending back to the I-25 SB Ramps with a raised channelizing island on the westbound approach, and two eastbound departure lanes plus a northbound to eastbound right turn auxiliary lane from Dawson Trails Blvd. to the I-25 SB ramp. The west leg of the intersection will have one left turn lane with a minimum of 250 feet of storage, two through lanes and one right turn lane with a minimum of 250 feet of storage on the eastbound approach, and two westbound departure lanes. The north leg of the intersection will have two left turn lanes with a minimum total of 500 feet of storage, two through lanes, and one right turn lane with approximately 100 feet of storage on the southbound approach, and two northbound departure lanes plus a westbound to northbound right turn auxiliary lane from Plum Creek Pkwy. to the East/West Collector roadway. The south leg of the intersection will have one left turn lane with a minimum of 200 feet of storage, two through lanes and one channelized free-flow right turn lane with a minimum of 150 feet of storage on the northbound approach, and two southbound departure lanes.
- **(12) Prairie Hawk Dr./East/West/Collector –** By 2050, it is anticipated that this intersection will be constructed to accommodate the Castle Meadows development. The intersection will be limited to three-quarter movement access. The intersection will be a “T” intersection with stop sign control on the east leg. The east leg of the intersection will have one right turn lane on the westbound approach, and one eastbound departure lane. The north leg of the intersection will have one left turn lane, and two through lanes on the southbound approach, and two northbound departure lanes. The south leg of the intersection will have two through lanes and one channelized continuous free-flow right turn lane on the northbound approach, and two southbound departure lanes.



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Vicinity Map

The Brickyard

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Figure 1

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Conceptual Site Plan

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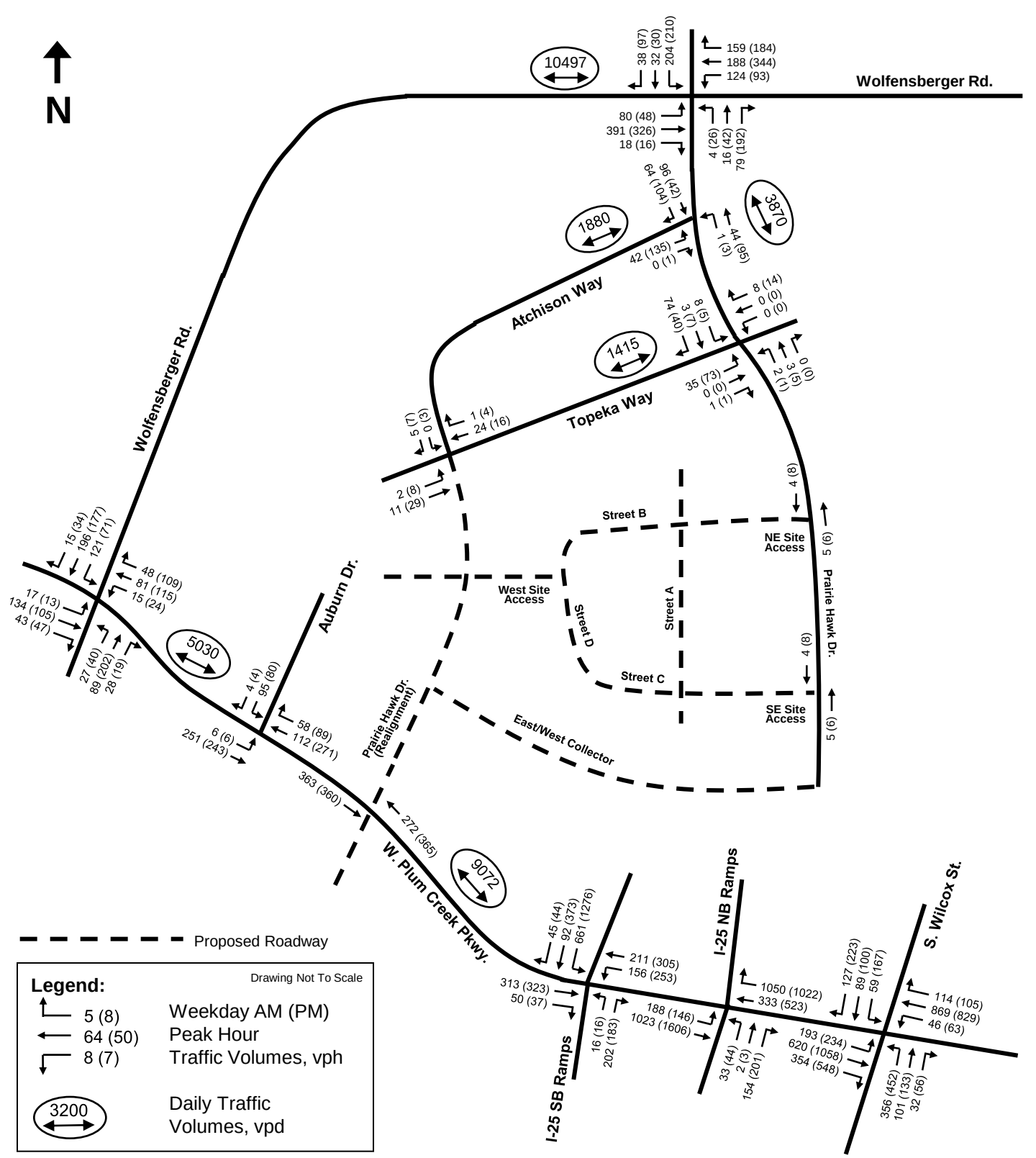
Figure 2



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2022 (Existing) Traffic Volumes

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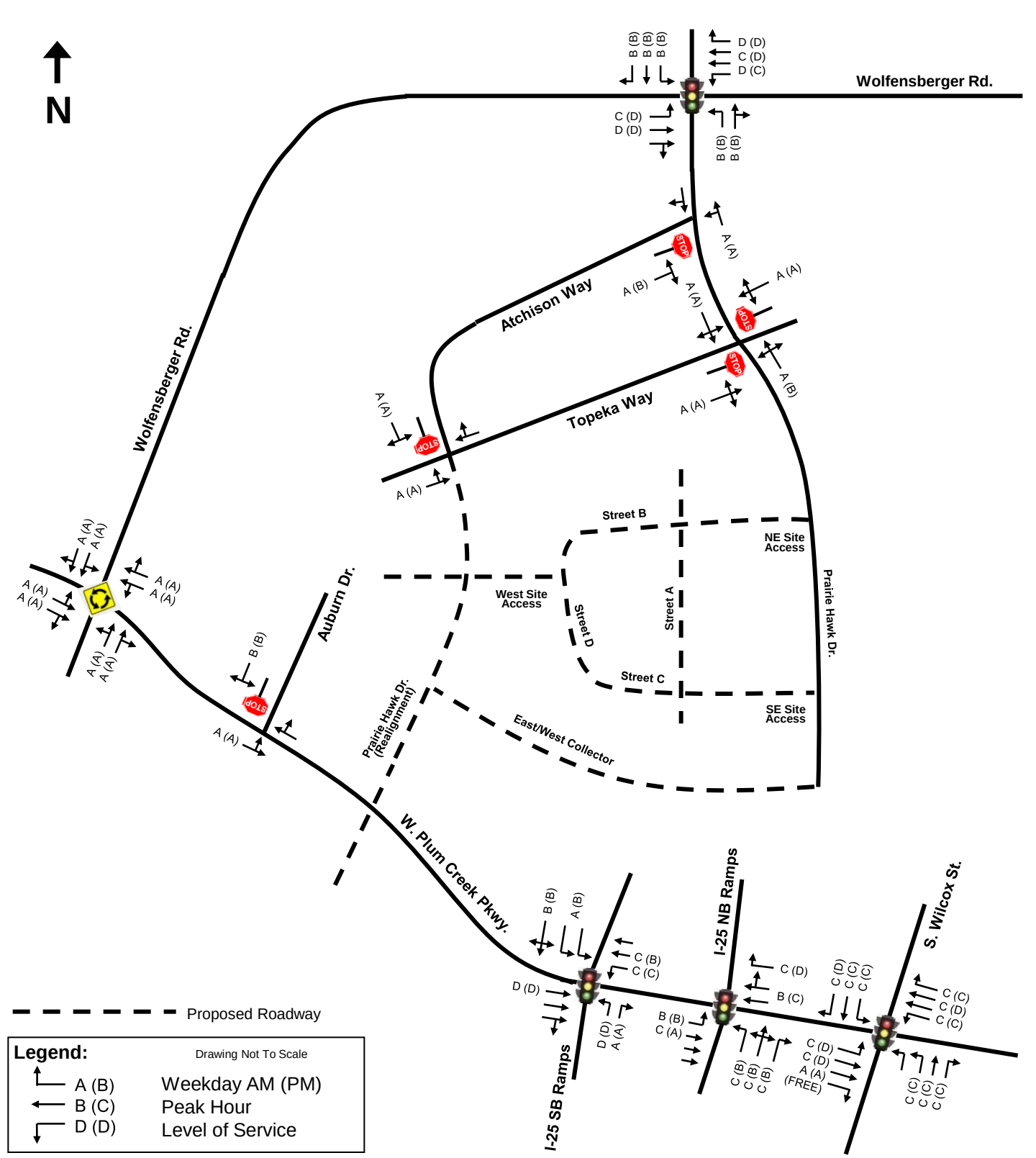
Figure 3



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2022 (Existing) Traffic Operational Conditions

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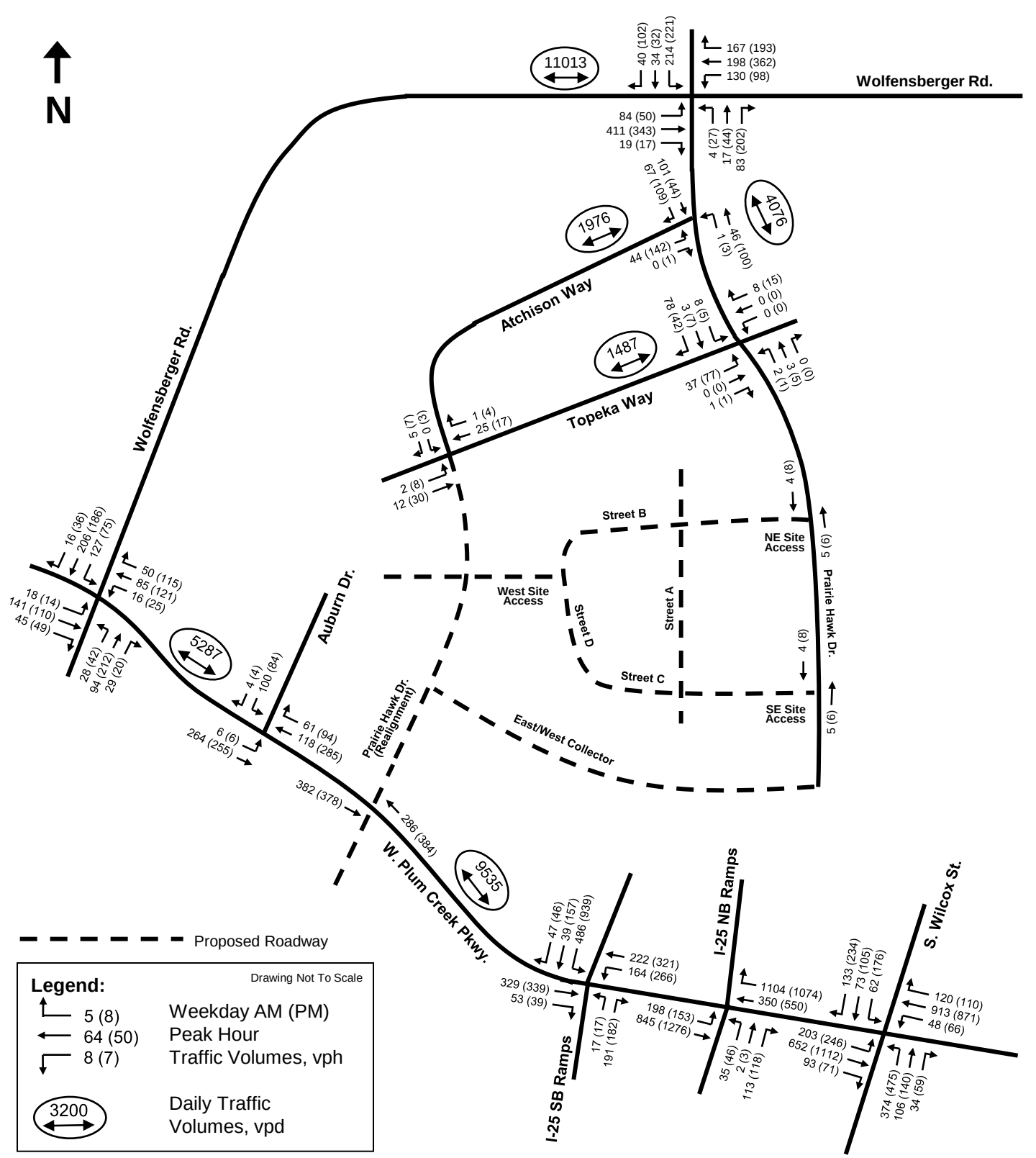
Figure 4



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2027 (Build-Out) Analysis Horizon
Regional Background Traffic Volumes

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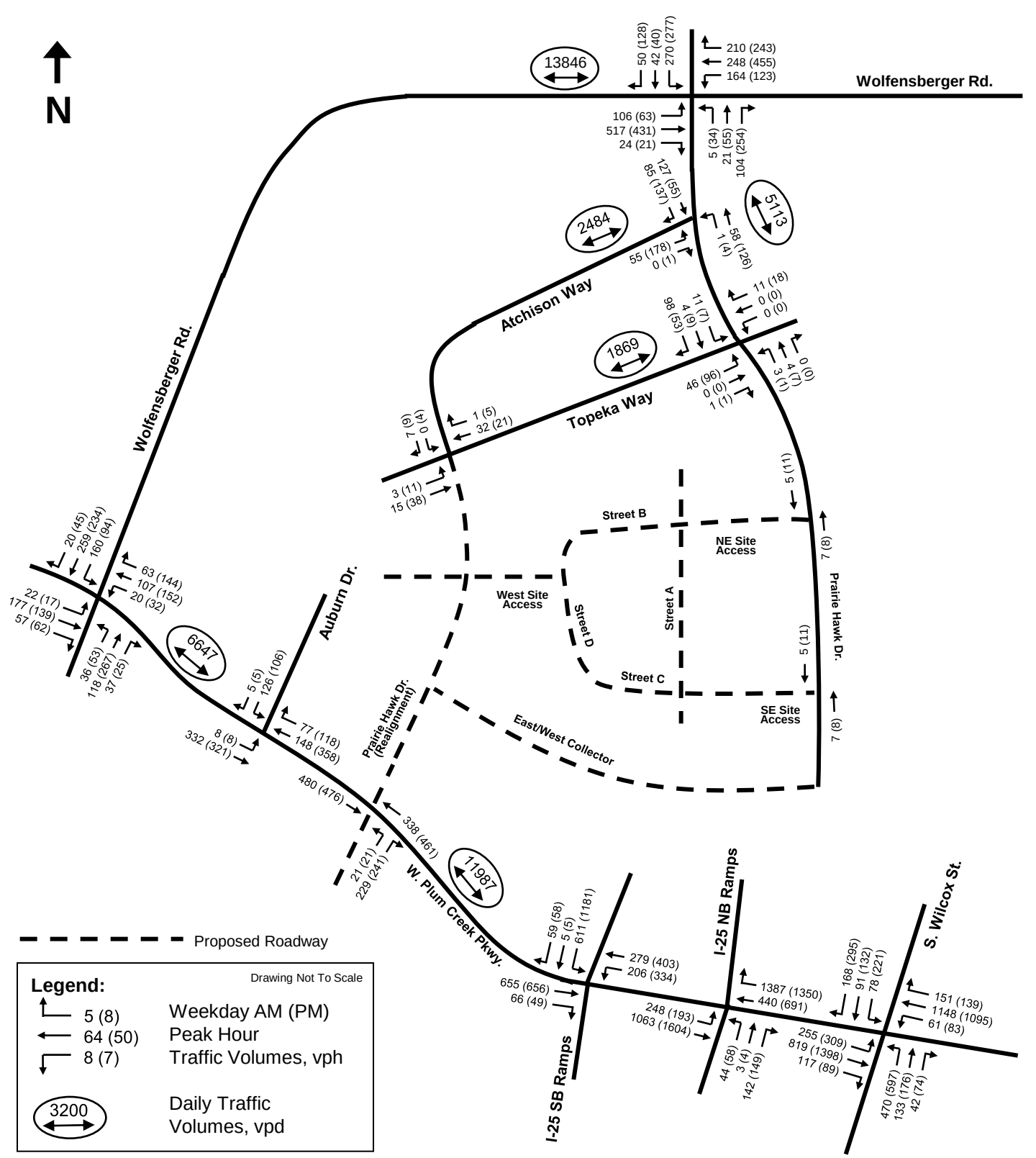
Figure 5



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2050 (Long-Term) Analysis Horizon
Regional Background Traffic Volumes

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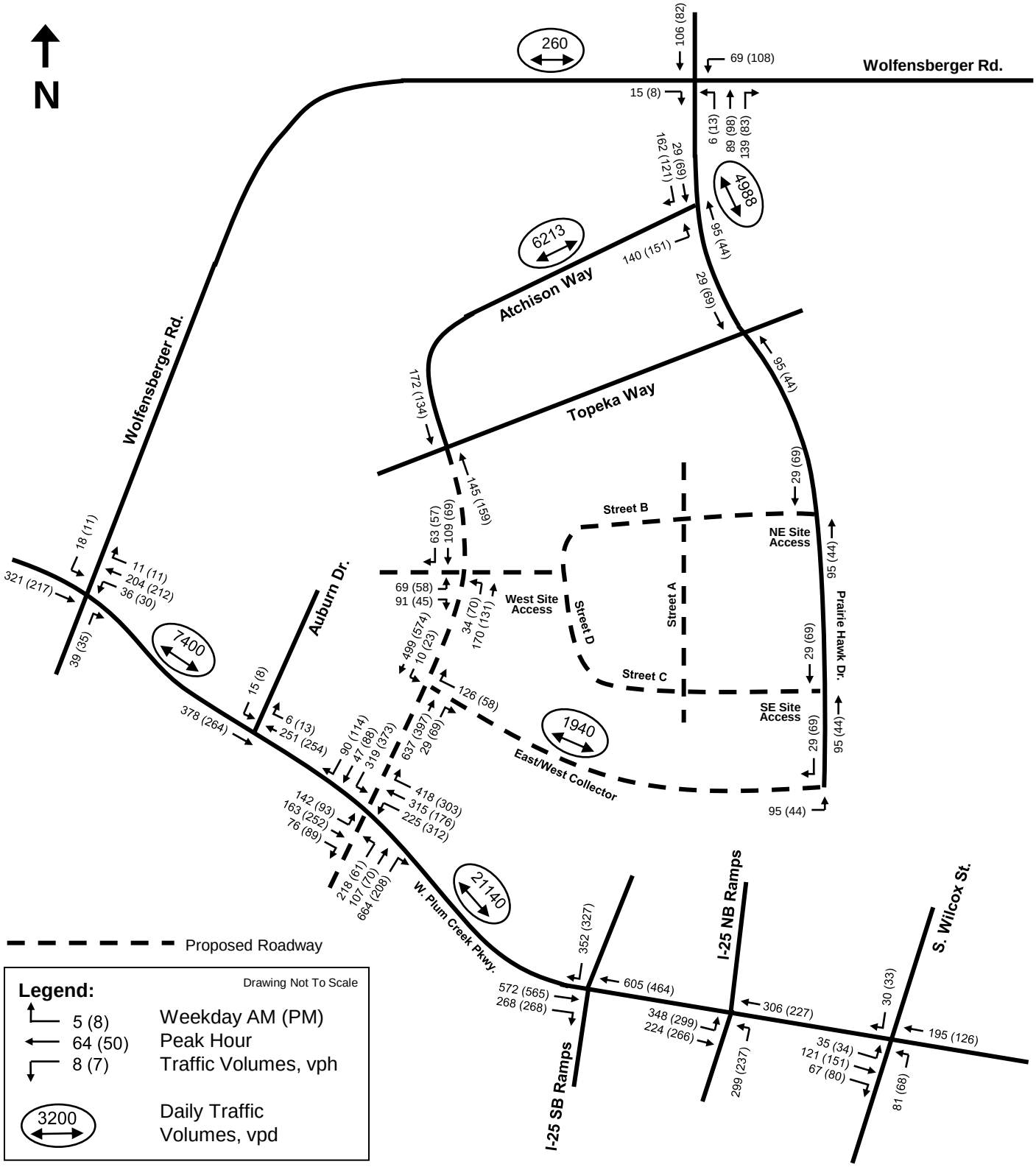
Figure 6



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2050 (Long-Term) Analysis Horizon
Local Background Traffic Volumes

The Brickyard

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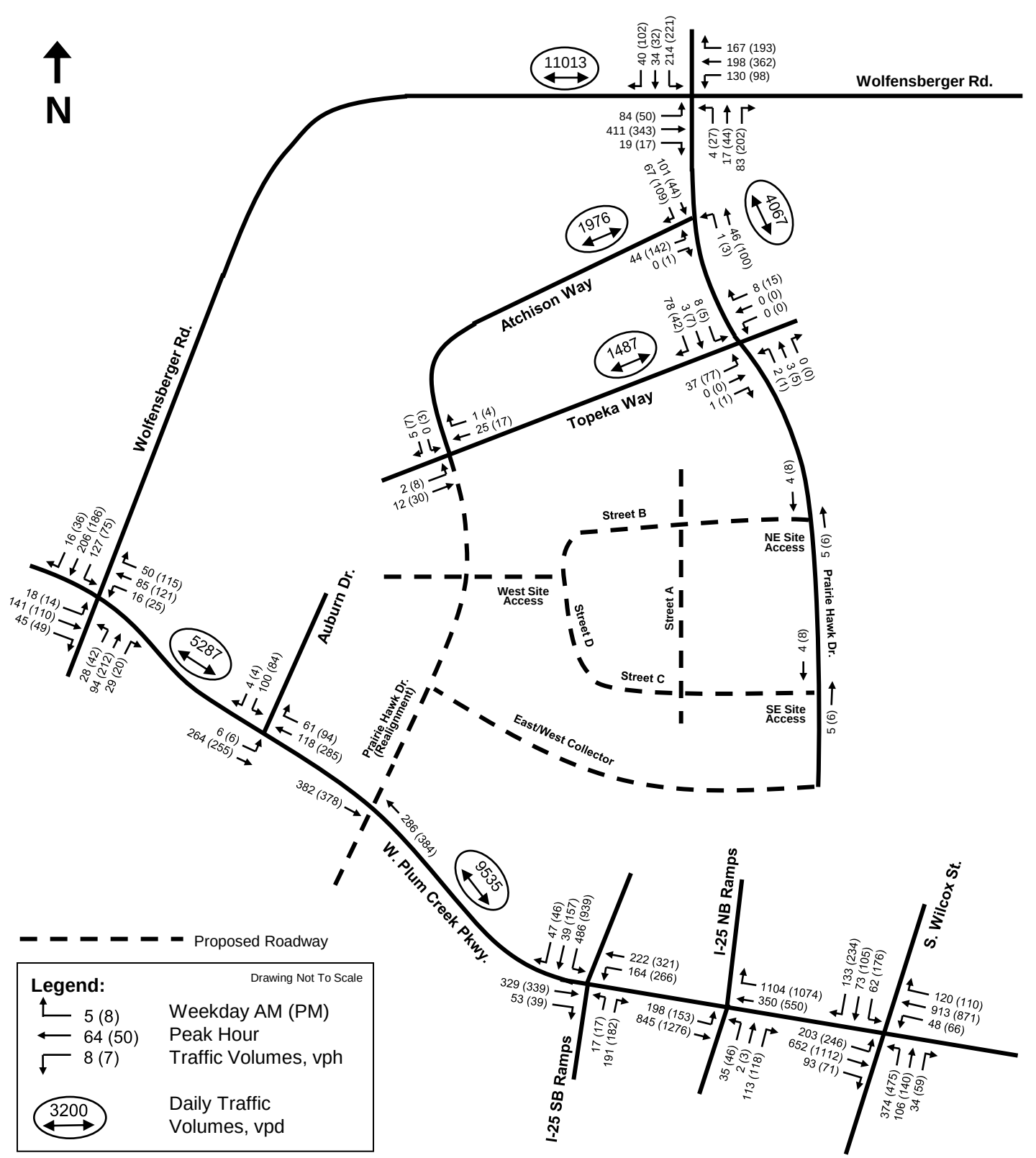
Figure 7



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2027 (Build-Out) Analysis Horizon
Total Background Traffic Volumes

The Brickyard

Confluence Companies

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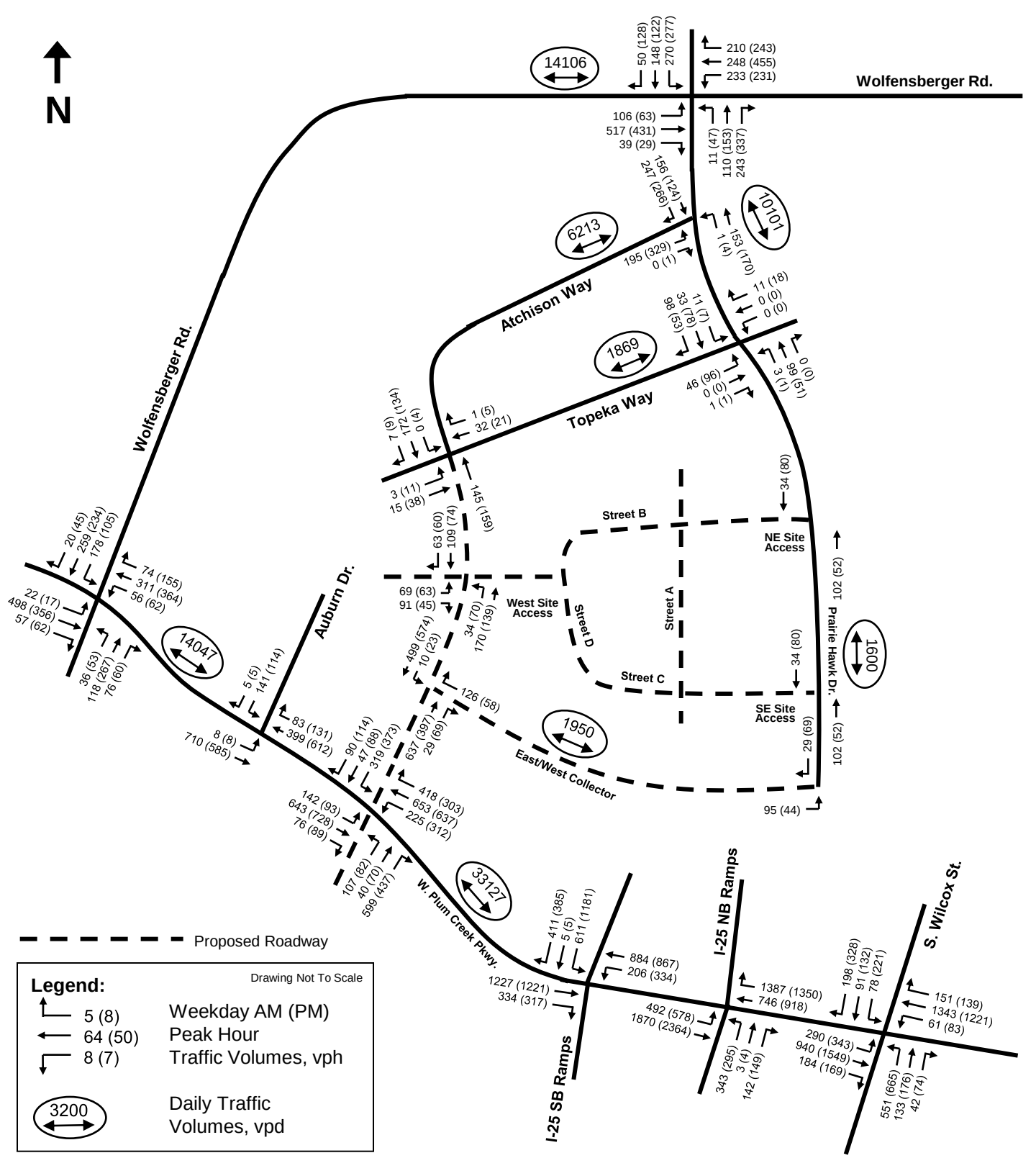
Figure 8



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2050 (Long-Term) Analysis Horizon
Total Background Traffic Volumes

The Brickyard

Confluence Companies

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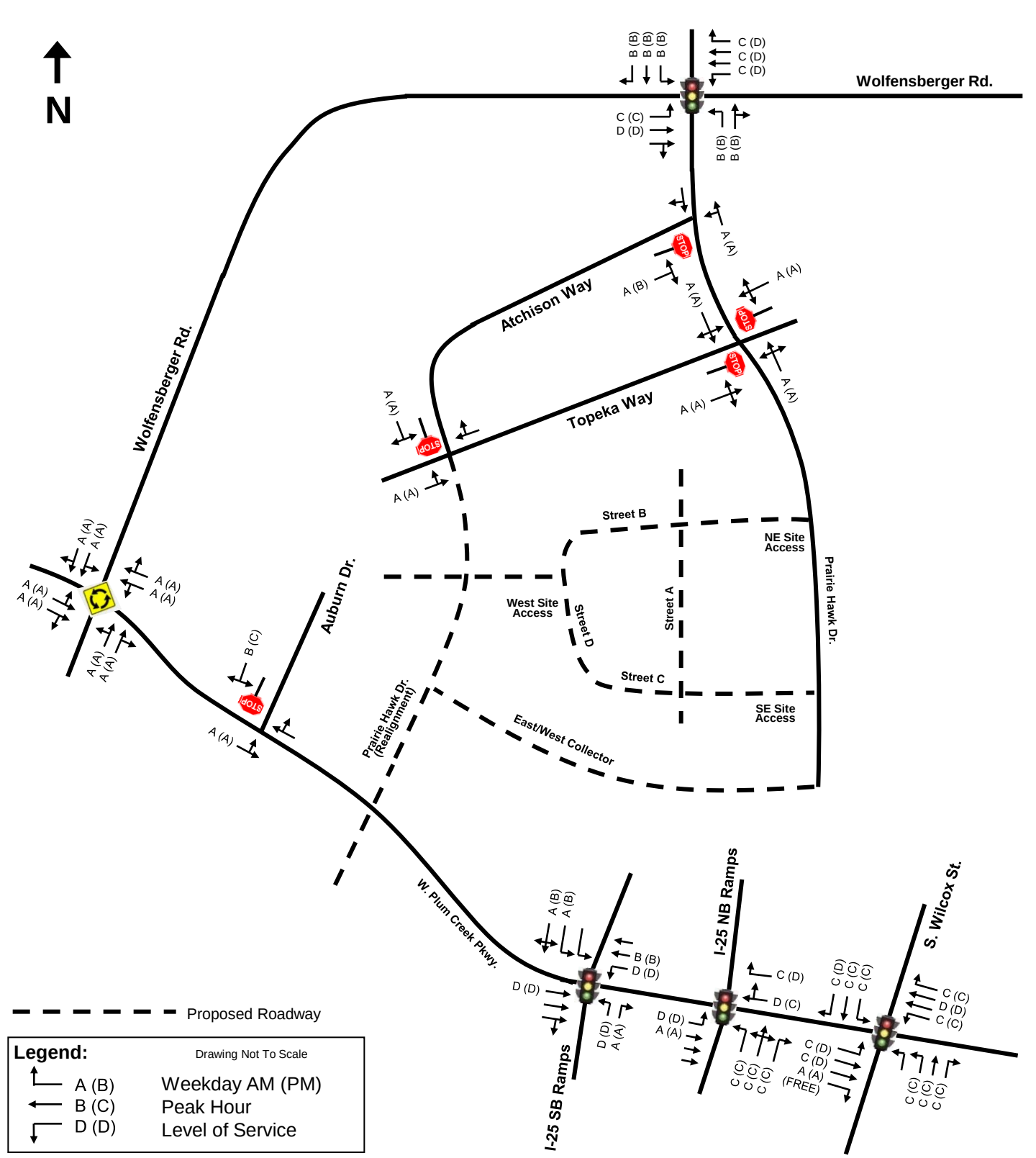
Figure 9



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2027 (Build-Out) Analysis Horizon
Background Traffic Operational Conditions

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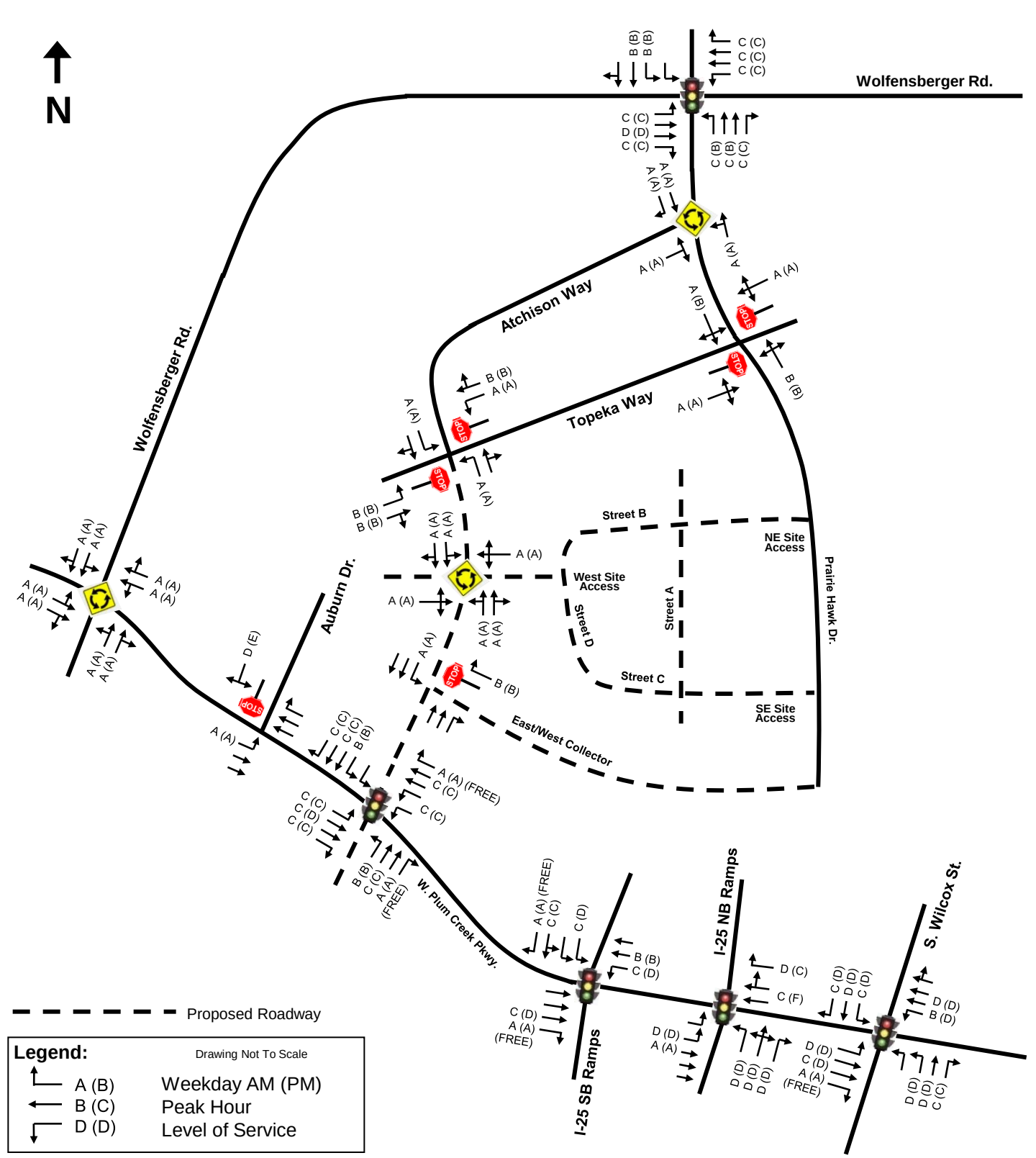
Figure 10



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2050 (Long-Term) Analysis Horizon
Background Traffic Operational Conditions

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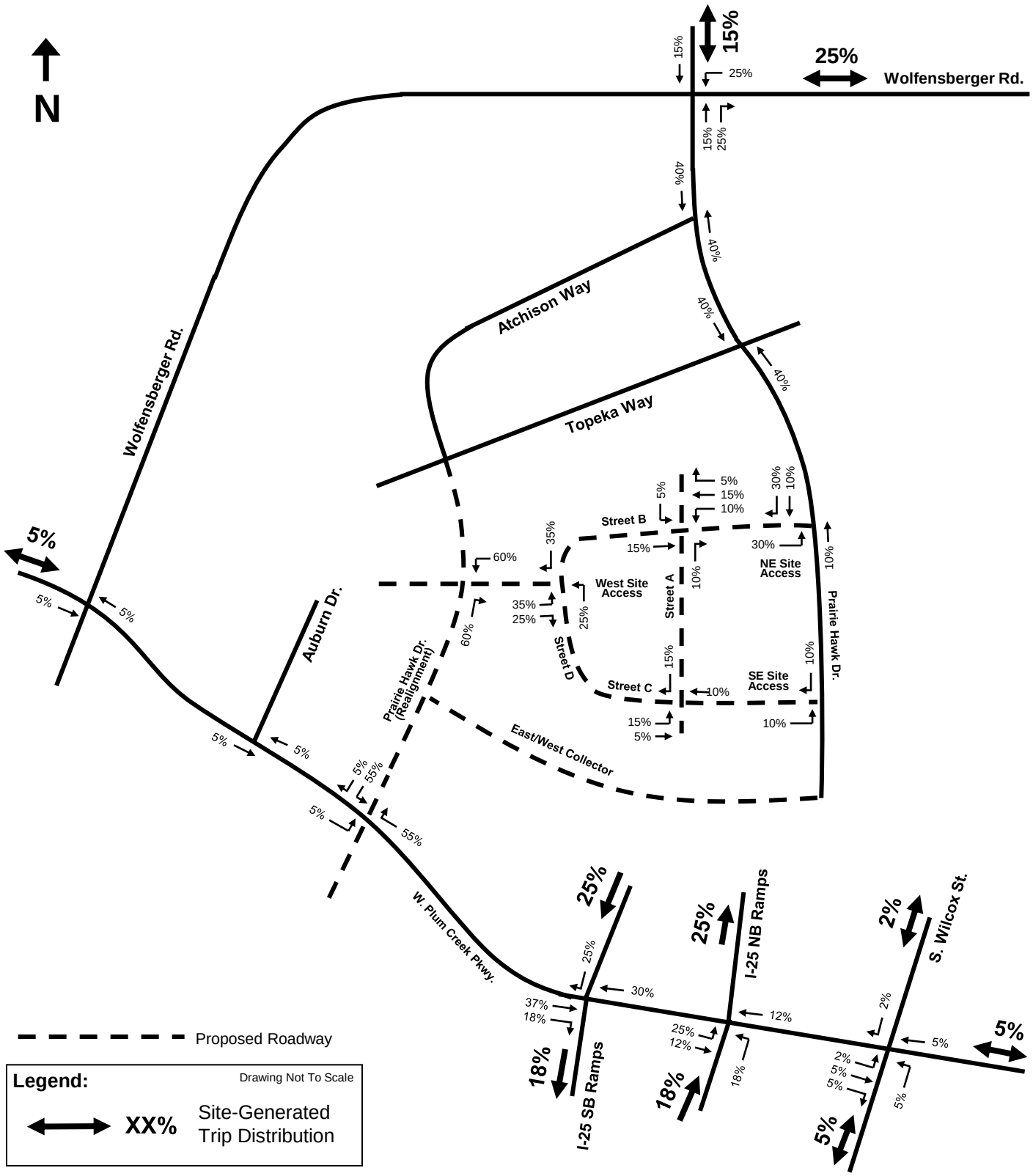
Figure 11



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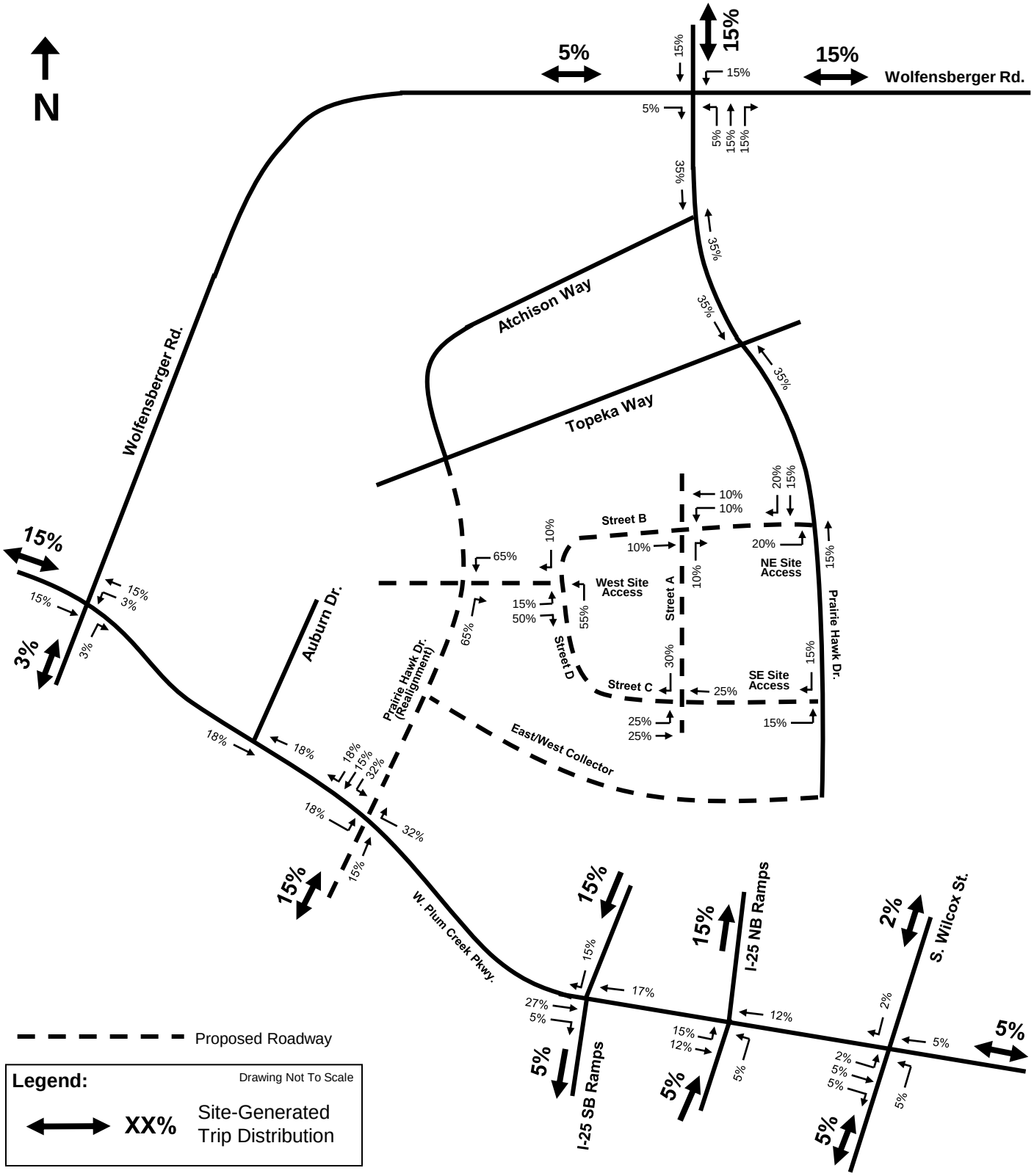
2027 (Build-Out) Analysis Horizon
Site Generated Trip Distribution: Residential Land Use

Figure 12



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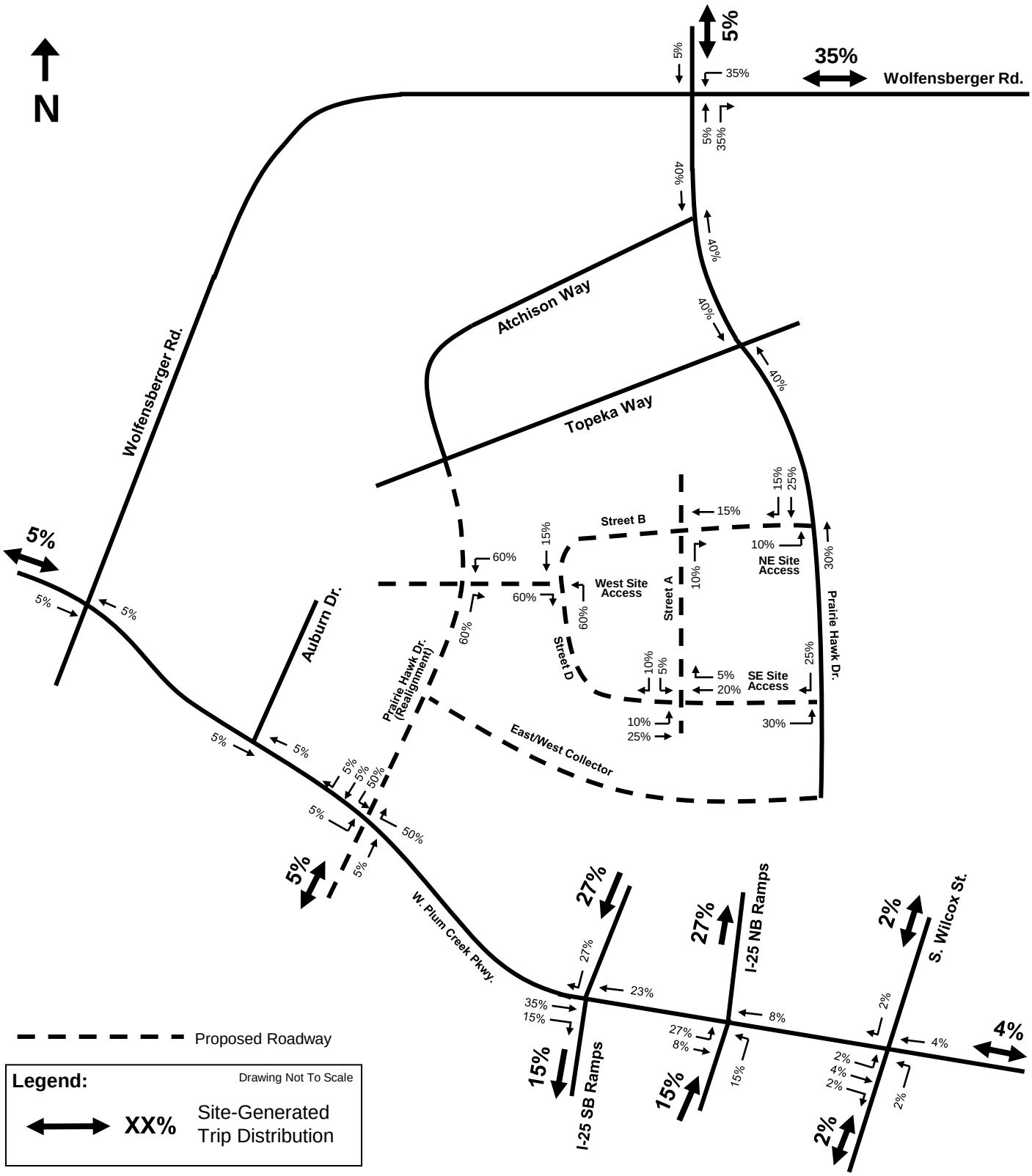
2027 (Build-Out) Analysis Horizon
Site Generated Trip Distribution: Commercial/Retail Land Use

Figure 13



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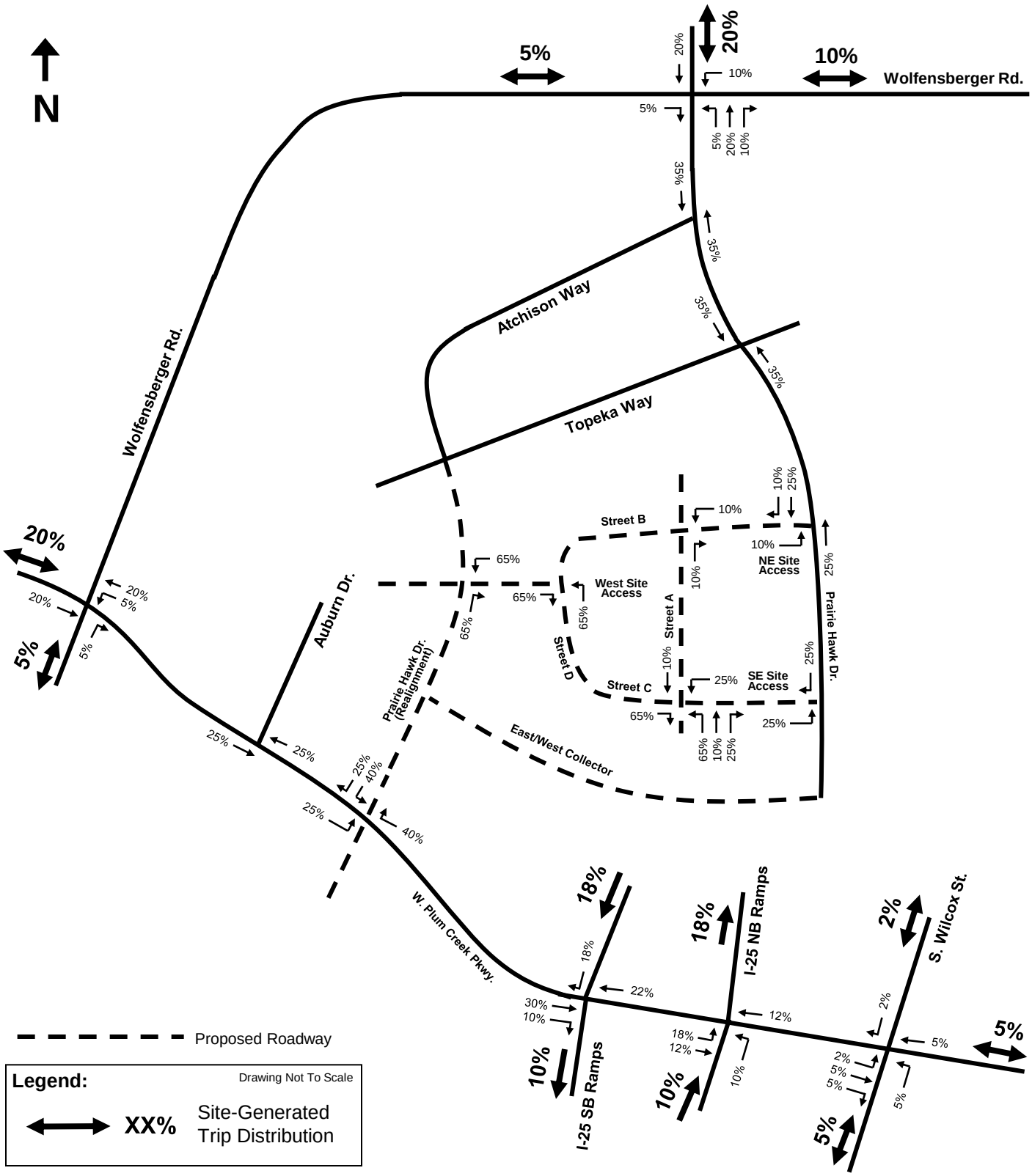
2027 (Build-Out) Analysis Horizon
Site Generated Trip Distribution: Hotel Land Use

Figure 14



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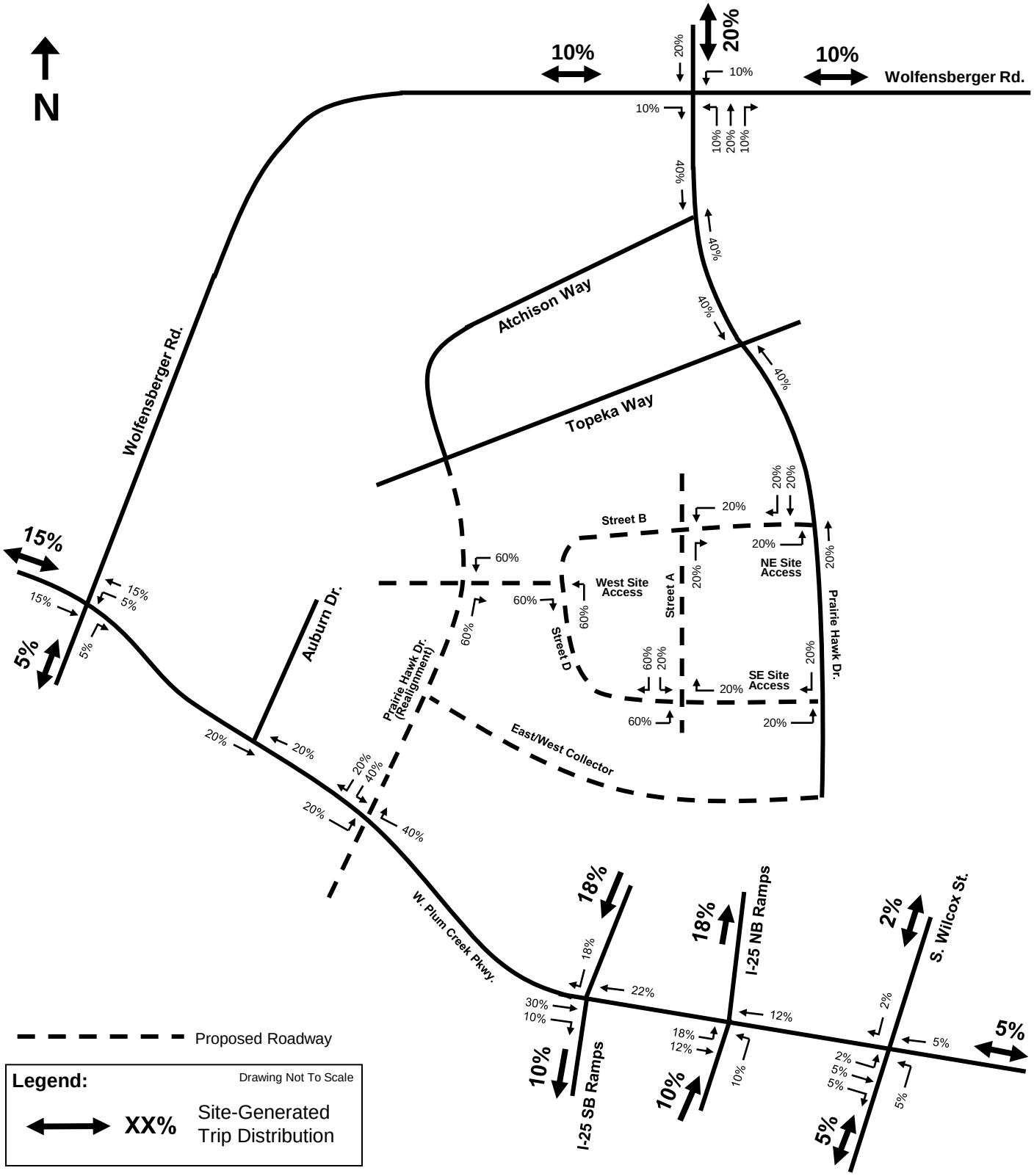
2027 (Build-Out) Analysis Horizon
Site Generated Trip Distribution:
Rec Center Land Use

Figure 15



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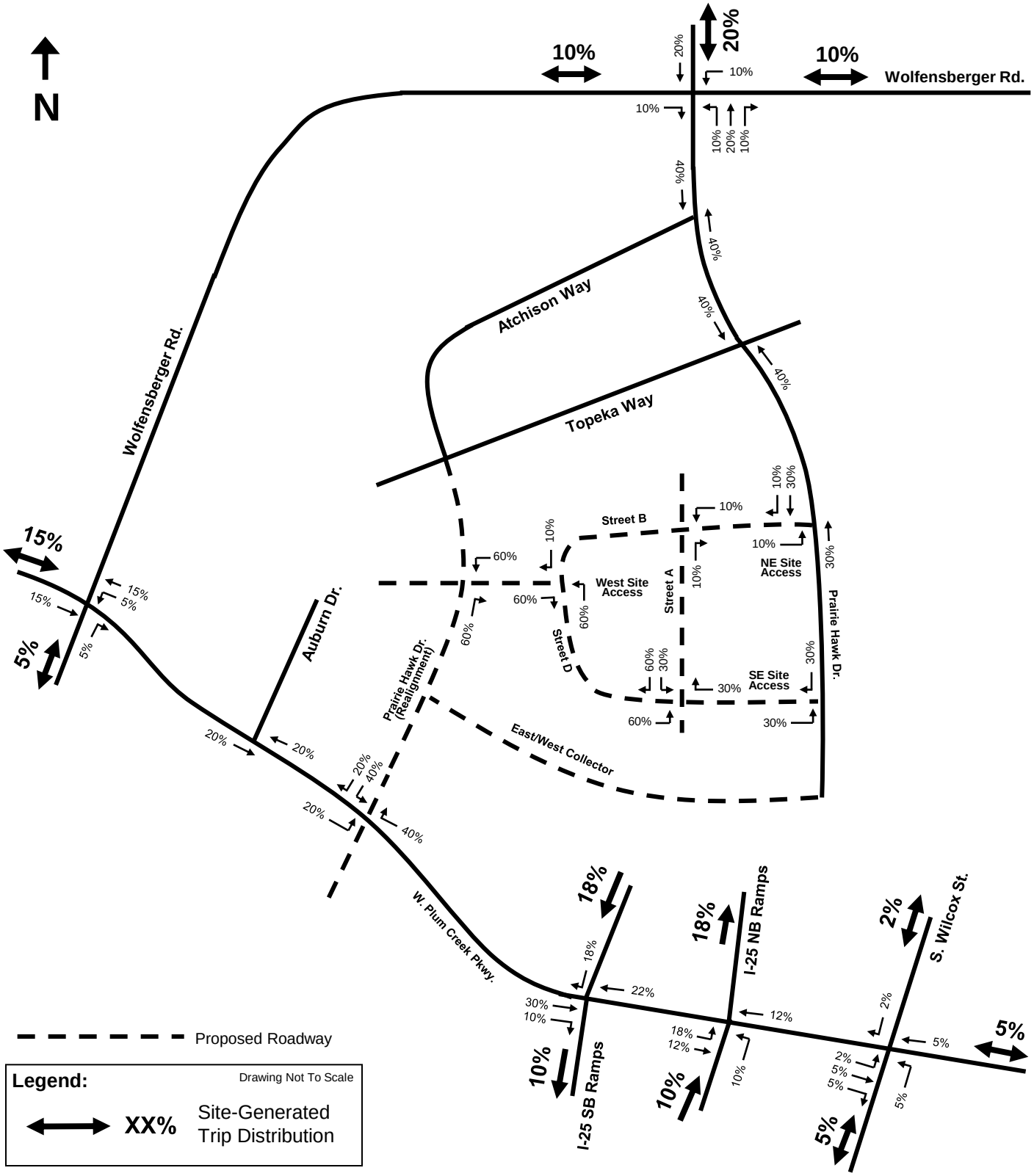
2027 (Build-Out) Analysis Horizon
Site Generated Trip Distribution: General Office Land Use

Figure 16



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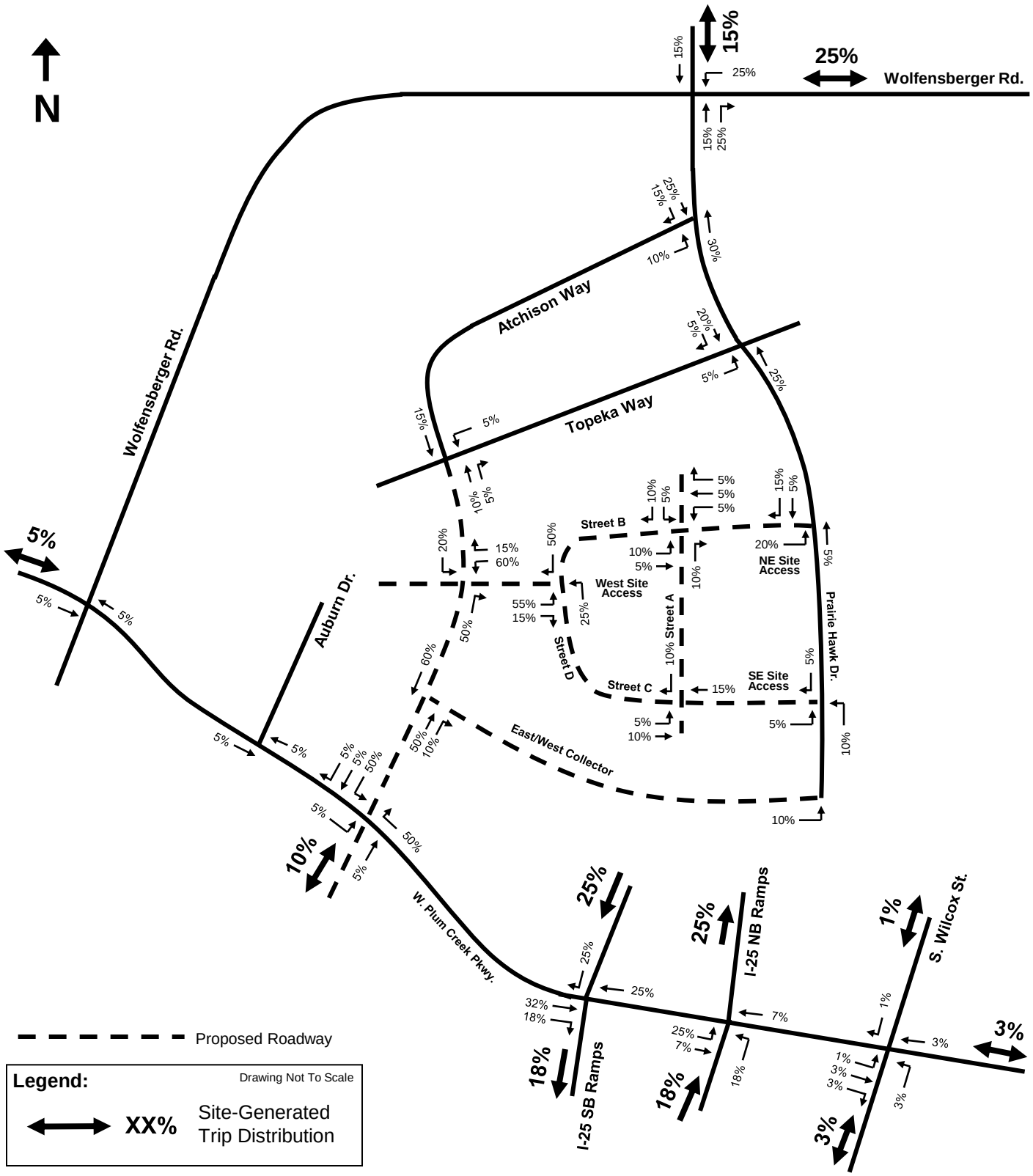
2027 (Build-Out) Analysis Horizon
Site Generated Trip Distribution:
High Turnover (Sit-Down) Restaurant Land Use

Figure 17



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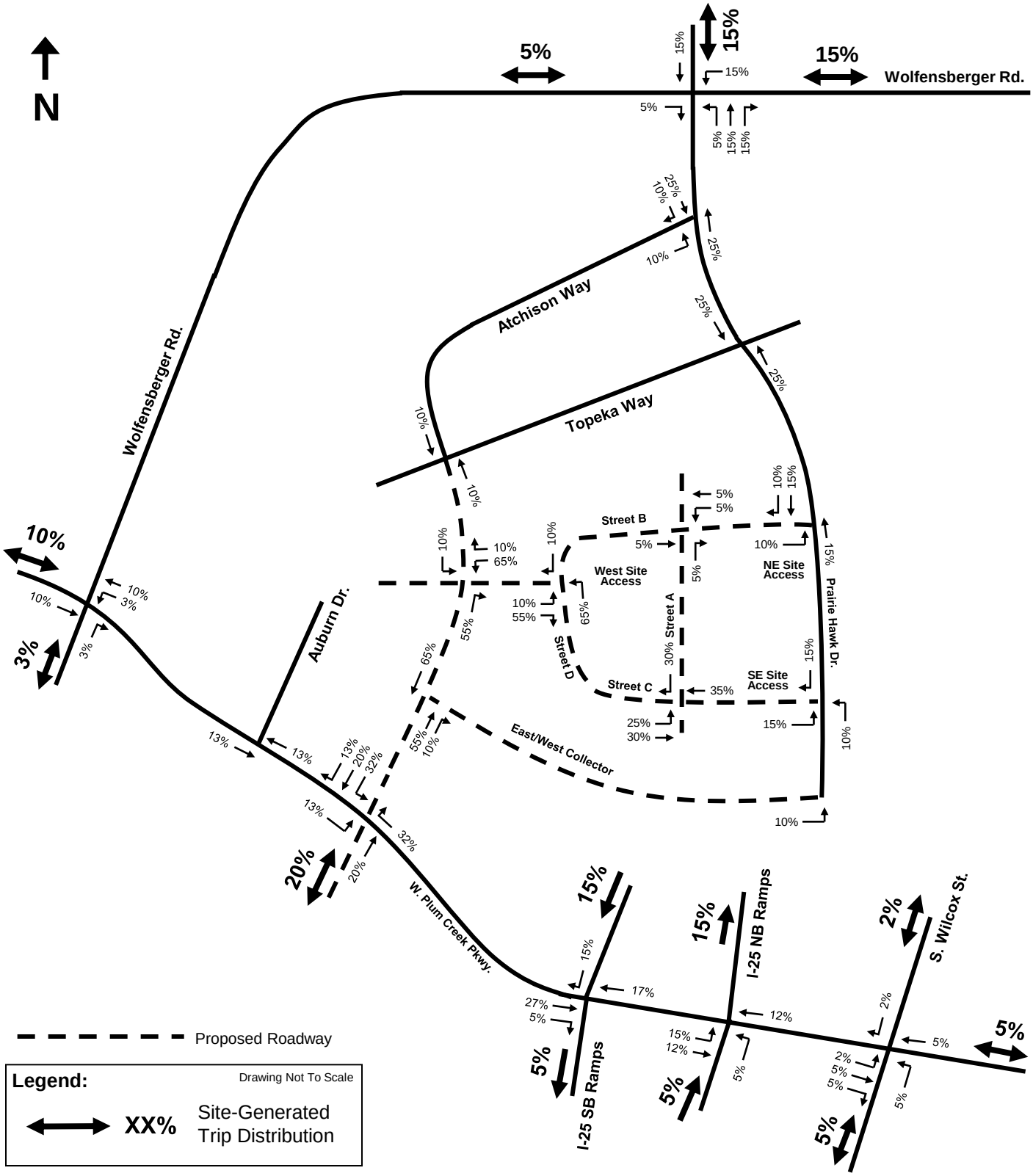
2050 (Long-Term) Analysis Horizon
Site Generated Trip Distribution: Residential Land Use

Figure 18



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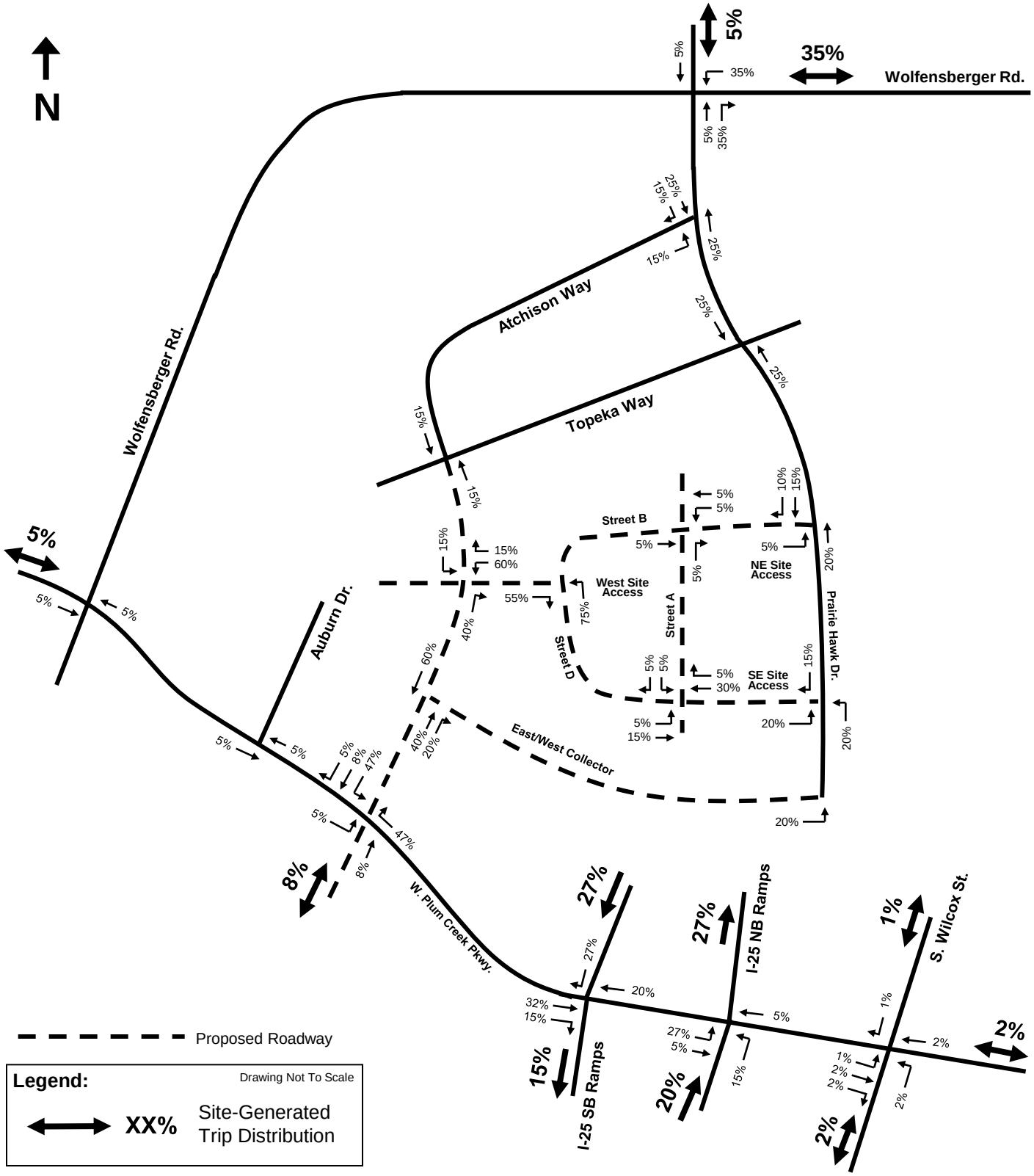
2050 (Long-Term) Analysis Horizon
Site Generated Trip Distribution: Commercial/Retail Land Use

Figure 19



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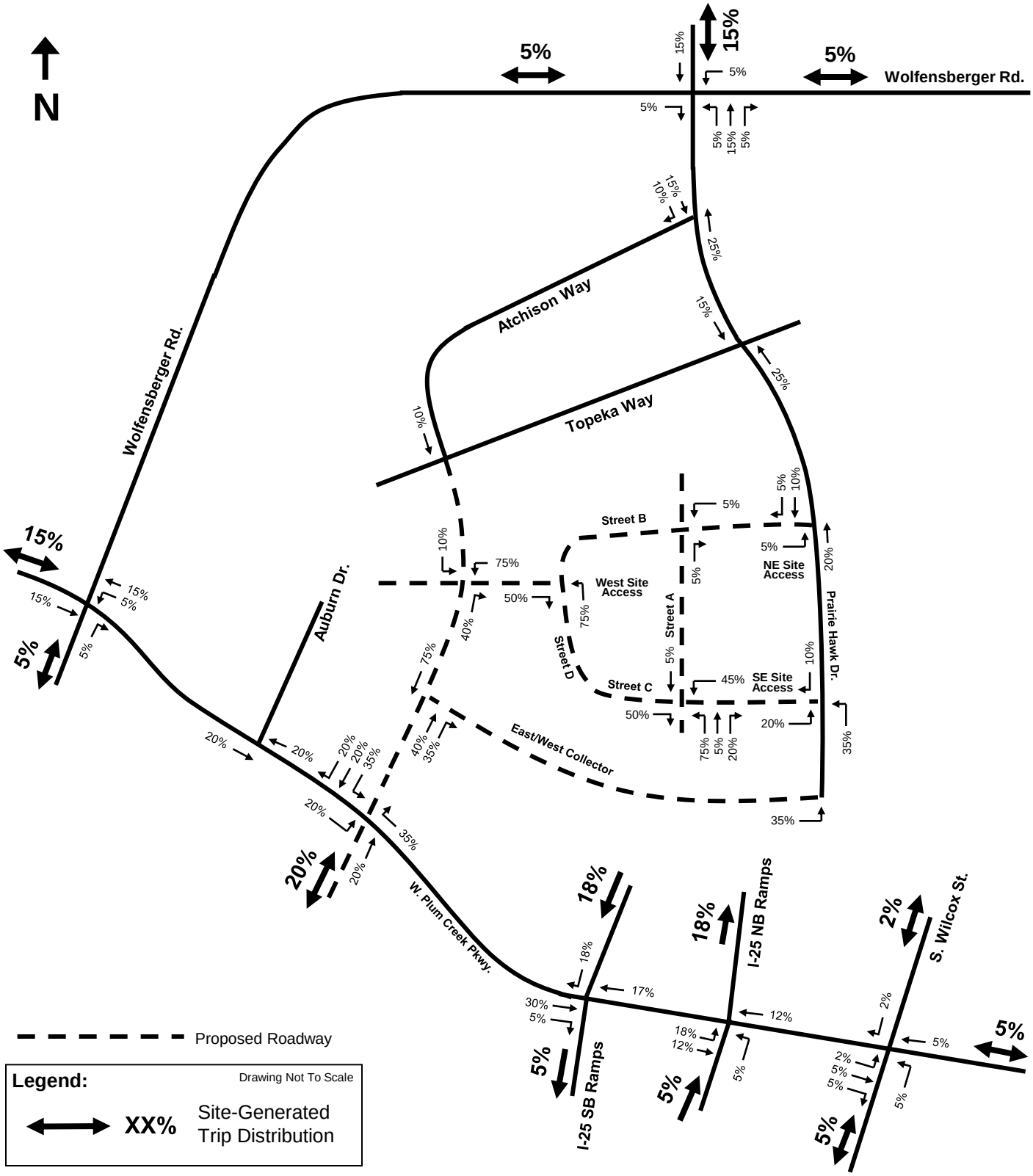
2050 (Long-Term) Analysis Horizon
Site Generated Trip Distribution: Hotel Land Use

Figure 20



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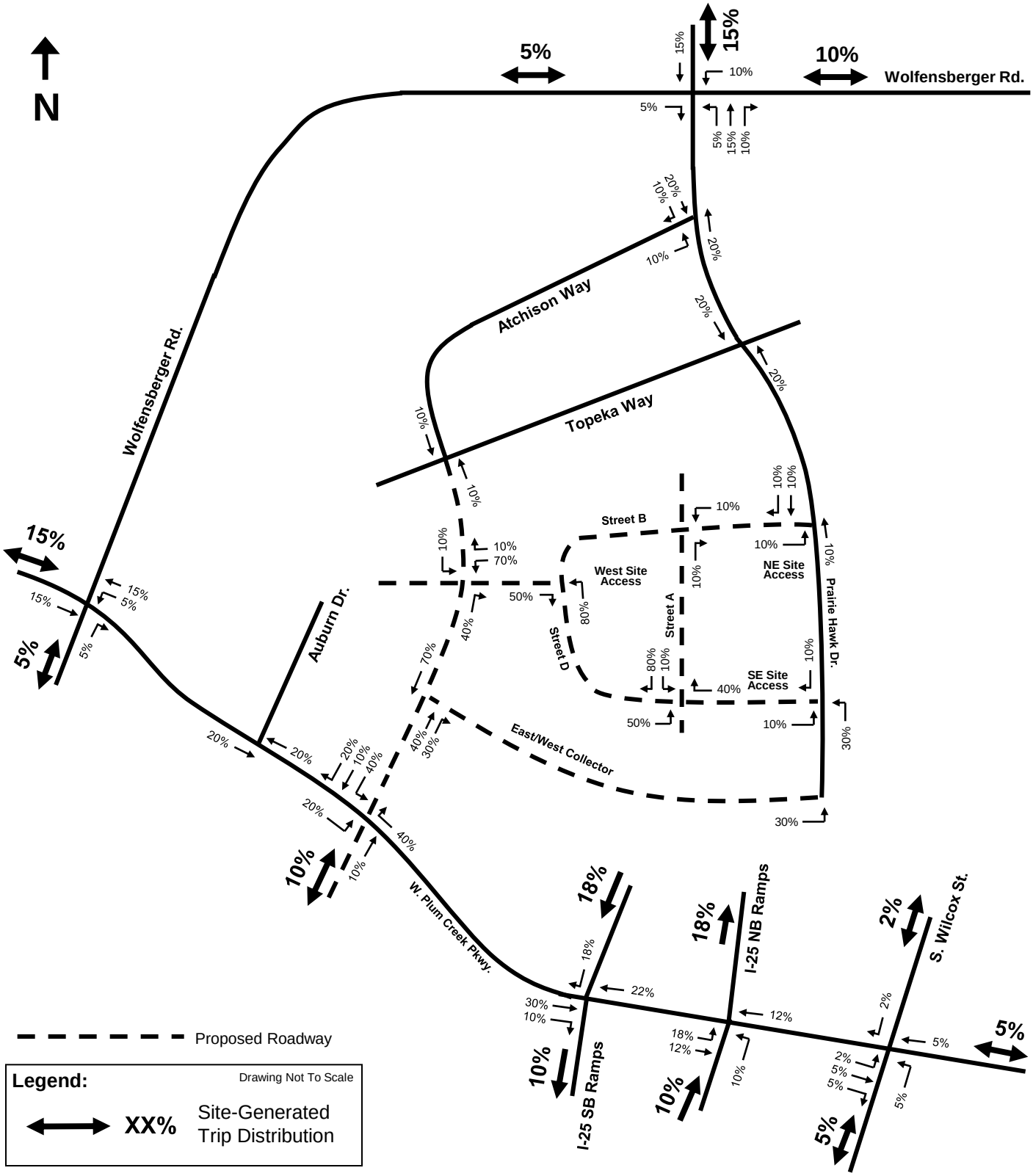
DENVER • DALLAS/FORT WORTH

The Brickyard
Confluence Companies
HKS #200726

2050 (Long-Term) Analysis Horizon
Site Generated Trip Distribution: Rec Center Land Use

Figure 21



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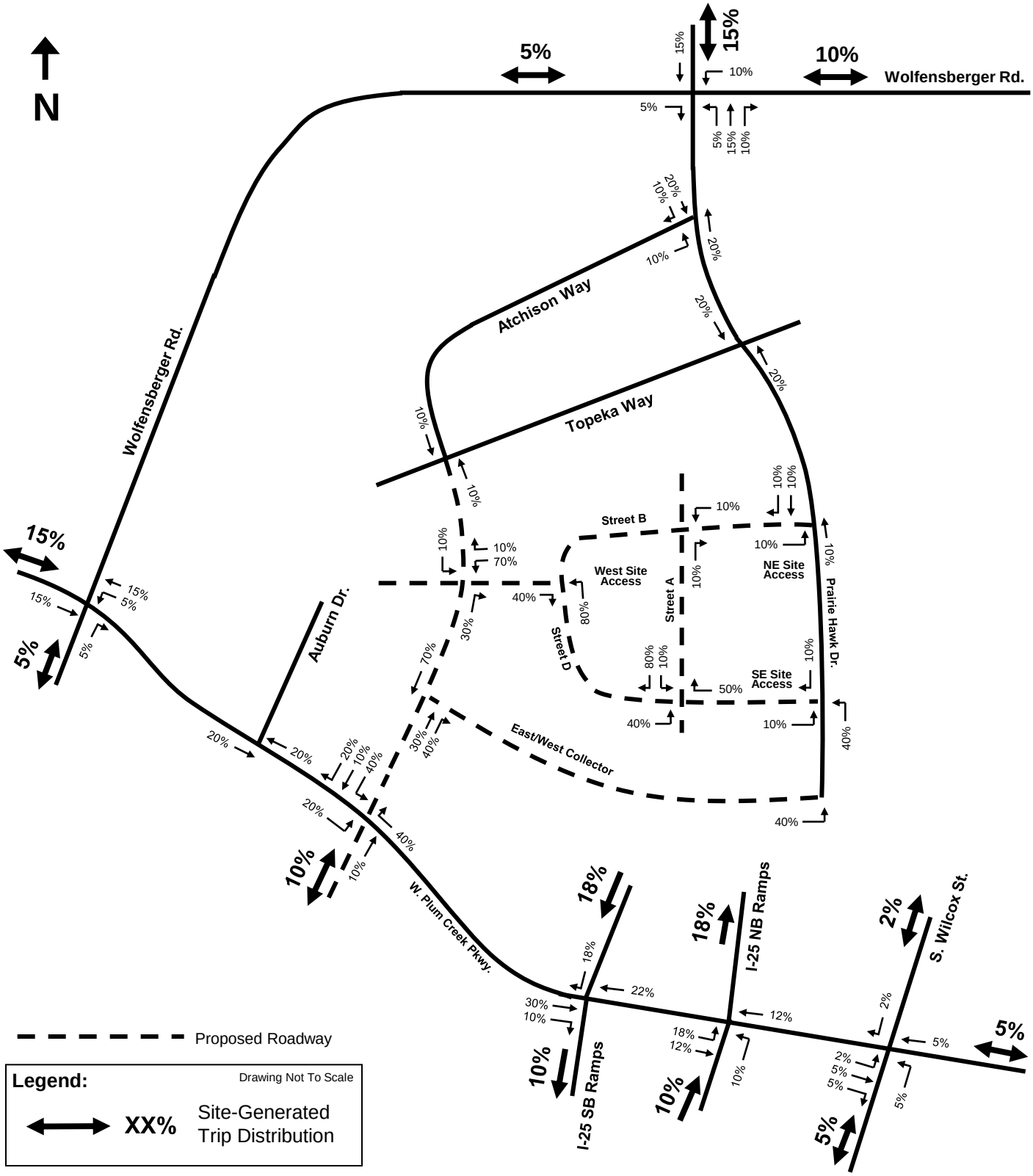
The Brickyard
Confluence Companies
HKS #200726

2050 (Long-Term) Analysis Horizon
Site Generated Trip Distribution: General Office Land Use

Figure 22



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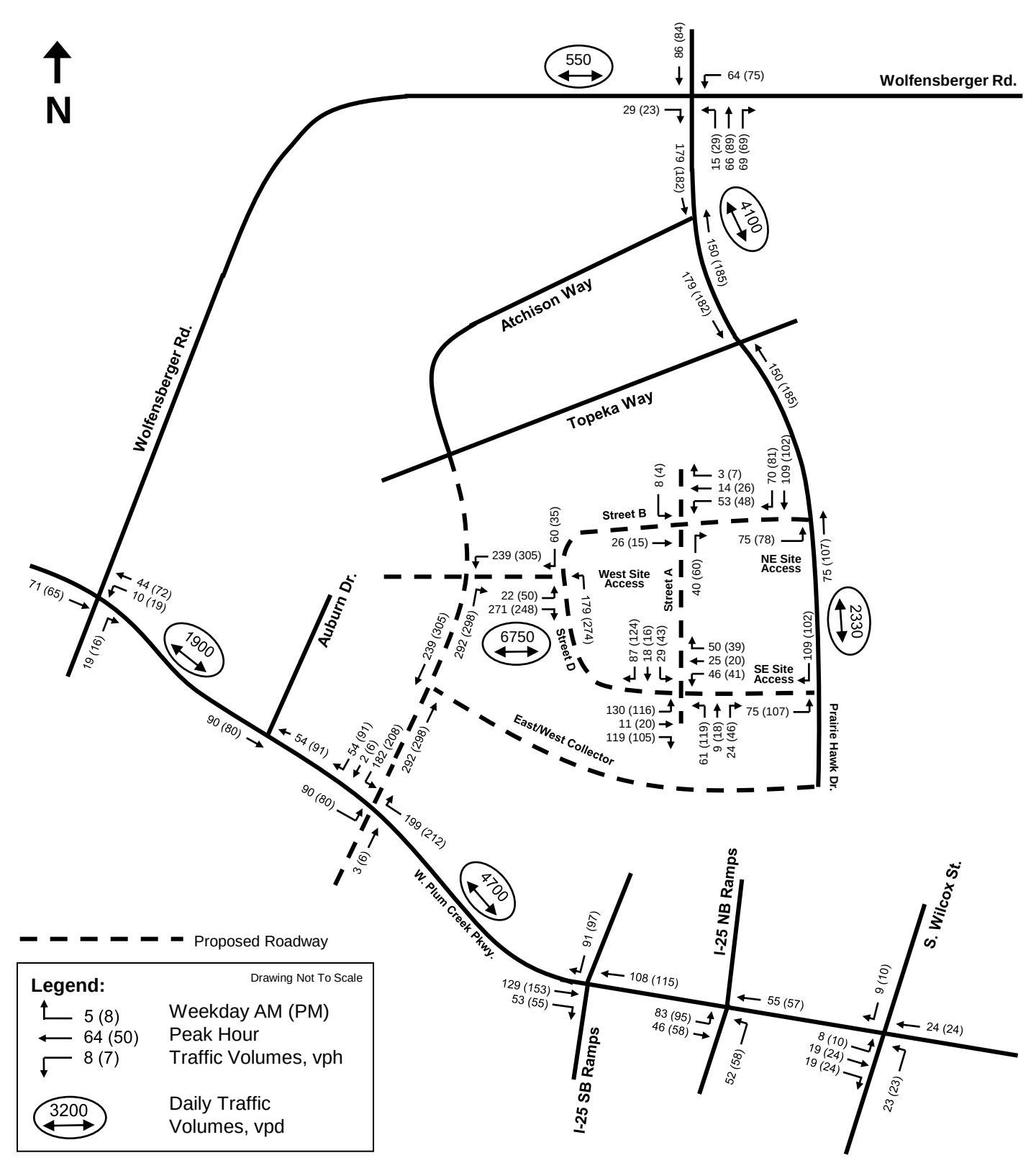
HKS #200726

2050 (Long-Term) Analysis Horizon
Site Generated Trip Distribution:
High Turnover (Sit-Down) Restaurant Land Use

Figure 23



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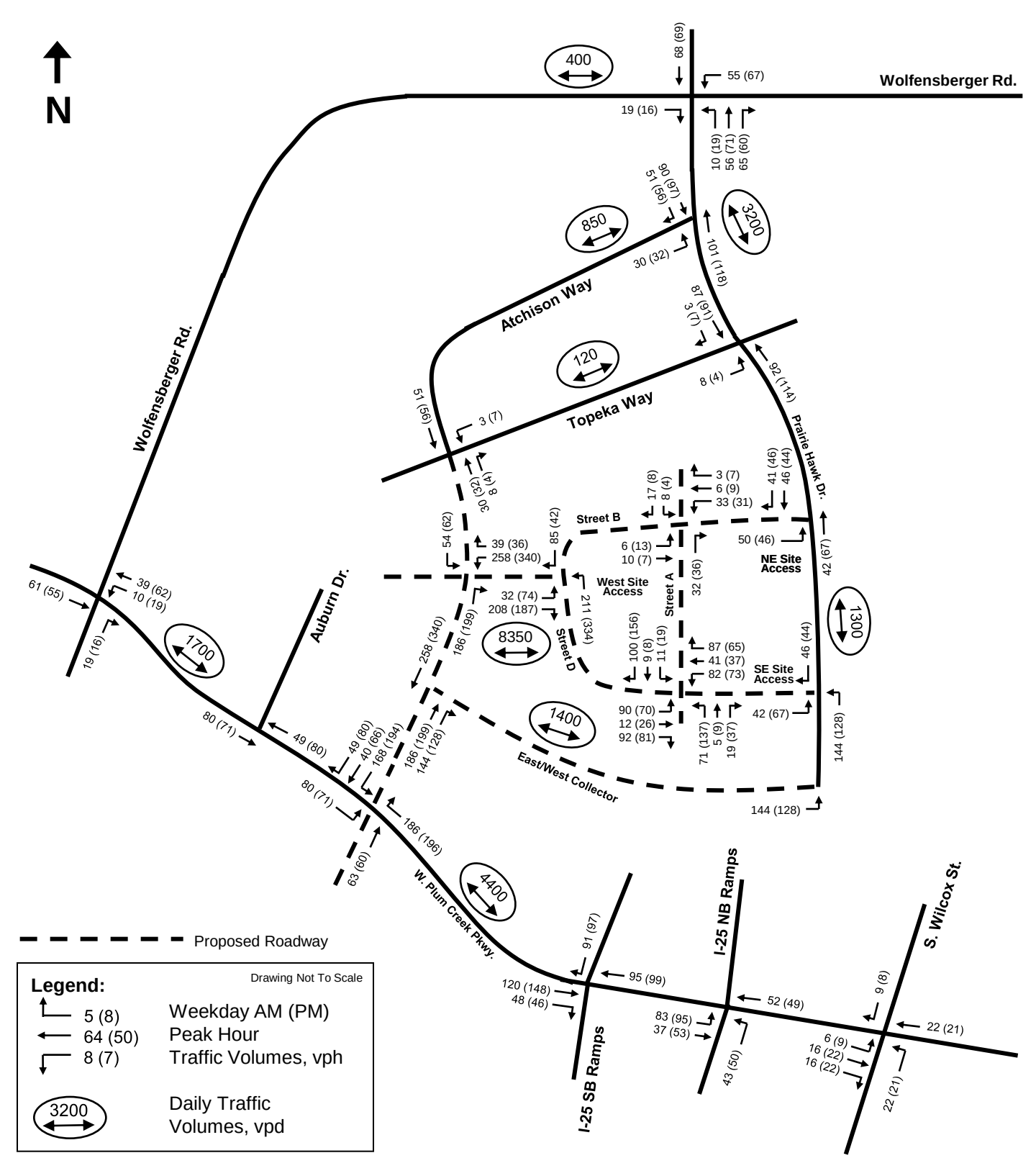
Site Generated Trip Assignment: 2027 (Build-Out) Analysis Horizon

The Brickyard

Confluence Companies

HKS #200726

Figure 24



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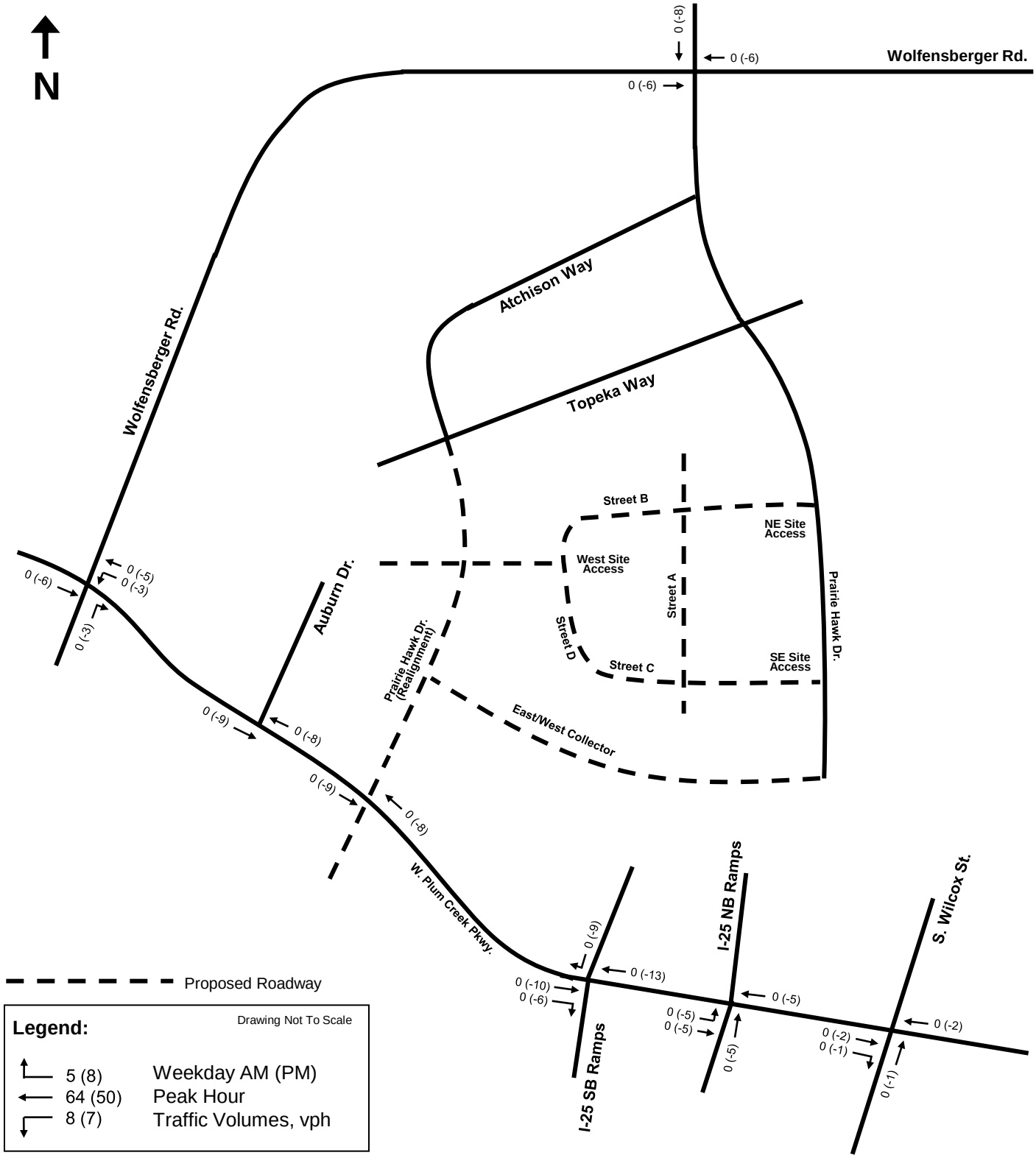
Site Generated Trip Assignment: 2050 (Long-Term) Analysis Horizon

The Brickyard

Confluence Companies

HKS #200726

Figure 25



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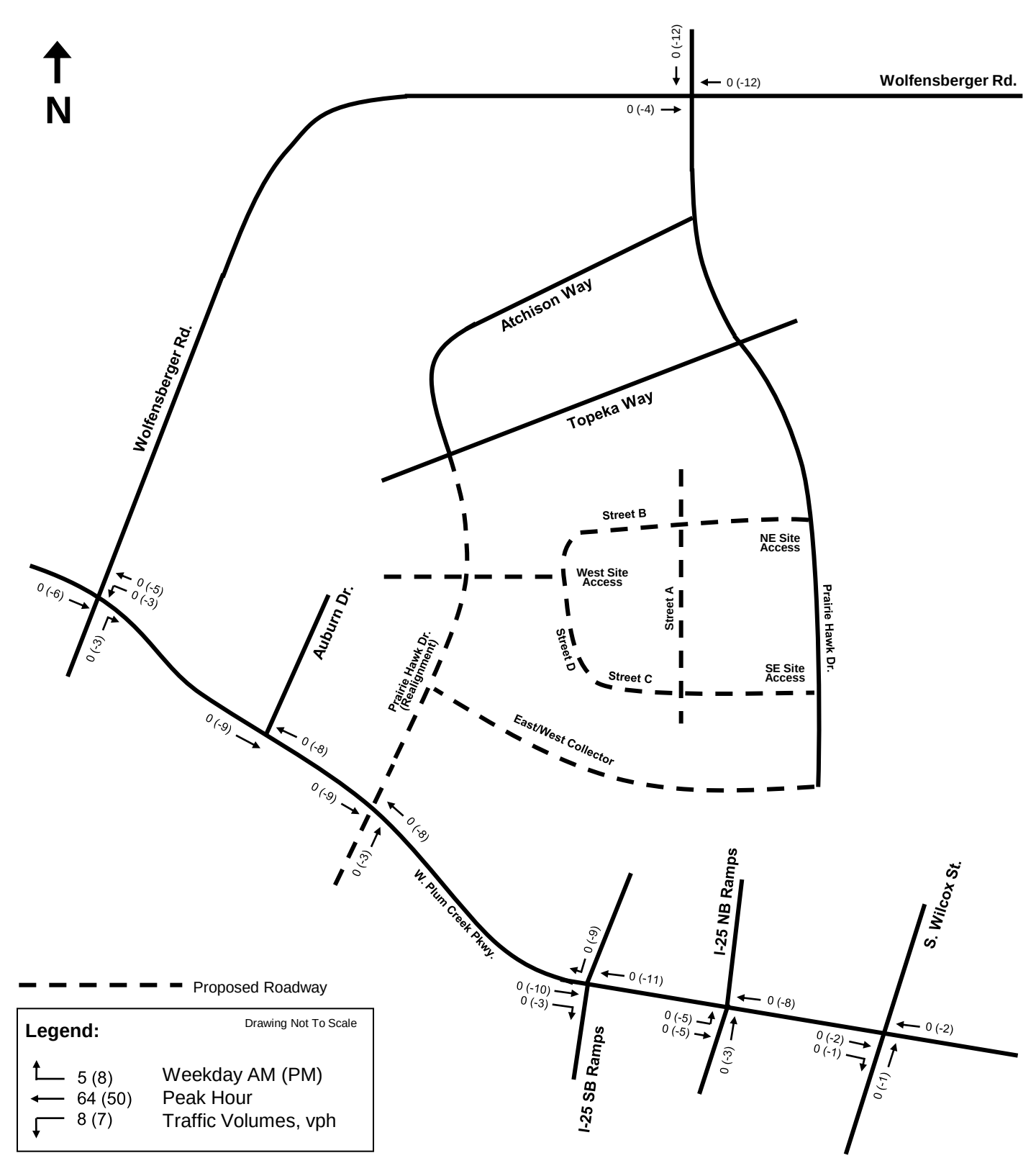
Site Generated Pass-By Trip Adjustments: 2027 (Build-Out) Analysis Horizon

The Brickyard

Confluence Companies

HKS #200726

Figure 26



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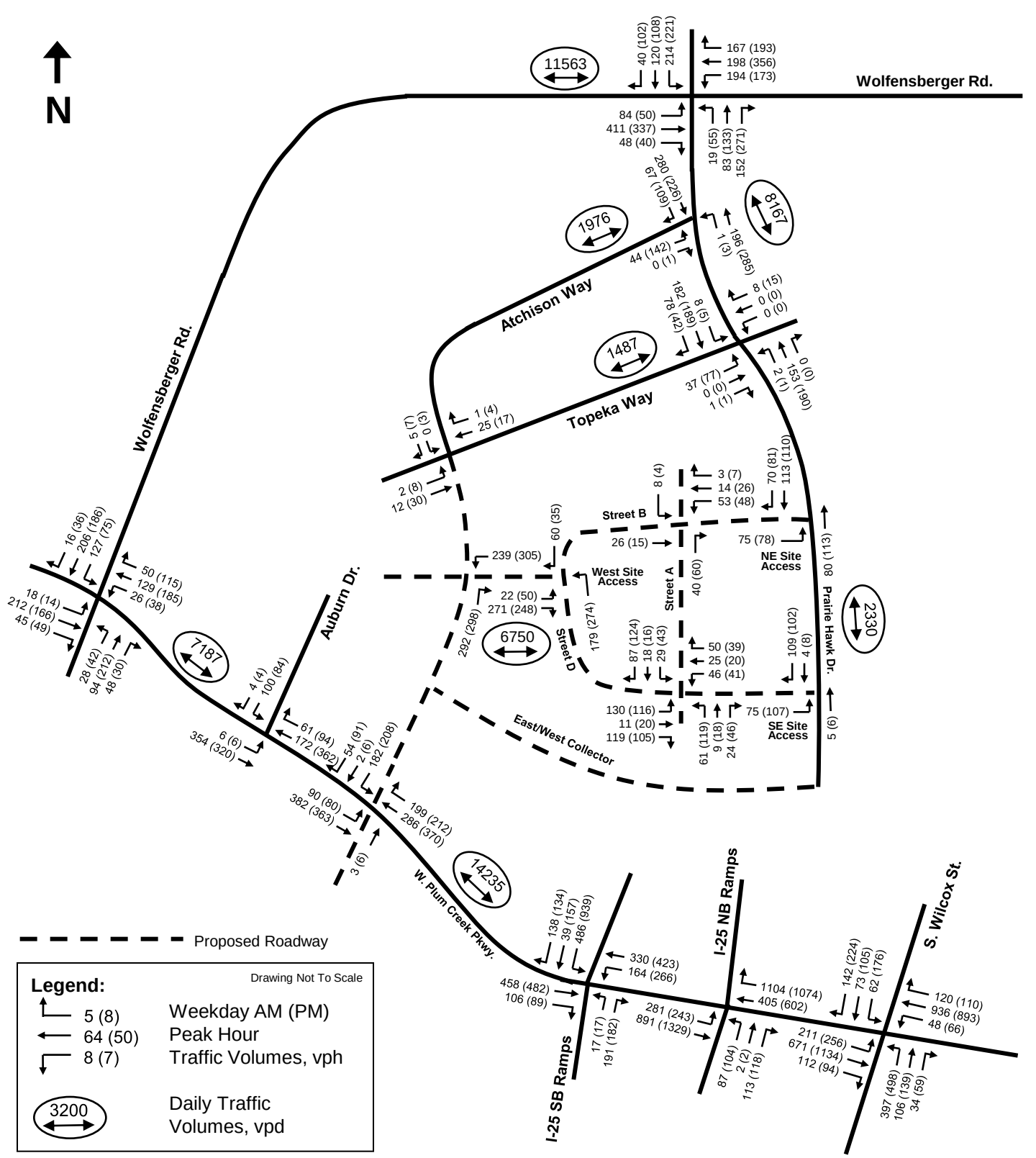
Site Generated Pass-By Trip Adjustments: 2050 (Long-Term) Analysis Horizon

The Brickyard

Confluence Companies

HKS #200726

Figure 27



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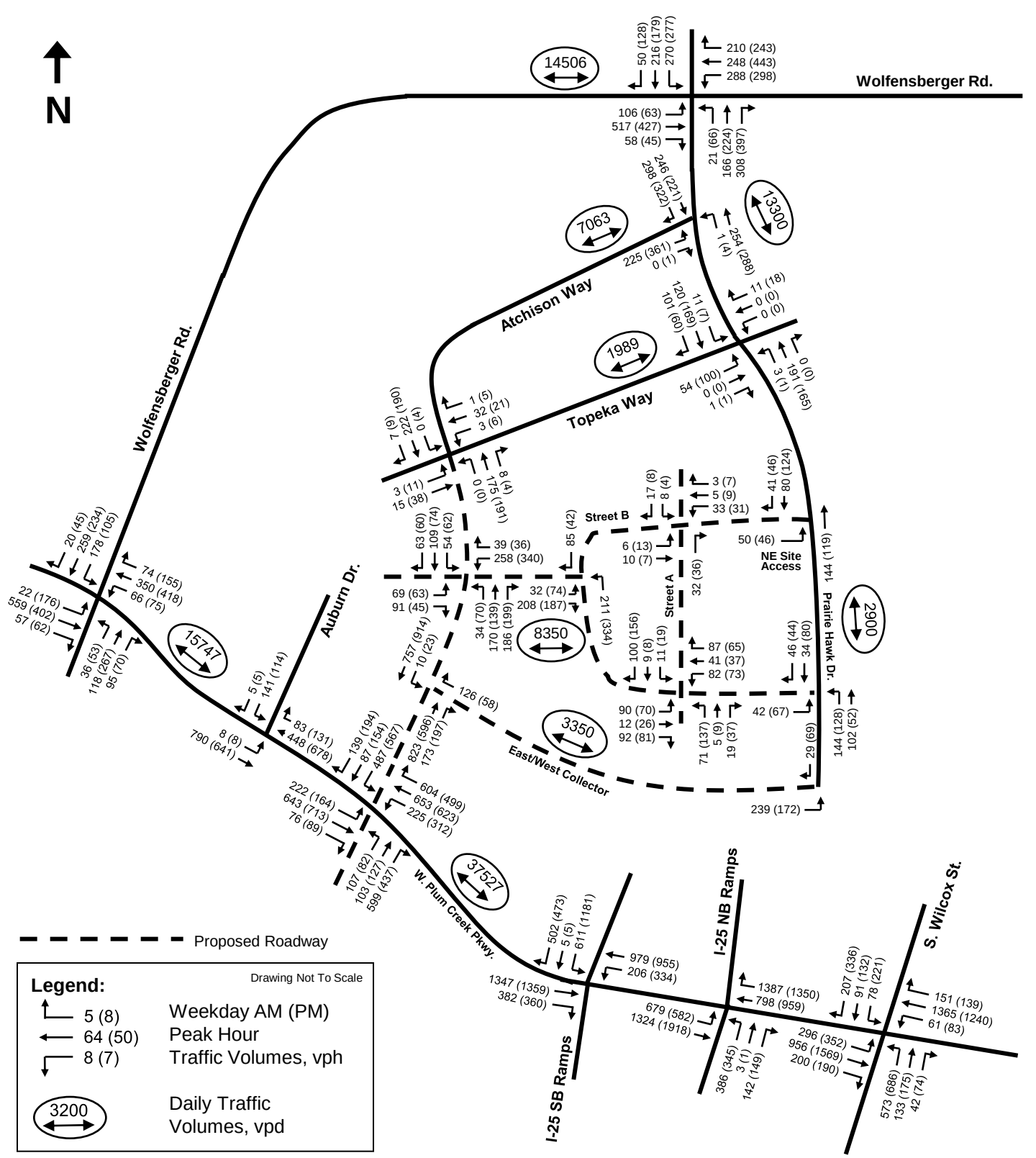
2027 (Build-Out) Analysis Horizon
Total Traffic Volumes

The Brickyard

Confluence Companies

HKS #200726

Figure 28



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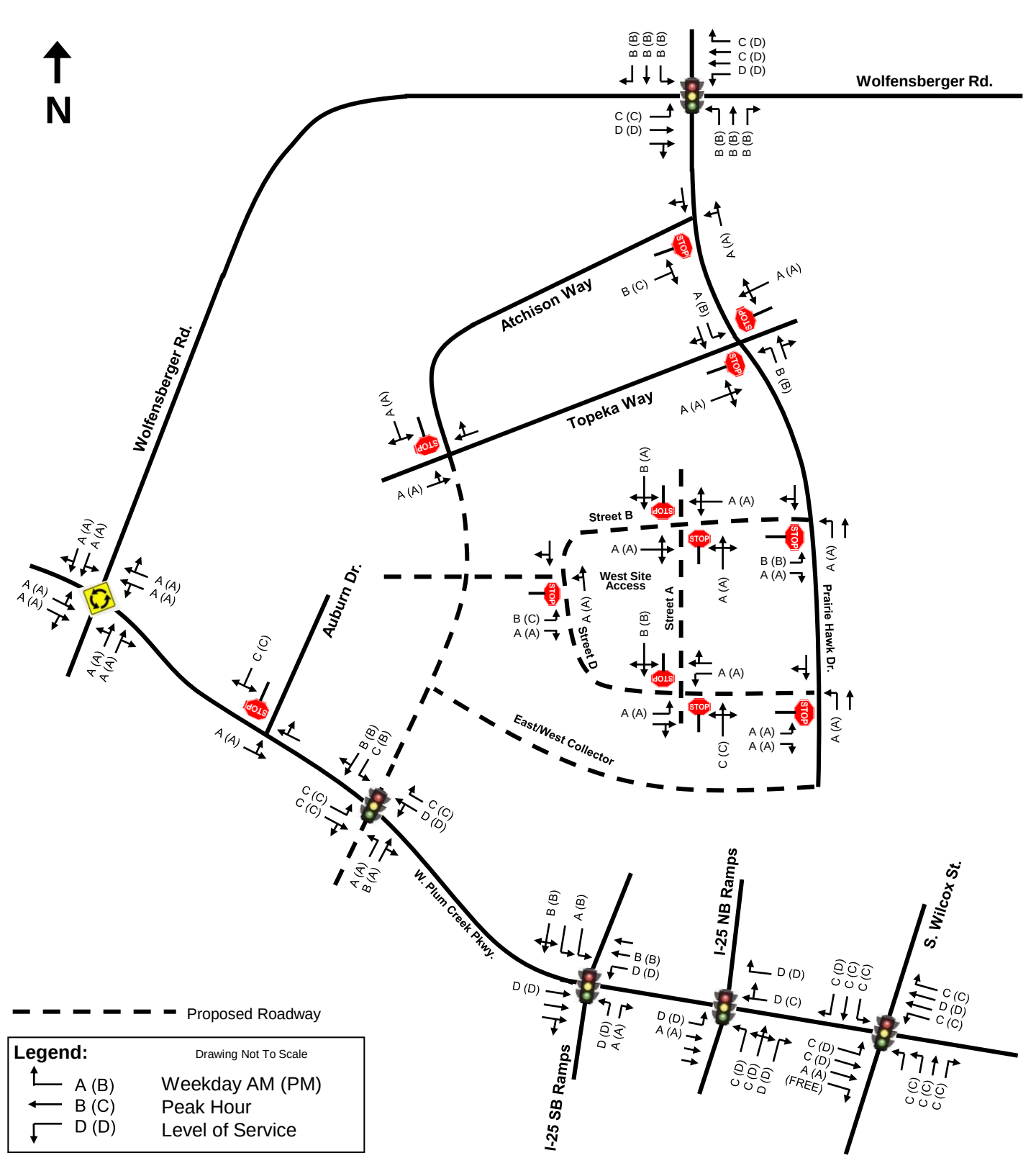
2050 (Long-Term) Analysis Horizon
Total Traffic Volumes

The Brickyard

Confluence Companies

HKS #200726

Figure 29



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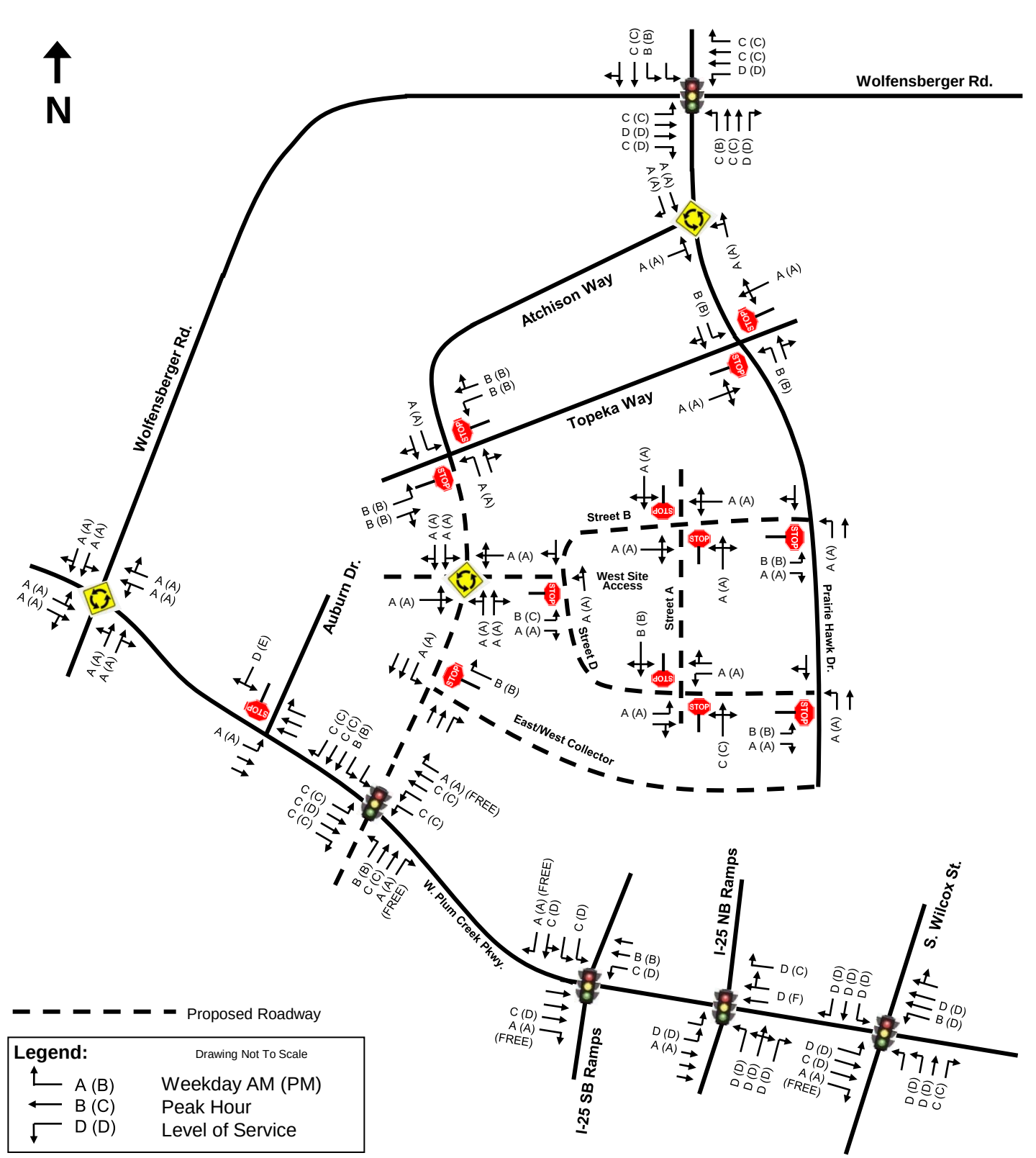
2027 (Build-Out) Analysis Horizon
Total Traffic Operational Conditions

The Brickyard

Confluence Companies

HKS #200726

Figure 30



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2050 (Long-Term) Analysis Horizon
Total Traffic Operational Conditions

The Brickyard
Confluence Companies
HKS #200726

Figure 31

APPENDIX “A”

2022 (EXISTING)
TRAFFIC VOLUME COUNTS

All Traffic Data Services, LLC
www.alltrafficdataservices.com

Site Code: 10
Station ID: 10
WOLFENSBERGER RD W.O .PRAIRIE HAWK DR

Latitude: 0' 0.0000 Undefined

Start Time	29-Jun-22 Wed	EB	WB							Total
12:00 AM		13	25							38
01:00		8	16							24
02:00		8	3							11
03:00		6	8							14
04:00		34	6							40
05:00		105	27							132
06:00		250	129							379
07:00		446	213							659
08:00		**550**	259							**809**
09:00		423	296							719
10:00		424	**303**							727
11:00		394	303							697
12:00 PM		**430**	299							729
01:00		349	259							608
02:00		336	318							654
03:00		351	351							702
04:00		391	462							853
05:00		361	**497**							**858**
06:00		331	365							696
07:00		195	282							477
08:00		138	249							387
09:00		86	161							247
10:00		50	105							155
11:00		22	74							96
Total		5701	5010							10711
Percent		53.2%	46.8%							
AM Peak	-	08:00	10:00	-	-	-	-	-	-	08:00
Vol.	-	550	303	-	-	-	-	-	-	809
PM Peak	-	12:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	430	497	-	-	-	-	-	-	858

All Traffic Data Services, LLC
www.alltrafficdataservices.com

Site Code: 10
Station ID: 10
WOLFENSBERGER RD W.O .PRAIRIE HAWK DR

Latitude: 0' 0.0000 Undefined

Start Time	30-Jun-22 Thu	EB	WB							Total
12:00 AM		21	29							50
01:00		14	16							30
02:00		4	9							13
03:00		8	2							10
04:00		31	6							37
05:00		97	29							126
06:00		228	106							334
07:00		409	170							579
08:00		**485**	230							**715**
09:00		413	262							675
10:00		371	287							658
11:00		371	**336**							707
12:00 PM		365	370							735
01:00		355	324							679
02:00		352	341							693
03:00		**381**	383							764
04:00		363	**443**							**806**
05:00		334	431							765
06:00		286	380							666
07:00		184	275							459
08:00		127	251							378
09:00		82	170							252
10:00		77	105							182
11:00		27	60							87
Total		5385	5015							10400
Percent		51.8%	48.2%							
AM Peak	-	08:00	11:00	-	-	-	-	-	-	08:00
Vol.	-	485	336	-	-	-	-	-	-	715
PM Peak	-	15:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	381	443	-	-	-	-	-	-	806
Grand Total		11086	10025							21111
Percent		52.5%	47.5%							
ADT		ADT 10,497		AADT 10,497						

All Traffic Data Services, LLC
www.alltrafficdataservices.com

Site Code: 11
Station ID: 11
PRAIRIE HAWK DR S.O. WOLFENSBERGER RD

Latitude: 0' 0.0000 Undefined

Start Time	29-Jun-22 Wed	NB	SB							Total
12:00 AM		7	7							14
01:00		1	5							6
02:00		4	0							4
03:00		7	7							14
04:00		12	21							33
05:00		22	43							65
06:00		31	122							153
07:00		50	154							204
08:00		107	**205**							312
09:00		137	137							274
10:00		106	121							227
11:00		**183**	171							**354**
12:00 PM		203	168							371
01:00		141	**169**							310
02:00		159	144							303
03:00		201	103							304
04:00		**224**	148							**372**
05:00		188	108							296
06:00		137	83							220
07:00		35	30							65
08:00		42	18							60
09:00		21	11							32
10:00		12	8							20
11:00		12	11							23
Total		2042	1994							4036
Percent		50.6%	49.4%							
AM Peak	-	11:00	08:00	-	-	-	-	-	-	11:00
Vol.	-	183	205	-	-	-	-	-	-	354
PM Peak	-	16:00	13:00	-	-	-	-	-	-	16:00
Vol.	-	224	169	-	-	-	-	-	-	372

All Traffic Data Services, LLC
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Site Code: 11
Station ID: 11
PRAIRIE HAWK DR S.O. WOLFENSBERGER RD

Latitude: 0' 0.0000 Undefined

Start Time	30-Jun-22 Thu	NB	SB							Total
12:00 AM		9	11							20
01:00		5	9							14
02:00		14	5							19
03:00		1	2							3
04:00		12	21							33
05:00		10	37							47
06:00		30	105							135
07:00		40	142							182
08:00		90	157							247
09:00		**134**	**174**							**308**
10:00		119	114							233
11:00		124	101							225
12:00 PM		174	**164**							**338**
01:00		105	137							242
02:00		169	150							319
03:00		194	130							324
04:00		**199**	120							319
05:00		163	69							232
06:00		82	105							187
07:00		75	28							103
08:00		33	44							77
09:00		74	5							79
10:00		4	3							7
11:00		7	5							12
Total		1867	1838							3705
Percent		50.4%	49.6%							
AM Peak	-	09:00	09:00	-	-	-	-	-	-	09:00
Vol.	-	134	174	-	-	-	-	-	-	308
PM Peak	-	16:00	12:00	-	-	-	-	-	-	12:00
Vol.	-	199	164	-	-	-	-	-	-	338
Grand Total		3909	3832							7741
Percent		50.5%	49.5%							
ADT		ADT 1,812		AADT 1,812						

All Traffic Data Services, LLC
www.alltrafficdataservices.com

Site Code: 12
Station ID: 12
ATCHISON WAY S.O. PRAIRIE HAWK DR

Latitude: 0' 0.0000 Undefined

Start Time	29-Jun-22 Wed	EB	WB							Total
12:00 AM		1	2							3
01:00		0	0							0
02:00		0	0							0
03:00		2	2							4
04:00		6	4							10
05:00		7	8							15
06:00		10	78							88
07:00		25	92							117
08:00		47	**93**							140
09:00		60	49							109
10:00		39	48							87
11:00		**69**	84							**153**
12:00 PM		106	87							193
01:00		59	80							139
02:00		70	73							143
03:00		**125**	64							189
04:00		125	**92**							**217**
05:00		112	82							194
06:00		92	52							144
07:00		30	18							48
08:00		23	12							35
09:00		13	5							18
10:00		3	1							4
11:00		4	2							6
Total		1028	1028							2056
Percent		50.0%	50.0%							
AM Peak	-	11:00	08:00	-	-	-	-	-	-	11:00
Vol.	-	69	93	-	-	-	-	-	-	153
PM Peak	-	15:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	125	92	-	-	-	-	-	-	217

Site Code: 12
Station ID: 12
ATCHISON WAY S.O. PRAIRIE HAWK DR

Latitude: 0' 0.0000 Undefined

Start Time	30-Jun-22 Thu	EB	WB							Total
12:00 AM		2	6							8
01:00		2	7							9
02:00		10	3							13
03:00		0	0							0
04:00		9	5							14
05:00		3	16							19
06:00		11	64							75
07:00		13	**91**							104
08:00		42	68							110
09:00		**64**	79							**143**
10:00		44	42							86
11:00		58	37							95
12:00 PM		80	**83**							163
01:00		44	54							98
02:00		75	79							154
03:00		**109**	75							**184**
04:00		98	58							156
05:00		82	33							115
06:00		39	24							63
07:00		29	17							46
08:00		23	4							27
09:00		9	0							9
10:00		1	1							2
11:00		3	3							6
Total		850	849							1699
Percent		50.0%	50.0%							
AM Peak	-	09:00	07:00	-	-	-	-	-	-	09:00
Vol.	-	64	91	-	-	-	-	-	-	143
PM Peak	-	15:00	12:00	-	-	-	-	-	-	15:00
Vol.	-	109	83	-	-	-	-	-	-	184
Grand Total		1878	1877							3755
Percent		50.0%	50.0%							
ADT		ADT 1,886		AADT 1,886						

All Traffic Data Services, LLC
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Site Code: 13
Station ID: 13
TOPEKA WAY W.O. PRAIRIE HAWK DR

Latitude: 0' 0.0000 Undefined

Start Time	29-Jun-22 Wed	EB	WB							Total
12:00 AM		2	7							9
01:00		5	2							7
02:00		8	5							13
03:00		4	7							11
04:00		10	20							30
05:00		14	43							57
06:00		16	48							64
07:00		47	**91**							138
08:00		47	61							108
09:00		56	53							109
10:00		**73**	63							136
11:00		72	69							**141**
12:00 PM		57	**70**							127
01:00		55	39							94
02:00		51	35							86
03:00		73	42							115
04:00		**101**	36							**137**
05:00		43	26							69
06:00		5	6							11
07:00		2	0							2
08:00		3	5							8
09:00		5	5							10
10:00		10	6							16
11:00		2	7							9
Total		761	746							1507
Percent		50.5%	49.5%							
AM Peak	-	10:00	07:00	-	-	-	-	-	-	11:00
Vol.	-	73	91	-	-	-	-	-	-	141
PM Peak	-	16:00	12:00	-	-	-	-	-	-	16:00
Vol.	-	101	70	-	-	-	-	-	-	137

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Site Code: 13
Station ID: 13
TOPEKA WAY W.O. PRAIRIE HAWK DR

Latitude: 0' 0.0000 Undefined

Start Time	30-Jun-22 Thu	EB	WB							Total
12:00 AM		3	0							3
01:00		5	2							7
02:00		2	0							2
03:00		2	5							7
04:00		5	11							16
05:00		15	40							55
06:00		18	35							53
07:00		21	**68**							89
08:00		34	48							82
09:00		44	55							99
10:00		59	51							110
11:00		**64**	59							**123**
12:00 PM		58	**67**							**125**
01:00		65	59							124
02:00		72	49							121
03:00		**74**	42							116
04:00		60	24							84
05:00		28	17							45
06:00		16	14							30
07:00		8	10							18
08:00		5	3							8
09:00		1	1							2
10:00		0	1							1
11:00		0	4							4
Total		659	665							1324
Percent		49.8%	50.2%							
AM Peak	-	11:00	07:00	-	-	-	-	-	-	11:00
Vol.	-	64	68	-	-	-	-	-	-	123
PM Peak	-	15:00	12:00	-	-	-	-	-	-	12:00
Vol.	-	74	67	-	-	-	-	-	-	125
Grand Total		1420	1411							2831
Percent		50.2%	49.8%							
ADT		ADT 1,404		AADT 1,404						

All Traffic Data Services, LLC
www.alltrafficdataservices.com

Site Code: 14
Station ID: 14
PLUM CREEK PKWY W.O. I25

Latitude: 0' 0.0000 Undefined

Start Time	29-Jun-22 Wed	EB	WB							Total
12:00 AM		19	21							40
01:00		9	17							26
02:00		5	9							14
03:00		2	12							14
04:00		7	28							35
05:00		40	66							106
06:00		108	217							325
07:00		204	319							523
08:00		**303**	**462**							**765**
09:00		245	361							606
10:00		212	323							535
11:00		231	356							587
12:00 PM		193	386							579
01:00		169	348							517
02:00		206	340							546
03:00		261	**416**							677
04:00		343	377							**720**
05:00		**352**	328							680
06:00		270	340							610
07:00		221	225							446
08:00		171	179							350
09:00		99	106							205
10:00		65	77							142
11:00		38	70							108
Total		3773	5383							9156
Percent		41.2%	58.8%							
AM Peak	-	08:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	303	462	-	-	-	-	-	-	765
PM Peak	-	17:00	15:00	-	-	-	-	-	-	16:00
Vol.	-	352	416	-	-	-	-	-	-	720

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Site Code: 14
Station ID: 14
PLUM CREEK PKWY W.O. I25

Latitude: 0' 0.0000 Undefined

Start Time	30-Jun-22 Thu	EB	WB							Total
12:00 AM		14	23							37
01:00		4	10							14
02:00		3	12							15
03:00		3	11							14
04:00		4	19							23
05:00		30	43							73
06:00		94	155							249
07:00		197	171							368
08:00		**368**	246							**614**
09:00		222	265							487
10:00		243	262							505
11:00		231	**270**							501
12:00 PM		244	343							587
01:00		228	389							617
02:00		251	299							550
03:00		275	341							616
04:00		**286**	406							692
05:00		253	**476**							**729**
06:00		275	396							671
07:00		211	283							494
08:00		175	223							398
09:00		121	190							311
10:00		63	208							271
11:00		39	57							96
Total		3834	5098							8932
Percent		42.9%	57.1%							
AM Peak	-	08:00	11:00	-	-	-	-	-	-	08:00
Vol.	-	368	270	-	-	-	-	-	-	614
PM Peak	-	16:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	286	476	-	-	-	-	-	-	729
Grand Total		7607	10481							18088
Percent		42.1%	57.9%							
ADT		ADT 9,072		AADT 9,072						

All Traffic Data Services, LLC
www.alltrafficdataservices.com

Site Code: 15
Station ID: 15
PLUM CREEK PKWY S.O. WOLFENSBERGER RD

Latitude: 0' 0.0000 Undefined

Start Time	29-Jun-22 Wed	NB	SB							Total
12:00 AM		6	7							13
01:00		1	3							4
02:00		3	6							9
03:00		2	13							15
04:00		9	40							49
05:00		35	120							155
06:00		78	277							355
07:00		123	**365**							**488**
08:00		144	256							400
09:00		146	168							314
10:00		158	165							323
11:00		**166**	170							336
12:00 PM		172	164							336
01:00		163	134							297
02:00		185	183							368
03:00		227	233							460
04:00		**264**	**260**							**524**
05:00		228	199							427
06:00		148	95							243
07:00		100	71							171
08:00		79	38							117
09:00		41	14							55
10:00		17	19							36
11:00		4	4							8
Total		2499	3004							5503
Percent		45.4%	54.6%							
AM Peak	-	11:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	166	365	-	-	-	-	-	-	488
PM Peak	-	16:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	264	260	-	-	-	-	-	-	524

Site Code: 15
Station ID: 15
PLUM CREEK PKWY S.O. WOLFENSBERGER RD

Latitude: 0' 0.0000 Undefined

Start Time	30-Jun-22 Thu	NB	SB							Total
12:00 AM		2	5							7
01:00		2	6							8
02:00		1	3							4
03:00		2	5							7
04:00		9	27							36
05:00		51	83							134
06:00		73	155							228
07:00		115	**251**							**366**
08:00		109	151							260
09:00		132	142							274
10:00		**178**	157							335
11:00		166	169							335
12:00 PM		138	177							315
01:00		149	157							306
02:00		182	179							361
03:00		**218**	**181**							**399**
04:00		204	176							380
05:00		159	147							306
06:00		122	99							221
07:00		81	67							148
08:00		83	34							117
09:00		42	29							71
10:00		20	17							37
11:00		6	8							14
Total		2244	2425							4669
Percent		48.1%	51.9%							
AM Peak	-	10:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	178	251	-	-	-	-	-	-	366
PM Peak	-	15:00	15:00	-	-	-	-	-	-	15:00
Vol.	-	218	181	-	-	-	-	-	-	399
Grand Total		4743	5429							10172
Percent		46.6%	53.4%							
ADT		ADT 5,030		AADT 5,030						

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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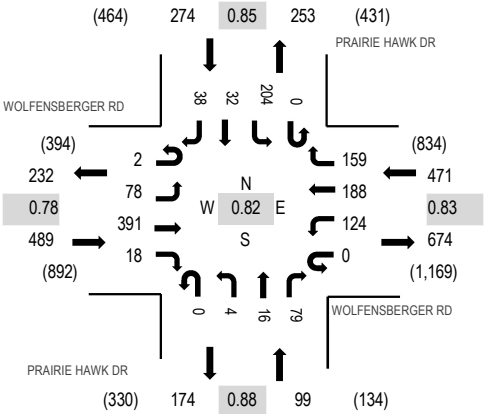
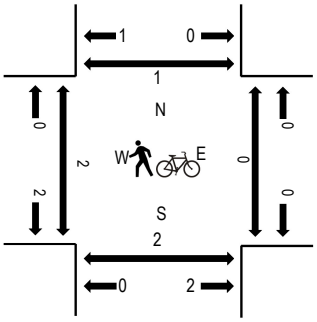
Location: 1 PRAIRIE HAWK DR & WOLFENSBERGER RD AM
Date: Thursday, June 30, 2022
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



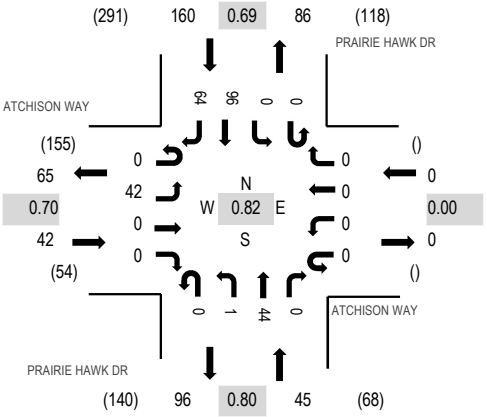
Traffic Counts

Interval Start Time	WOLFENSBERGER RD Eastbound				WOLFENSBERGER RD Westbound				PRAIRIE HAWK DR Northbound				PRAIRIE HAWK DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	11	70	2	0	18	30	23	0	1	1	6	0	28	3	6	199	991	0	0	0	1
7:15 AM	0	11	88	3	0	22	36	35	0	0	2	12	0	28	4	6	247	1,106	0	0	0	1
7:30 AM	0	14	83	8	0	26	29	32	0	1	0	5	0	40	7	12	257	1,157	1	0	1	0
7:45 AM	0	16	86	11	0	48	32	32	0	0	1	6	0	43	4	9	288	1,213	0	0	1	0
8:00 AM	1	19	94	3	0	32	57	28	0	2	5	19	0	40	7	7	314	1,333	0	0	0	0
8:15 AM	0	13	74	5	0	28	41	45	0	0	4	15	0	48	12	13	298		2	0	0	0
8:30 AM	0	17	103	3	0	25	41	32	0	0	2	24	0	50	4	12	313		0	0	2	0
8:45 AM	1	29	120	7	0	39	49	54	0	2	5	21	0	66	9	6	408		0	0	0	1
Count Total	2	130	718	42	0	238	315	281	0	6	20	108	0	343	50	71	2,324		3	0	4	3
Peak Hour	2	78	391	18	0	124	188	159	0	4	16	79	0	204	32	38	1,333		2	0	2	1

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

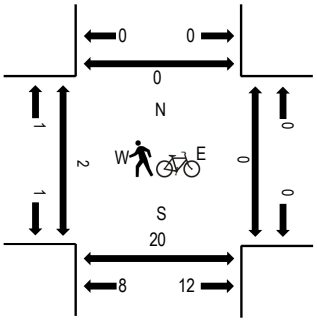
Location: 2 PRAIRIE HAWK DR & ATCHISON WAY AM
Date: Thursday, June 30, 2022
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



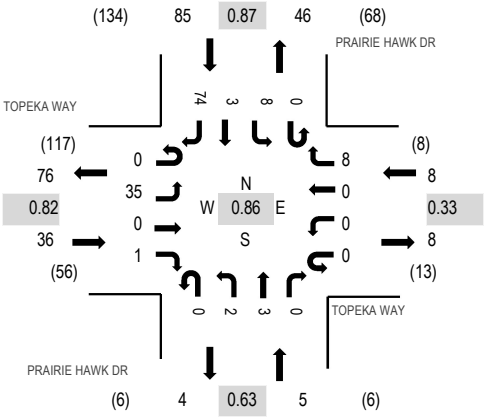
Traffic Counts

Interval Start Time	ATCHISON WAY Eastbound				ATCHISON WAY Westbound				PRAIRIE HAWK DR Northbound				PRAIRIE HAWK DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	2	0	0	0	0	0	0	0	0	3	0	0	0	2	15	22	166	0	0	0	0
7:15 AM	0	8	0	0	0	0	0	0	0	0	8	0	0	0	12	14	42	206	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	1	3	0	0	0	8	18	31	216	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	2	6	0	0	0	22	40	71	243	0	0	1	0
8:00 AM	0	7	0	0	0	0	0	0	0	0	14	0	0	0	25	16	62	247	0	0	0	0
8:15 AM	0	8	0	0	0	0	0	0	0	0	7	0	0	0	28	9	52		0	0	4	0
8:30 AM	0	15	0	0	0	0	0	0	0	1	11	0	0	0	19	12	58		2	0	14	0
8:45 AM	0	12	0	0	0	0	0	0	0	0	12	0	0	0	24	27	75		0	0	2	0
Count Total	0	54	0	0	0	0	0	0	0	4	64	0	0	0	140	151	413		2	0	21	0
Peak Hour	0	42	0	0	0	0	0	0	0	1	44	0	0	0	96	64	247		2	0	20	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

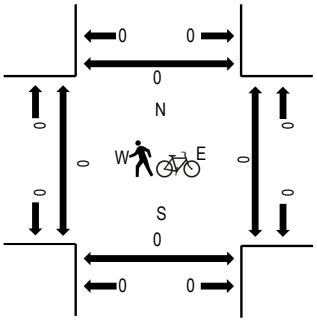
Location: 3 PRAIRIE HAWK DR & TOPEKA WAY AM
Date: Thursday, June 30, 2022
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	TOPEKA WAY Eastbound				TOPEKA WAY Westbound				PRAIRIE HAWK DR Northbound				PRAIRIE HAWK DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	7	11	70	0	0	0	0
7:15 AM	0	8	0	0	0	0	0	0	0	0	0	0	0	1	1	10	20	98	0	0	0	0
7:30 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	1	1	7	14	113	0	0	0	0
7:45 AM	0	4	0	0	0	0	0	0	0	1	0	0	2	2	0	16	25	127	0	0	0	0
8:00 AM	0	8	0	0	0	0	0	6	0	0	1	0	0	3	1	20	39	134	0	0	0	0
8:15 AM	0	7	0	1	0	0	0	1	0	0	1	0	0	4	2	19	35		0	0	0	0
8:30 AM	0	9	0	0	0	0	0	0	0	1	0	0	0	0	0	18	28		0	0	0	0
8:45 AM	0	11	0	0	0	0	0	1	0	1	1	0	0	1	0	17	32		0	0	0	0
Count Total	0	55	0	1	0	0	0	8	0	3	3	0	2	13	5	114	204		0	0	0	0
Peak Hour	0	35	0	1	0	0	0	8	0	2	3	0	0	8	3	74	134		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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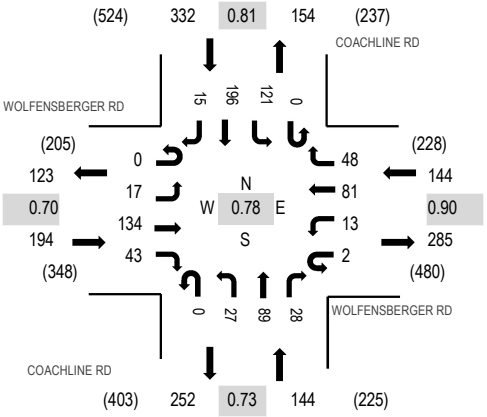
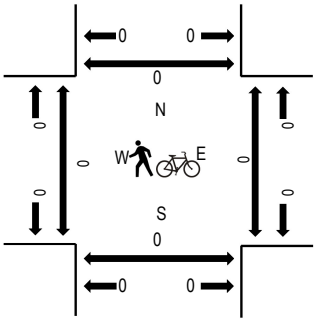
Location: 4 COACHLINE RD & WOLFENSBERGER RD AM
Date: Thursday, June 30, 2022
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



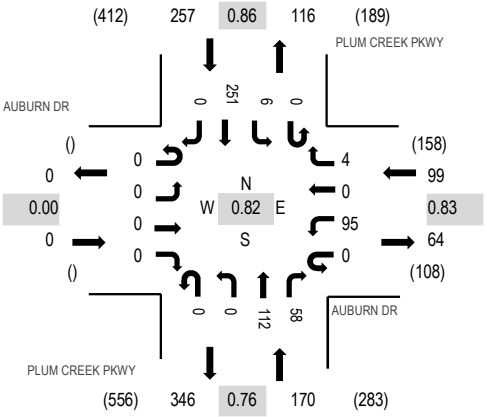
Traffic Counts

Interval Start Time	WOLFENSBERGER RD Eastbound				WOLFENSBERGER RD Westbound				COACHLINE RD Northbound				COACHLINE RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	2	24	3	0	3	14	4	0	3	11	3	0	12	19	1	99	511	0	0	0	0
7:15 AM	0	3	26	10	0	0	13	6	0	2	8	8	0	15	26	1	118	581	0	0	0	0
7:30 AM	0	2	27	7	1	2	12	5	0	5	10	0	0	16	36	3	126	652	0	0	2	0
7:45 AM	0	5	35	10	0	0	20	4	0	3	23	5	0	23	35	5	168	722	0	0	0	0
8:00 AM	0	4	29	9	2	1	19	15	0	7	14	3	0	21	40	5	169	814	0	0	0	0
8:15 AM	0	4	27	10	0	4	22	13	0	4	23	6	0	27	44	5	189		0	0	0	0
8:30 AM	0	5	30	7	0	2	17	9	0	6	24	8	0	27	59	2	196		0	0	0	0
8:45 AM	0	4	48	17	0	6	23	11	0	10	28	11	0	46	53	3	260		0	0	0	0
Count Total	0	29	246	73	3	18	140	67	0	40	141	44	0	187	312	25	1,325		0	0	2	0
Peak Hour	0	17	134	43	2	13	81	48	0	27	89	28	0	121	196	15	814		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

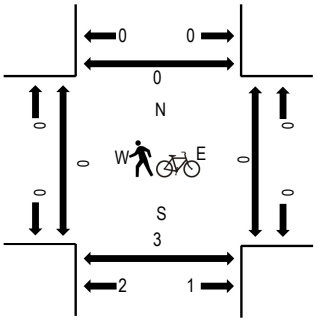
Location: 5 PLUM CREEK PKWY & AUBURN DR AM
Date: Thursday, June 30, 2022
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	AUBURN DR Eastbound				AUBURN DR Westbound				PLUM CREEK PKWY Northbound				PLUM CREEK PKWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	11	0	0	0	0	15	8	0	1	27	0	62	327	0	0	1	0
7:15 AM	0	0	0	0	0	15	0	0	0	0	14	10	0	2	33	0	74	366	0	0	1	0
7:30 AM	0	0	0	0	0	16	0	0	0	0	17	7	0	0	46	0	86	405	0	1	1	0
7:45 AM	0	0	0	0	0	17	0	0	0	0	27	15	0	1	45	0	105	471	0	0	0	0
8:00 AM	0	0	0	0	0	14	0	2	0	0	18	13	0	0	54	0	101	526	0	0	1	0
8:15 AM	0	0	0	0	0	23	0	1	0	0	22	13	0	2	52	0	113		0	0	0	0
8:30 AM	0	0	0	0	0	29	0	1	0	0	33	15	0	2	72	0	152		0	0	0	0
8:45 AM	0	0	0	0	0	29	0	0	0	0	39	17	0	2	73	0	160		0	0	2	0
Count Total	0	0	0	0	0	154	0	4	0	0	185	98	0	10	402	0	853		0	1	6	0
Peak Hour	0	0	0	0	0	95	0	4	0	0	112	58	0	6	251	0	526		0	0	3	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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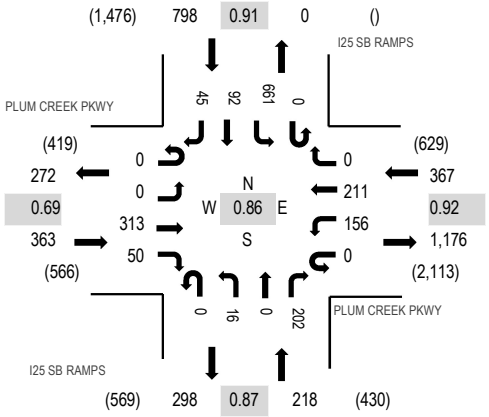
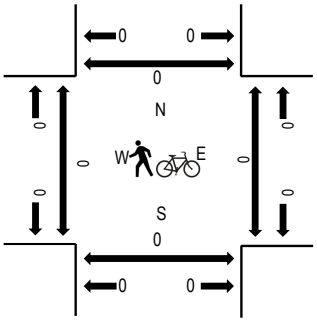
Location: 6 I25 SB RAMPS & PLUM CREEK PKWY AM
Date: Thursday, June 30, 2022
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	PLUM CREEK PKWY Eastbound				PLUM CREEK PKWY Westbound				I25 SB RAMPS Northbound				I25 SB RAMPS Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	32	6	0	34	20	0	0	3	0	47	0	150	16	2	310	1,355	0	0	0	0
7:15 AM	0	0	31	15	0	42	24	0	0	3	0	48	0	125	20	8	316	1,405	0	0	0	0
7:30 AM	0	0	51	9	0	38	20	0	0	3	0	48	0	129	22	6	326	1,493	0	0	0	0
7:45 AM	0	0	50	9	0	36	48	0	0	2	0	58	0	168	24	8	403	1,641	0	0	0	0
8:00 AM	0	0	49	9	0	37	36	0	0	2	0	42	0	152	23	10	360	1,746	0	0	0	0
8:15 AM	0	0	53	13	0	39	61	0	0	6	0	57	0	134	25	16	404		0	0	0	0
8:30 AM	0	0	91	17	0	43	54	0	0	3	0	46	0	188	22	10	474		0	0	0	0
8:45 AM	0	0	120	11	0	37	60	0	0	5	0	57	0	187	22	9	508		0	0	0	0
Count Total	0	0	477	89	0	306	323	0	0	27	0	403	0	1,233	174	69	3,101		0	0	0	0
Peak Hour	0	0	313	50	0	156	211	0	0	16	0	202	0	661	92	45	1,746		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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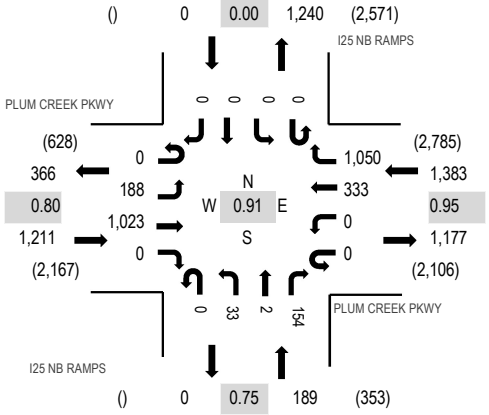
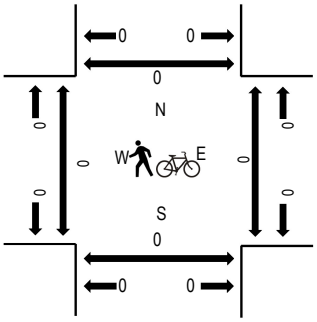
Location: 7 I25 NB RAMPS & PLUM CREEK PKWY AM
Date: Thursday, June 30, 2022
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	PLUM CREEK PKWY Eastbound				PLUM CREEK PKWY Westbound				I25 NB RAMPS Northbound				I25 NB RAMPS Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	46	192	0	0	0	51	267	0	4	1	21	0	0	0	0	582	2,522	0	0	0	0
7:15 AM	0	38	171	0	0	0	59	302	0	5	0	27	0	0	0	0	602	2,556	0	0	0	0
7:30 AM	0	43	193	0	0	0	56	298	0	3	0	34	0	0	0	0	627	2,617	0	0	0	0
7:45 AM	0	41	232	0	0	0	75	294	0	9	1	59	0	0	0	0	711	2,728	0	0	0	0
8:00 AM	0	35	224	0	0	0	69	247	0	10	1	30	0	0	0	0	616	2,783	0	0	0	0
8:15 AM	0	38	215	0	0	0	92	266	0	4	0	48	0	0	0	0	663		0	0	0	0
8:30 AM	0	55	266	0	0	0	91	282	0	8	0	36	0	0	0	0	738		0	0	0	0
8:45 AM	0	60	318	0	0	0	81	255	0	11	1	40	0	0	0	0	766		0	0	0	0
Count Total	0	356	1,811	0	0	0	574	2,211	0	54	4	295	0	0	0	0	5,305		0	0	0	0
Peak Hour	0	188	1,023	0	0	0	333	1,050	0	33	2	154	0	0	0	0	2,783		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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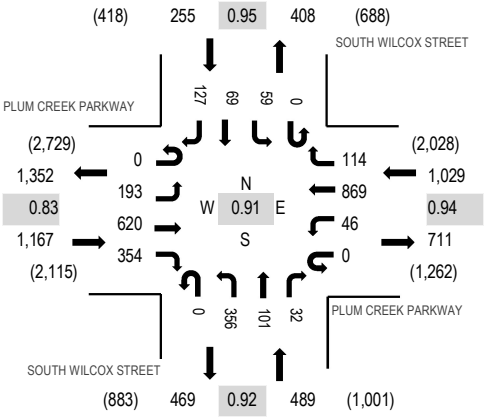
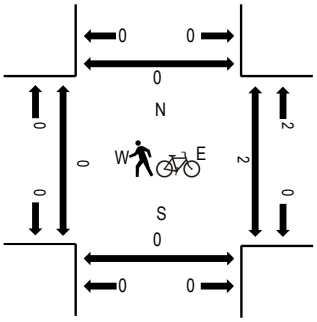
Location: 8 SOUTH WILCOX STREET & PLUM CREEK PARKWAY AM
Date: Thursday, June 30, 2022
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



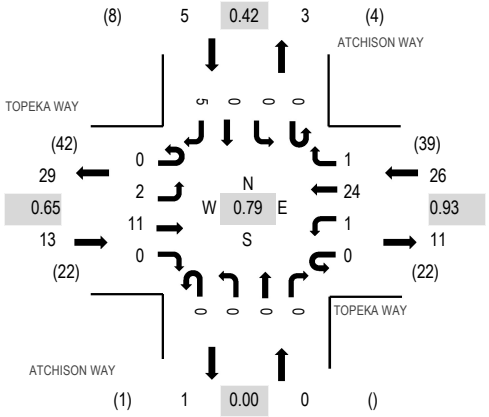
Traffic Counts

Interval Start Time	PLUM CREEK PARKWAY Eastbound				PLUM CREEK PARKWAY Westbound				SOUTH WILCOX STREET Northbound				SOUTH WILCOX STREET Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	24	118	72	0	13	190	16	0	113	16	4	0	8	9	23	606	2,622	0	0	0	0
7:15 AM	0	20	105	75	0	12	228	19	0	112	17	5	0	7	6	20	626	2,677	0	1	0	0
7:30 AM	0	31	125	77	0	12	228	27	0	88	16	2	0	5	13	14	638	2,747	0	0	0	0
7:45 AM	0	52	155	94	0	12	219	23	0	117	19	3	0	14	19	25	752	2,887	0	0	0	0
8:00 AM	0	39	137	79	0	9	189	26	0	90	24	7	0	13	20	28	661	2,940	0	0	0	0
8:15 AM	0	49	130	76	0	16	228	16	0	81	30	6	0	12	18	34	696		0	0	0	0
8:30 AM	0	41	174	90	0	7	233	33	0	105	24	8	0	16	14	33	778		0	1	0	0
8:45 AM	0	64	179	109	0	14	219	39	0	80	23	11	0	18	17	32	805		0	0	0	0
Count Total	0	320	1,123	672	0	95	1,734	199	0	786	169	46	0	93	116	209	5,562		0	2	0	0
Peak Hour	0	193	620	354	0	46	869	114	0	356	101	32	0	59	69	127	2,940		0	1	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

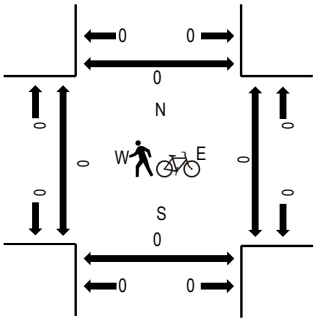
Location: 9 ATCHISON WAY & TOPEKA WAY AM
Date: Thursday, June 30, 2022
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



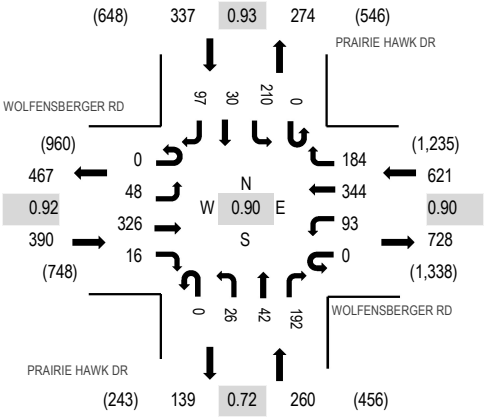
Traffic Counts

Interval Start Time	TOPEKA WAY Eastbound				TOPEKA WAY Westbound				ATCHISON WAY Northbound				ATCHISON WAY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	2	0	0	0	2	1	0	0	0	0	0	0	0	0	5	25	0	0	0	0
7:15 AM	0	0	5	0	0	0	4	0	0	0	0	0	0	1	0	0	10	26	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2	27	0	0	0	0
7:45 AM	0	0	1	0	0	0	6	0	0	0	0	0	0	0	0	1	8	38	0	0	0	0
8:00 AM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	6	44	0	0	0	0
8:15 AM	0	1	3	0	0	1	6	0	0	0	0	0	0	0	0	0	11		0	0	0	0
8:30 AM	0	1	3	0	0	0	7	0	0	0	0	0	0	0	0	2	13		0	0	0	0
8:45 AM	0	0	5	0	0	0	5	1	0	0	0	0	0	0	0	3	14		0	0	0	0
Count Total	0	2	20	0	0	1	36	2	0	0	0	0	0	2	0	6	69		0	0	0	0
Peak Hour	0	2	11	0	0	1	24	1	0	0	0	0	0	0	0	5	44		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

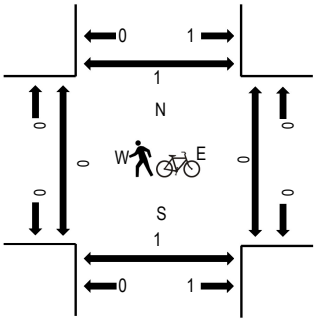
Location: 1 PRAIRIE HAWK DR & WOLFENSBERGER RD PM
Date: Thursday, June 30, 2022
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



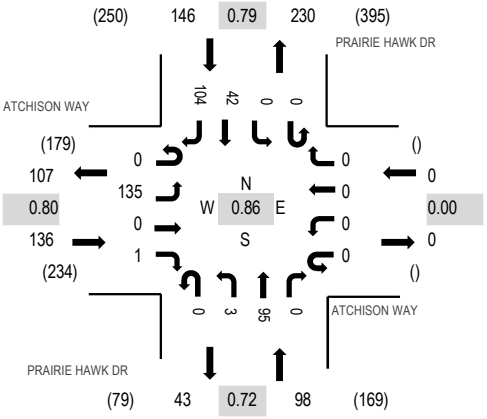
Traffic Counts

Interval Start Time	WOLFENSBERGER RD Eastbound				WOLFENSBERGER RD Westbound				PRAIRIE HAWK DR Northbound				PRAIRIE HAWK DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	13	81	7	0	29	94	57	0	8	10	42	0	54	4	32	431	1,608	0	0	0	0
4:15 PM	0	13	79	3	0	21	85	37	0	4	7	52	0	59	12	20	392	1,578	0	0	1	1
4:30 PM	0	11	95	1	0	19	93	53	0	11	18	65	0	50	9	24	449	1,589	0	0	0	0
4:45 PM	0	11	71	5	0	24	72	37	0	3	7	33	0	47	5	21	336	1,476	0	0	0	0
5:00 PM	0	16	79	9	0	25	89	45	0	7	18	47	0	36	6	24	401	1,479	0	0	0	0
5:15 PM	0	15	76	1	0	10	121	45	0	4	8	42	0	58	4	19	403		1	0	2	0
5:30 PM	0	17	60	3	0	17	76	43	0	6	7	22	0	55	6	24	336		0	0	0	0
5:45 PM	0	11	67	4	0	10	95	38	0	8	9	18	0	50	9	20	339		0	0	0	0
Count Total	0	107	608	33	0	155	725	355	0	51	84	321	0	409	55	184	3,087		1	0	3	1
Peak Hour	0	48	326	16	0	93	344	184	0	26	42	192	0	210	30	97	1,608		0	0	1	1

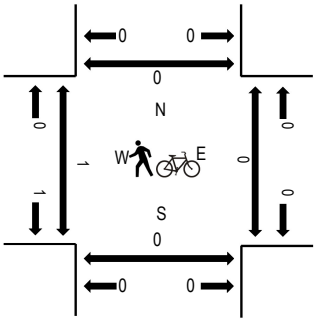
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 PRAIRIE HAWK DR & ATCHISON WAY PM
Date: Thursday, June 30, 2022
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

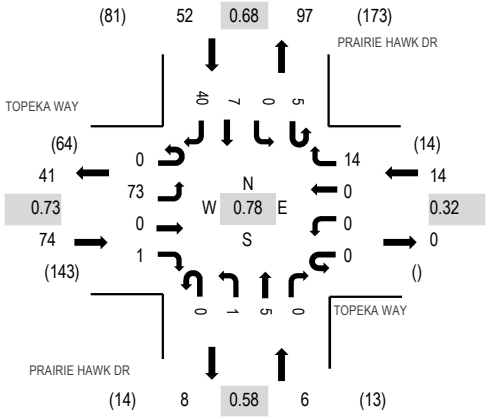
Traffic Counts

Interval Start Time	ATCHISON WAY Eastbound				ATCHISON WAY Westbound				PRAIRIE HAWK DR Northbound				PRAIRIE HAWK DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	27	0	0	0	0	0	0	1	1	23	0	0	0	20	23	95	364	0	0	0	0
4:15 PM	0	26	0	0	0	0	0	0	0	0	22	0	0	0	15	20	83	380	1	0	0	0
4:30 PM	0	44	0	0	0	0	0	0	0	0	34	0	0	0	12	19	109	364	0	0	0	0
4:45 PM	0	28	0	1	0	0	0	0	0	0	14	0	0	0	5	29	77	311	0	0	0	0
5:00 PM	0	37	0	0	0	0	0	0	0	3	25	0	0	0	10	36	111	289	0	0	0	0
5:15 PM	0	30	0	1	0	0	0	0	0	0	21	0	0	0	5	10	67		0	0	0	0
5:30 PM	0	17	0	0	0	0	0	0	0	1	14	0	0	0	6	18	56		0	0	0	0
5:45 PM	0	23	0	0	0	0	0	0	0	0	10	0	0	0	3	19	55		0	0	0	0
Count Total	0	232	0	2	0	0	0	0	1	5	163	0	0	0	76	174	653		1	0	0	0
Peak Hour	0	135	0	1	0	0	0	0	0	3	95	0	0	0	42	104	380		1	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

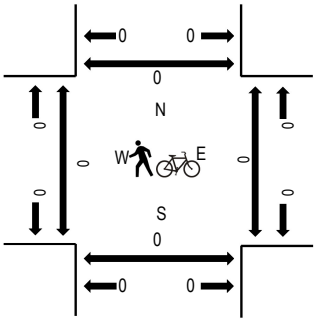
Location: 3 PRAIRIE HAWK DR & TOPEKA WAY PM
Date: Thursday, June 30, 2022
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



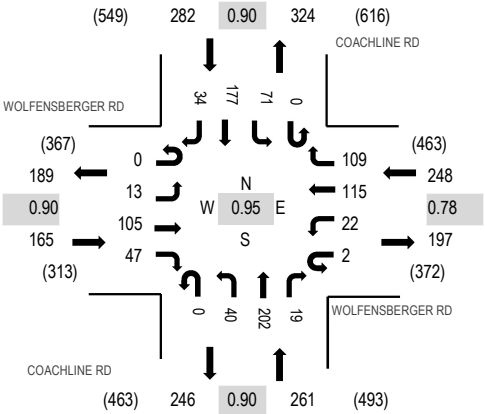
Traffic Counts

Interval Start Time	TOPEKA WAY Eastbound				TOPEKA WAY Westbound				PRAIRIE HAWK DR Northbound				PRAIRIE HAWK DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	24	0	1	0	0	0	0	0	1	2	0	1	0	5	13	47	146	0	0	0	0
4:15 PM	0	17	0	0	0	0	0	1	0	0	2	0	2	0	0	14	36	135	0	0	0	0
4:30 PM	0	21	0	0	0	0	0	11	0	0	0	0	2	0	0	8	42	130	0	0	0	0
4:45 PM	0	11	0	0	0	0	0	2	0	0	1	0	0	0	2	5	21	109	0	0	0	0
5:00 PM	0	27	0	0	0	0	0	0	0	0	1	0	0	0	1	7	36	105	0	0	0	0
5:15 PM	0	20	0	0	0	0	0	0	0	0	1	0	0	0	3	7	31		0	0	0	0
5:30 PM	0	12	0	0	0	0	0	0	0	1	2	0	1	0	2	3	21		0	0	0	0
5:45 PM	0	10	0	0	0	0	0	0	0	0	2	0	0	0	0	5	17		0	0	0	0
Count Total	0	142	0	1	0	0	0	14	0	2	11	0	6	0	13	62	251		0	0	0	0
Peak Hour	0	73	0	1	0	0	0	14	0	1	5	0	5	0	7	40	146		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

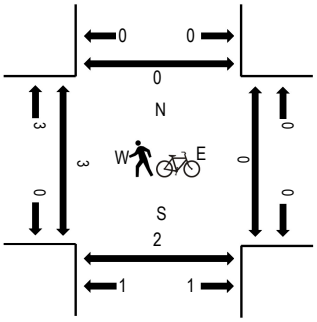
Location: 4 COACHLINE RD & WOLFENSBERGER RD PM
Date: Thursday, June 30, 2022
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



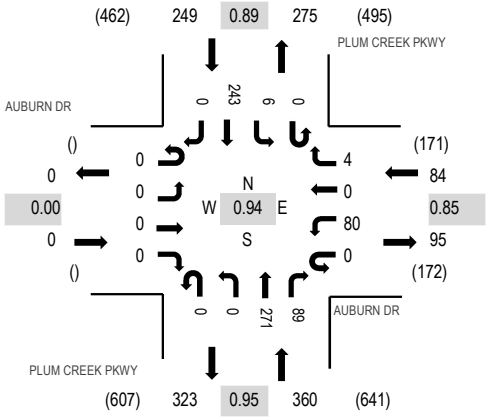
Traffic Counts

Interval Start Time	WOLFENSBERGER RD Eastbound				WOLFENSBERGER RD Westbound				COACHLINE RD Northbound				COACHLINE RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	7	25	8	0	3	27	23	0	11	37	5	0	21	47	11	225	917	0	0	0	0
4:15 PM	0	10	23	11	1	6	24	27	0	7	35	4	0	15	44	10	217	921	0	0	0	0
4:30 PM	0	3	26	9	0	6	32	19	0	11	45	6	0	27	42	14	240	956	0	0	0	0
4:45 PM	0	1	27	19	2	2	27	21	0	13	51	3	0	13	50	6	235	947	0	0	0	0
5:00 PM	0	4	24	12	0	6	20	33	0	8	51	7	0	19	38	7	229	901	2	0	0	0
5:15 PM	0	5	28	7	0	8	36	36	0	8	55	3	0	12	47	7	252		0	0	0	0
5:30 PM	0	3	17	11	1	7	27	17	2	11	59	4	0	20	43	9	231		0	0	0	0
5:45 PM	0	5	19	9	0	0	28	24	0	5	45	7	0	13	26	8	189		0	0	0	0
Count Total	0	38	189	86	4	38	221	200	2	74	378	39	0	140	337	72	1,818		2	0	0	0
Peak Hour	0	13	105	47	2	22	115	109	0	40	202	19	0	71	177	34	956		2	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

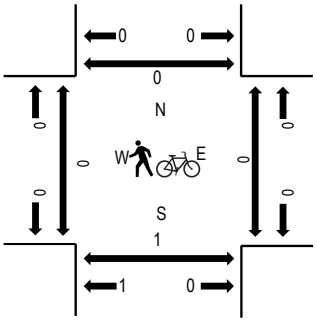
Location: 5 PLUM CREEK PKWY & AUBURN DR PM
Date: Thursday, June 30, 2022
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



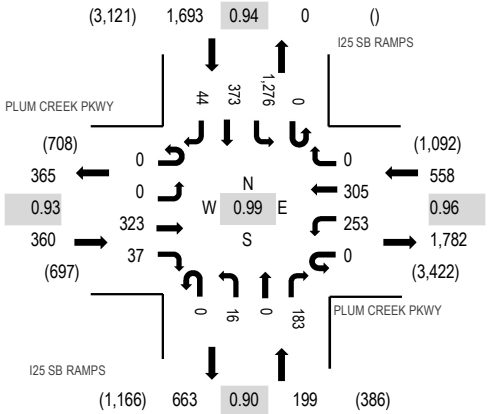
Traffic Counts

Interval Start Time	AUBURN DR Eastbound				AUBURN DR Westbound				PLUM CREEK PKWY Northbound				PLUM CREEK PKWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	18	0	1	0	0	47	22	0	3	52	0	143	643	0	0	0	0
4:15 PM	0	0	0	0	0	24	0	3	0	0	47	23	0	2	64	0	163	676	0	0	0	0
4:30 PM	0	0	0	0	0	19	0	1	0	0	62	13	0	2	55	0	152	680	0	0	0	0
4:45 PM	0	0	0	0	0	18	0	1	0	0	68	27	0	0	71	0	185	693	0	0	1	0
5:00 PM	0	0	0	0	0	25	0	1	0	0	73	19	0	3	55	0	176	631	0	0	0	0
5:15 PM	0	0	0	0	0	22	0	2	0	0	63	23	0	3	54	0	167		0	0	0	0
5:30 PM	0	0	0	0	0	15	0	0	0	0	67	20	0	0	63	0	165		0	0	0	0
5:45 PM	0	0	0	0	0	18	0	3	0	0	56	11	0	1	34	0	123		0	0	0	0
Count Total	0	0	0	0	0	159	0	12	0	0	483	158	0	14	448	0	1,274		0	0	1	0
Peak Hour	0	0	0	0	0	80	0	4	0	0	271	89	0	6	243	0	693		0	0	1	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

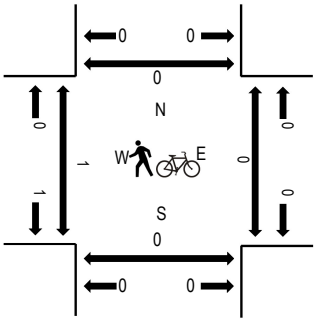
Location: 6 I25 SB RAMPS & PLUM CREEK PKWY PM
Date: Thursday, June 30, 2022
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



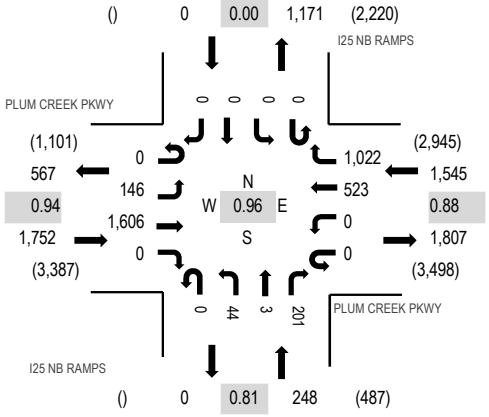
Traffic Counts

Interval Start Time	PLUM CREEK PKWY Eastbound				PLUM CREEK PKWY Westbound				I25 SB RAMPS Northbound				I25 SB RAMPS Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	78	9	0	63	64	0	0	6	0	44	0	278	48	10	600	2,716	0	0	0	0
4:15 PM	0	0	69	9	0	57	67	0	0	2	0	50	0	345	87	17	703	2,810	0	0	0	0
4:30 PM	0	0	87	12	0	69	63	0	0	7	0	36	0	316	100	14	704	2,808	0	0	0	0
4:45 PM	0	0	82	9	0	65	87	0	0	4	0	52	0	312	92	6	709	2,726	1	0	0	0
5:00 PM	0	0	85	7	0	62	88	0	0	3	0	45	0	303	94	7	694	2,580	0	0	0	0
5:15 PM	1	0	78	7	0	54	93	0	0	1	0	44	0	330	78	15	701		0	0	0	0
5:30 PM	0	0	86	8	0	60	74	0	0	5	0	45	0	290	51	3	622		0	0	0	0
5:45 PM	0	0	62	8	0	64	62	0	0	1	0	41	0	264	53	8	563		0	0	0	0
Count Total	1	0	627	69	0	494	598	0	0	29	0	357	0	2,438	603	80	5,296		1	0	0	0
Peak Hour	0	0	323	37	0	253	305	0	0	16	0	183	0	1,276	373	44	2,810		1	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

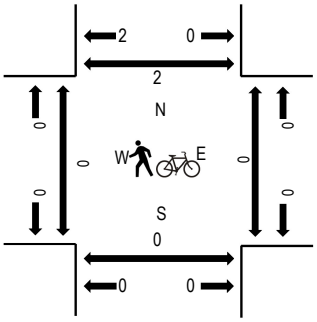
Location: 7 I25 NB RAMPS & PLUM CREEK PKWY PM
Date: Thursday, June 30, 2022
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



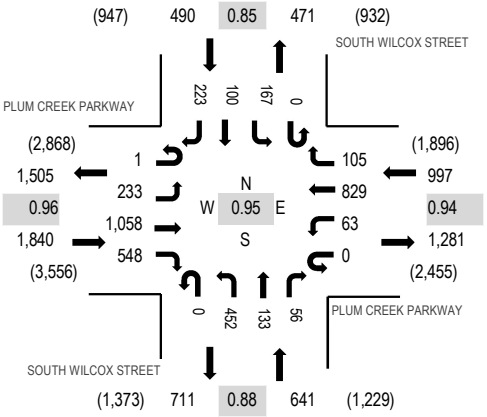
Traffic Counts

Interval Start Time	PLUM CREEK PKWY Eastbound				PLUM CREEK PKWY Westbound				I25 NB RAMPS Northbound				I25 NB RAMPS Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	36	373	0	0	0	121	221	0	7	1	41	0	0	0	0	800	3,421	0	0	0	0
4:15 PM	0	40	427	0	0	0	120	252	0	8	2	47	0	0	0	0	896	3,545	0	0	0	0
4:30 PM	0	36	399	0	0	0	115	232	0	16	1	61	0	0	0	0	860	3,517	0	0	0	0
4:45 PM	0	34	393	0	0	0	147	236	0	9	0	46	0	0	0	0	865	3,512	0	0	0	1
5:00 PM	0	36	387	0	0	0	141	302	0	11	0	47	0	0	0	0	924	3,398	0	0	0	0
5:15 PM	0	33	413	0	0	0	133	226	0	14	2	47	0	0	0	0	868		0	0	0	0
5:30 PM	0	41	376	0	0	0	120	248	0	13	1	56	0	0	0	0	855		0	0	0	0
5:45 PM	0	25	338	0	0	0	116	215	0	10	0	47	0	0	0	0	751		0	0	0	0
Count Total	0	281	3,106	0	0	0	1,013	1,932	0	88	7	392	0	0	0	0	6,819		0	0	0	1
Peak Hour	0	146	1,606	0	0	0	523	1,022	0	44	3	201	0	0	0	0	3,545		0	0	0	1

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

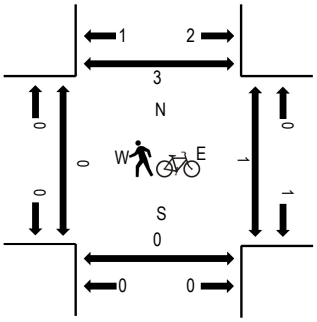
Location: 8 SOUTH WILCOX STREET & PLUM CREEK PARKWAY PM
Date: Thursday, June 30, 2022
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



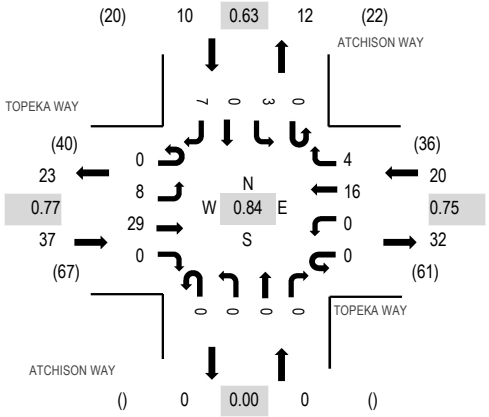
Traffic Counts

Interval Start Time	PLUM CREEK PARKWAY Eastbound				PLUM CREEK PARKWAY Westbound				SOUTH WILCOX STREET Northbound				SOUTH WILCOX STREET Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	50	248	110	0	6	188	31	0	84	29	15	0	38	34	63	896	3,816	0	0	0	0
4:15 PM	0	58	261	141	0	15	189	27	0	117	36	9	0	30	35	49	967	3,964	0	0	0	0
4:30 PM	0	60	270	147	0	15	187	30	0	93	31	14	0	36	24	64	971	3,968	0	0	0	0
4:45 PM	1	63	256	139	0	16	223	24	0	105	25	18	0	47	26	39	982	3,954	0	0	0	0
5:00 PM	0	51	264	128	0	15	223	27	0	139	36	16	0	45	29	71	1,044	3,812	0	0	0	0
5:15 PM	0	59	268	134	0	17	196	24	0	115	41	8	0	39	21	49	971		0	0	0	3
5:30 PM	0	68	250	135	0	9	193	25	0	120	32	16	0	36	27	46	957		0	0	0	0
5:45 PM	0	53	233	109	0	10	184	22	0	90	30	10	0	28	31	40	840		1	0	1	0
Count Total	1	462	2,050	1,043	0	103	1,583	210	0	863	260	106	0	299	227	421	7,628		1	0	1	3
Peak Hour	1	233	1,058	548	0	63	829	105	0	452	133	56	0	167	100	223	3,968		0	0	0	3

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

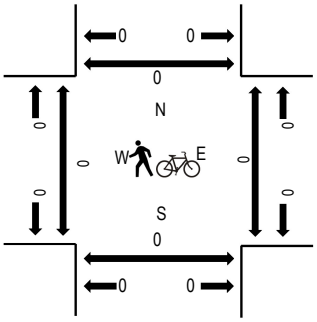
Location: 9 ATCHISON WAY & TOPEKA WAY PM
Date: Thursday, June 30, 2022
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	TOPEKA WAY Eastbound				TOPEKA WAY Westbound				ATCHISON WAY Northbound				ATCHISON WAY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	2	10	0	0	0	2	0	0	0	0	0	0	2	0	2	18	67	0	0	0	0
4:15 PM	0	4	8	0	0	0	5	1	0	0	0	0	0	0	0	2	20	62	0	0	0	0
4:30 PM	0	1	5	0	0	0	4	1	0	0	0	0	0	1	0	2	14	59	0	0	0	0
4:45 PM	0	1	6	0	0	0	5	2	0	0	0	0	0	0	0	1	15	58	0	0	0	0
5:00 PM	0	2	6	0	0	0	3	0	0	0	0	0	0	2	0	0	13	56	0	0	0	0
5:15 PM	0	1	7	0	0	0	5	1	0	0	0	0	0	2	0	1	17		0	0	0	0
5:30 PM	0	3	5	0	0	0	4	0	0	0	0	0	0	1	0	0	13		0	0	0	0
5:45 PM	0	2	4	0	0	0	2	1	0	0	0	0	0	2	0	2	13		0	0	0	0
Count Total	0	16	51	0	0	0	30	6	0	0	0	0	0	10	0	10	123		0	0	0	0
Peak Hour	0	8	29	0	0	0	16	4	0	0	0	0	0	3	0	7	67		0	0	0	0

APPENDIX “B”

EXISTING TRAFFIC SIGNAL TIMING PLANS

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B		B		B		B							
Sequence 1																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 2																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 3																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 4																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 5																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 6																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 7																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 8																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 9																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 10																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 11																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 12																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.

Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 13																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 14																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 15																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 16																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use	X	X	X	X	X	X	X	X								
Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Approach	N	S	E	W	S	N	W	E	N	N	N	N	N	N	N	N
Movement	L	T	L	T	L	T	L	T								
Associated PED																
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Approach	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Movement																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	1956
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Timing 1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Phases 2	X		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	X		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	X		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	X		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	X	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
Phase 6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
Must 7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
Gap 8	.	.	.	X	.	.	.		.	.	.	.	.	.	.	.
With 9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
Phase 10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	V				-	Auto	X		
2	2	V				-	Auto	X		X
3	3	V				-	Auto	X		
4	4	V				-	Auto	X		X
5	5	V				+	Auto	X		
6	6	V				+	Auto	X		X
7	7	V				+	Auto	X		
8	8	V				+	Auto	X		X
9	2	P				-	Auto			

10	4	P				-	Auto			
11	6	P				+	Auto			
12	8	P				+	Auto			
13	1	O				-	Auto	X		
14	2	O				+	Auto	X		X
15	3	O				-	Auto	X		
16	4	O				+	Auto	X		X

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility								
Detector Rack	X	X	X	X				

Enable TS2/MMU Type Cabinet: No
Enable MMU Extended Status: No
Enable SDLC Stop Time: No
Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	**Channel 2**

Color Check Enable (MM) 1-4-3

Enable Color Check: Yes

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellow	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Red	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Configuration Communications 1 (SDLC)

Ethernet Port Configuration (MM) 1-5-1

DHCP Enable:	No
Controller IP:	10.50.60.60
Subnet Mask:	255.255.255.0
Default Gateway IP:	10.50.60.1
Server IP:	10.1.5.39

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec):	0
NTCIP UDP Port:	501
Ethernet Priority:	1
Port 2 Priority (Port C50S for 2070):	4
Port 3A Priority (Port C21S for 2070):	3
Port 3B Priority (Port C22S for 2070):	2

Port Configuration (MM) 1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Comm Module	None	Auto	Auto
Protocol	NTCIP	NTCIP	NTCIP
Enable	No	No	No
Data Rate (BPS)	9600	9600	9600
Data, Parity, Stop	8 N 1	8 N 1	8 N 1
Address	0	0	0
Telemetry Response Delay	0.0	0.0	0.0
Duplex - Half or Full	Half	Full	Full
Flow Control	No	Yes	Yes
Group Address	0	0	0
Single Flag Enable	Yes	Yes	Yes
RTS to CTS Delay	n/a	n/a	0.0
RTS Turn Off Delay	n/a	n/a	0.0
Dropout Time	10	10	10
Early RTS	n/a	n/a	No
Telemetry Mode	n/a	n/a	FSK
ATCS Railroad	0	n/a	n/a
ATCS Railroad Line	0	n/a	n/a
ATCS Group	0	n/a	n/a
Wayside Device	0	n/a	n/a
ATC Device	0	n/a	n/a
Wayside Subnode	0	n/a	n/a
ATC Subnode	0	n/a	n/a

ECPIP (MM) 1-5-6

Controller Address: 0

Expanded System Detector Address: 0

System Detector Assignment

System Detector	Local Detector

Wireless Configuration (MM) 1-5-7

Wireless Channel Number: 1
Wireless Access Code: 327423274

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Configuration Logging / Display

Event Logging (MM) 1-6-1

Critical RFE's (MMU/TF)	Yes	3 Critical Errors Within 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Fault	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preemption Events	Yes	TSP Events	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online / Offline	Yes		

Alarm Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM) 1-7-2

Key Click Enable:	Yes
Switch to Graphics Mode:	No
LED Mode:	Auto
Display Mode:	Advanced
Trans Mode Pop-Up Disable:	No

Sign On (MM) 8-5

Sign On Message Line 1: Wolfensberger & Prarie Hawk
Sign On Message Line 2:

Software Modules (MM) 8-7

Application Version: 32.66.10
OS (Boot) Version: 06.07.00

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Logic Processor Page 1

Logic Statement Control (MM) 1-8-1

Logic #	Statement Control
1	D
2	D
3	D

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Logic Processor Page 2

Logic Statements (MM) 1-8-2

Logic #: 1 - "Stop Time"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	LP COB CODE ON		520

Then:

Assignment	#	State
CTR SET STIME RING	1	On
CTR SET STIME RING	2	On

Logic #: 2 - "CTL ST"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	LP CIB CODE ON		424

Then:

Assignment	#	State
LP SET CIB ON	135	
LP SET CIB ON	143	

Logic #: 3 - "Door Open"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	LP CIB CODE ON		160

Then:

Assignment	#	State
CTR SET ALARM	1	On

Else:

Assignment	#	State
CTR SET ALARM	1	Off

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	3	8	3	8	3	8	5	8	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	5	0	5	0	5	0	5	0	0	0	0	0	0	0	0
Walk	0	7	0	8	0	7	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	19	0	26	0	20	0	25	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	1.0	1.0	1.0	3.0	1.0	1.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	30	26	10	28	10	26	30	30	0	0	0	0	0	0	0	0
Max2	30	26	10	28	12	30	30	30	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	3	8	3	5	3	8	3	3	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	3	8	3	5	3	8	5	5	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	5	0	5	0	5	0	5	0	0	0	0	0	0	0	0
Walk	0	7	0	8	0	7	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	19	0	26	0	20	0	25	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	15	26	10	28	10	90	30	28	0	0	0	0	0	0	0	0
Max2	12	12	7	7	12	12	7	7	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	3	8	3	5	3	8	5	5	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable
A	1	2	Green Overlap	13	0.0	0.0	1	No
B	3	4	Green Overlap	14	0.0	0.0	2	No
C	5	6	Green Overlap	15	0.0	0.0	3	No
D	7	8	Green Overlap	16	0.0	0.0	4	No

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	3	0	7	3.0	0.0	5
B02	3	0	7	3.0	0.0	5
C03	3	0	7	3.0	0.0	5
D04	3	0	7	3.0	0.0	5
E05	3	0	7	3.0	0.0	5
F06	3	0	7	3.0	0.0	5
G07	3	0	7	3.0	0.0	5
H08	3	0	7	3.0	0.0	5
I09	5	0	7	3.0	0.0	5
J10	5	0	7	3.0	0.0	5
K11	5	0	7	3.0	0.0	5
L12	5	0	7	3.0	0.0	5
M13	5	0	7	3.0	0.0	5
N14	5	0	7	3.0	0.0	5
O15	5	0	7	3.0	0.0	5
P16	5	0	7	3.0	0.0	5

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	Y
3	.
4	.
5	.
6	Y
7	.
8	.
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
B
C
D

Flash Thru Mon: No
Flash Time: 0
All Red: 6
Power Start Seq: 1
MUTCD Enabled: No
Y->G: n/a

Automatic Flash

Entry
2
6

Exit
2

6

Overlap Exit
A
B
C
D

Flash Thru Mon: No
Exit Flash: W
Minimum Flash: 8
Mimimum Recall: No
Cycle Through Phase: No

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guar Passage																
Non-Act I		X				X										
Non-Act II				X				X								
Dual Entry		X		X		X		X								
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk																
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off Unit Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
AI Calc																

Plan # 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X				X										

Ped Recall																
Max Recall																
Soft Recall																
No Rest																
AI Calc																

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	PTN
Splits In	Percent	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Fixed
Offset Reference	Yellow	Use Ped Time	No
Ped Recall	No	Ped Reservice	No
Local Zero Override	Yes	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Percent
Cycle	90	Std (COS)	9	Offsets In	Seconds
Offset Value	1s	Dwell/Add Time	29		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	1		
Max Select	None	Force Off	Fixed		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 1)	12	30	11	37	12	30	27	21	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	90%	90%	0%	0%

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Percent
Cycle	80	Std (COS)	17	Offsets In	Seconds
Offset Value	73s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	2		
Max Select	None	Force Off	Fixed		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 2)	15	18	12	35	11	22	22	25	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	80%	80%	0%	0%

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0	
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0	

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Percent
Cycle	100	Std (COS)	25	Offsets In	Seconds
Offset Value	18s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	3		
Max Select	None	Force Off	Fixed		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 3)	11	30	11	48	11	30	33	26	0	0	0	0	0	0	0	0

Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100%	100%	0%	0%

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Percent
Cycle	75	Std (COS)	33	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	26		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	4		
Max Select	None	Force Off	Float		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 4)	9	22	9	35	9	22	30	14	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	75%	75%	0%	0%

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0	
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0	

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

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ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Coordination Split Pattern
Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (percent)	12	30	11	37	12	30	27	21	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	90%	90%	0%	0%

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (percent)	15	18	12	35	11	22	22	25	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	80%	80%	0%	0%

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (percent)	11	30	11	48	11	30	33	26	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100%	100%	0%	0%

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (percent)	9	22	9	35	9	22	30	14	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	75%	75%	0%	0%

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Preempt Plan

Preempt Plan (MM) 4-1

Preempt Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Red	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	4.0	1.0
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	0	0.0	120	4.0	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Red	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	4.0	1.0
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**

Dwell / Cycle-Exit	0	0.0	120	4.0	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Red	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	4.0	1.0
				Yellow	**Red**

	Min Dwell	Pmt Ext	Max Time		
Dwell / Cycle-Exit	0	0.0	120	4.0	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Red	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red

Track Clear	0	0	0	4.0	1.0
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	0	0.0	120	4.0	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Preempt Preempt Filtering
Enable Preempt Filtering &
TSP/SCP (MM) 4-2

Input	Solid	Pulsing
1	...BYPASSED...	...BYPASSED...
2	...BYPASSED...	...BYPASSED...
3	PREEMPTION 3	PREEMPTION 7
4	PREEMPTION 4	PREEMPTION 8
5	PREEMPTION 5	PREEMPTION 9
6	PREEMPTION 6	PREEMPTION 10
7	...BYPASSED...	...BYPASSED...
8	...BYPASSED...	...BYPASSED...
9	...BYPASSED...	...BYPASSED...
10	...BYPASSED...	...BYPASSED...

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MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Preempt TSP/SCP Plan and Split

TSP / SCP Plan (MM) 4-3

TSP/SCP Plan	Enable Option	Signal Type	Det Lock	Delay Time	Max Presence	PMT Enables Reservice	No Delay in TSP	Action SF Inhibit	Reservice Cycles	Bus Heading
1	No	Solid	No	0	0	No	False	0	0	NB
2	No	Solid	No	0	0	No	False	0	0	SB
3	No	Solid	No	0	0	No	False	0	0	EB
4	No	Solid	No	0	0	No	False	0	0	WB
5	No	Solid	No	0	0	No	False	0	0	.
6	No	Solid	No	0	0	No	False	0	0	.

Mode: TSP
Free Default Pattern: 120
Headway Allowance: 0

TSP/SCP Plan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

TSP / SCP Split Pattern (MM) 4-4

TSP/SCP Split Pattern	Max Type	Phase															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4	Max Reduction	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255

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MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Time Base Clock/Calendar

Clock/Calendar Data (MM) 5-1

Manual Action Plan:	0
SYNC Reference Time:	00:00
SYNC Reference:	Reference Time
Day Light Savings:	No
Time Reset Input Set Time:	3:30:00
Standard Time From GMT:	0

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1 - "1"

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2 - "2"

Pattern	2	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3 - "3"

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 4 - "4"

Pattern	4	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 10 - "NB arterial"

Pattern	Free	Override Sys	No
Timing Plan	4	Sequence	0
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 20 - "20"

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2	X	X	X	X	X	X	X	X								
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 21 - "21"

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Ext 2																
Veh Recall																
Max Recall						X										
Max 2	X	X	X	X	X	X	X	X								
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 30 - "30"

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall						X										
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Action Plan	Start Time
1	20	05:30
2	1	06:00
3	20	07:30
4	1	08:10
5	2	09:00
6	3	15:00
7	2	18:30
8	30	21:00
9	21	23:59

Day Plan #2 - "2"

Event	Action Plan	Start Time
1	2	08:00
2	30	21:00
3	21	23:59

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
	X	X	X	X	X	X	X	X	X	X	X
	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
	X	X	X	X	X	X	X	X	X	X	X
	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**		
	X	X	X	X	X	X	X	X	X		

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Time Base Exceptions

Exception Day Program (MM) 5-5

Excep Day	Float/Fixed	Mon/Mon	DOW/DOM	WOM/Year	Day Plan

Castle Rock, CO

ECONOLITE

MOVING TRAFFIC FORWARD

001 - Wolfensberger Rd @ Prairie Hawk Dr - Cobalt @ 10.50.60.60 - Econolite Type - Cobalt

Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Assigned Phase	Called Phase	Type
1	1	2	S
2	2		S
3	3	4	S
4	4		S
5	5	6	S
6	6		S
7	7	8	S
8	8		S
12	4		S
14	6		S
30	2		S
50	6		S

Vehicle Detector Plan Number - 2

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	3		S
4	4		S
5	5		S
6	6		S
7	7		S
8	8		S
9	2		S
10	2		S
11	4		S
12	4		S
13	6		S
14	6		S
15	8		S
16	8		S
17	1		S
18	2		S
19	3		S
20	4		S
21	5		S

22	6		S
23	7		S
24	8		S
25	2		S
26	4		S
27	6		S
28	8		S

Vehicle Detector Plan Number - 3

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	3		S
4	4		S
5	5		S
6	6		S
7	7		S
8	8		S
9	2		S
10	2		S
11	4		S
12	4		S
13	6		S
14	6		S
15	8		S
16	8		S
17	1		S
18	2		S
19	3		S
20	4		S
21	5		S
22	6		S
23	7		S
24	8		S
25	2		S
26	4		S
27	6		S
28	8		S

Vehicle Detector Plan Number - 4

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	3		S
4	4		S
5	5		S
6	6		S
7	7		S
8	8		S
9	2		S
10	2		S

11	4		S
12	4		S
13	6		S
14	6		S
15	8		S
16	8		S
17	1		S
18	2		S
19	3		S
20	4		S
21	5		S
22	6		S
23	7		S
24	8		S
25	2		S
26	4		S
27	6		S
28	8		S

Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description
1	S-STANDARD	Yes	WBL
2	S-STANDARD	Yes	EBT
3	S-STANDARD	Yes	NBL
4	S-STANDARD	Yes	SBT
5	S-STANDARD	Yes	EBL
6	S-STANDARD	Yes	WBT
7	S-STANDARD	Yes	SBL
8	S-STANDARD	Yes	NBT
9	S-STANDARD	Yes	
10	S-STANDARD	Yes	
11	S-STANDARD	Yes	
12	S-STANDARD	Yes	SBR
13	S-STANDARD	Yes	
14	S-STANDARD	Yes	WBR
15	S-STANDARD	Yes	
16	S-STANDARD	Yes	
17	S-STANDARD	Yes	
18	S-STANDARD	Yes	
19	S-STANDARD	Yes	
20	S-STANDARD	Yes	
21	S-STANDARD	Yes	EBL
22	S-STANDARD	Yes	
23	S-STANDARD	Yes	
24	S-STANDARD	Yes	EBT1
25	S-STANDARD	Yes	EBT2
26	S-STANDARD	Yes	
27	S-STANDARD	Yes	EBR
28	S-STANDARD	Yes	
29	S-STANDARD	Yes	EB Advance

30	S-STANDARD	Yes	Dilemma EB
31	S-STANDARD	Yes	SBL
32	S-STANDARD	Yes	
33	S-STANDARD	Yes	
34	S-STANDARD	Yes	SBT
35	S-STANDARD	Yes	
36	S-STANDARD	Yes	
37	S-STANDARD	Yes	SBR
38	S-STANDARD	Yes	
39	S-STANDARD	Yes	
40	S-STANDARD	Yes	
41	S-STANDARD	Yes	WBL
42	S-STANDARD	Yes	
43	S-STANDARD	Yes	
44	S-STANDARD	Yes	WBT
45	S-STANDARD	Yes	
46	S-STANDARD	Yes	
47	S-STANDARD	Yes	WBR
48	S-STANDARD	Yes	
49	S-STANDARD	Yes	WB Advance
50	S-STANDARD	Yes	
51	S-STANDARD	Yes	NBL
52	S-STANDARD	Yes	
53	S-STANDARD	Yes	
54	S-STANDARD	Yes	NBT
55	S-STANDARD	Yes	
56	S-STANDARD	Yes	
57	S-STANDARD	Yes	NBR
58	S-STANDARD	Yes	
59	S-STANDARD	Yes	
60	S-STANDARD	Yes	
61	S-STANDARD	Yes	
62	S-STANDARD	Yes	
63	S-STANDARD	Yes	
64	S-STANDARD	Yes	

Vehicle Detector Plan Number - 1

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
2	2	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
3	3	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
4	4	Yes	Yes	0.0	None	2.0	0	No	0	None	Yes	Yes	No
5	5	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
6	6	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
7	7	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
8	8	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
9	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No

10	0	No	Yes	5.0	Passage	0.0	0	No	0	None	No	No	No
11	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	Yes	Yes	8.0	Passage	0.0	0	No	0	None	Yes	Yes	No
13	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	Yes	Yes	8.0	Passage	0.0	0	No	0	None	Yes	Yes	No
15	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
18	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
21	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
24	0	Yes	Yes	0.0	None	0.0	0	No	0	None	Yes	Yes	No
25	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
26	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
27	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
29	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
30	2	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
31	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
34	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
37	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	Yes	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
44	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
47	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
49	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
50	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
54	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
57	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 3

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

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Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B		B		B		B							
Sequence 1																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 2																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 3																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 4																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 5																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 6																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 7																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 8																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 9																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 10																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 11																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 12																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 13																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 14																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 15																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 16																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use	X	X	X	X	X	X	X	X								

Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Approach	N	S	E	W	S	N	W	E	N	N	N	N	N	N	N	N
Movement	L	T	L	T	L	T	L	T								
Associated PED																
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Approach	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Movement																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	6507
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

Timing Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

Phase Must Gap With Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	V				-	Auto	X		
2	2	V				-	Auto	X		X
3	3	V				-	Auto	X		
4	4	V				-	Auto	X		X
5	5	V				+	Auto	X		
6	6	V				+	Auto	X		X
7	7	V				+	Auto	X		
8	8	V				+	Auto	X		X
9	2	P				-	Auto			
10	4	P				-	Auto			
11	6	P				+	Auto			
12	8	P				+	Auto			
13	1	O				-	Auto	X		
14	2	O				+	Auto	X		X
15	3	O				-	Auto	X		
16	4	O				+	Auto	X		X

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Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility								
Detector Rack								

Enable TS2/MMU Type Cabinet: No
Enable MMU Extended Status: No
Enable SDLC Stop Time: No
Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	**Channel 2**

Color Check Enable (MM) 1-4-3

Enable Color Check: No

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green																
Yellow																
Red																

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

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Configuration Communications 1 (SDLC)

Ethernet Port Configuration (MM) 1-5-1

DHCP Enable:	No
Controller IP:	10.50.70.51
Subnet Mask:	255.255.255.0
Default Gateway IP:	10.50.70.1
Server IP:	10.1.5.39

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec):	0
NTCIP UDP Port:	501
Ethernet Priority:	1
Port 2 Priority (Port C50S for 2070):	4
Port 3A Priority (Port C21S for 2070):	3
Port 3B Priority (Port C22S for 2070):	2

Port Configuration (MM) 1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Comm Module	None	Auto	Auto
Protocol	NTCIP	NTCIP	NTCIP
Enable	No	No	No
Data Rate (BPS)	9600	9600	9600
Data, Parity, Stop	8 N 1	8 N 1	8 N 1
Address	0	0	0
Telemetry Response Delay	0.0	0.0	0.0
Duplex - Half or Full	Half	Full	Full
Flow Control	No	Yes	Yes
Group Address	0	0	0
Single Flag Enable	Yes	Yes	Yes
RTS to CTS Delay	n/a	n/a	0.0
RTS Turn Off Delay	n/a	n/a	0.0
Dropout Time	10	10	10
Early RTS	n/a	n/a	No
Telemetry Mode	n/a	n/a	FSK
ATCS Railroad	0	n/a	n/a
ATCS Railroad Line	0	n/a	n/a
ATCS Group	0	n/a	n/a
Wayside Device	0	n/a	n/a
ATC Device	0	n/a	n/a
Wayside Subnode	0	n/a	n/a
ATC Subnode	0	n/a	n/a

ECPIP (MM) 1-5-6

Controller Address:	0
Expanded System Detector Address:	0

System Detector Assignment

System Detector	Local Detector

Wireless Configuration (MM) 1-5-7

Wireless Channel Number:	1
Wireless Access Code:	327423274

Peer to Peer Setup (MM) 1-5-8

Local Port: 503

Peer	Port	IP Address	Timeout	Peer Name (Cobalt only)
1	503	10.50.70.50	1	PCP/Perry
2	503	10.50.70.52	1	PCP/PCB
3	503	10.50.70.54	1	PCP/I25NB
4	503	10.50.70.53	1	PCP/I25SB
5	503	10.50.60.30	1	Virtual 2

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Solutions that Move the World™

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Configuration Logging / Display

Event Logging (MM) 1-6-1

Critical RFE's (MMU/TF)	Yes	3 Critical Errors Within 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Fault	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preemption Events	Yes	TSP Events	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online / Offline	Yes		

Alarm Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM) 1-7-2

Key Click Enable:	Yes
Switch to Graphics Mode:	No
LED Mode:	Auto
Display Mode:	Advanced
Trans Mode Pop-Up Disable:	No

Sign On (MM) 8-5

Sign On Message Line 1: Plum Creek Pkwy & Wilcox Street
Sign On Message Line 2:

Software Modules (MM) 8-7

Application Version: 32.66.10
OS (Boot) Version: 06.07.00

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Solutions that Move the World™

035 - Plum Creek Pkwy @ Wilcox St - Cobalt @ 10.50.70.51 - Econolite Type - Cobalt

Logic Processor Page 1

Logic Statement Control (MM)
1-8-1

Logic #	Statement Control
1	E
2	E
3	D
18	D
21	D
22	D
23	D
24	D
25	D
30	E
31	E
32	E
33	E
34	E
35	E
36	E
51	E
52	E
53	E
54	E

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Logic Processor Page 2

Logic Statements (MM) 1-8-2

Logic #: 1 - "Stop Time"

If:

	Peer	T/F	Assignment	#		State
IF	--	F	LP COB CODE ON			520

Then:

Assignment	#	State
CTR SET STIME RING	1	On
CTR SET STIME RING	2	On

Logic #: 2 - "CTL ST"

If:

	Peer	T/F	Assignment	#		State
IF	--	F	LP CIB CODE ON			424

Then:

Assignment	#	State
CTR SET STIME ALL		On

Logic #: 3 - "Door Open"

If:

	Peer	T/F	Assignment	#		State
IF	--	F	LP CIB CODE ON			160

Then:

Assignment	#	State
CTR SET ALARM	1	On

Else:

Assignment	#	State
CTR SET ALARM	1	Off

Logic #: 11 - "LNG PED 2&6"

If:

	Peer	T/F	Assignment	#		State
IF	--	F	PED ON PH PED CLR	2	IS	On
OR	--	F	PED ON PH PED CLR	6	IS	On

Then:

Assignment	#	State
LP SET LOGIC FLAG	2	On

Logic #: 12 - "LNG Ped 2&6"

If:

	Peer	T/F	Assignment	#		State
IF	--	F	CTR PHASE TIMING	2	IS	Off
AND	--	F	CTR PHASE TIMING	6	IS	Off
AND	--	F	LP LOGIC FLAG	2	IS	On

Then:

Assignment	#	State
CRD SET FREE		On

Else:

Assignment	#	State
LP SET LOGIC FLAG	2	Off

Logic #: 13 - "LNG Ped 4&8"

If:

	Peer	T/F	Assignment	#		State
IF	--	F	PED ON PH PED CLR	4	IS	On
OR	--	F	PED ON PH PED CLR	8	IS	On

Then:

Assignment	#	State
LP SET LOGIC FLAG	4	On

Logic #: 14 - "LNG Ped 4&8"

If:

	Peer	T/F	Assignment	#		State
IF	--	F	CTR PHASE TIMING	2	IS	Off
AND	--	F	CTR PHASE TIMING	6	IS	Off
AND	--	F	LP LOGIC STATEMENT	4	IS	On

Then:

Assignment	#	State
CRD SET FREE		On

Else:

Assignment	#	State
LP SET LOGIC FLAG	4	Off

Logic #: 18 - "Vir2StpTim"

If:

	Peer	T/F	Assignment	#		State
IF	5	F	LP LOGIC FLAG	3	IS	On

Then:

Assignment	#	State
CTR SET STIME ALL		On
LP SET LOGIC FLAG	3	On

Else:

Assignment	#	State
LP SET LOGIC FLAG	3	Off

Logic #: 20 - "VirtStpTim"

If:

	Peer	T/F	Assignment	#		State
IF	5	F	CTR STOP TIME RING	1	IS	On
OR	5	F	CTR STOP TIME RING	2	IS	On

Then:

Assignment	#	State
CTR SET STIME ALL		On
LP SET LOGIC FLAG	3	On

Else:

Assignment	#	State
LP SET LOGIC FLAG	3	Off

Logic #: 21 - "PCB E/W stp"

If:

	Peer	T/F	Assignment	#		State
IF	2	F	LP LOGIC FLAG	3	IS	On
AND	2	F	VEH GREEN ON PH	5	IS	On
AND	--	F	VEH GREEN ON PH	4	IS	On
AND	--	F	VEH GREEN ON PH	8	IS	On

Then:

Assignment	#	State
CTR SET STIME ALL		On

Logic #: 22 - "PCB N/S stp"

If:

	Peer	T/F	Assignment	#		State
IF	2	F	LP LOGIC FLAG	3	IS	On
AND	2	F	VEH GREEN ON PH	6	IS	On
AND	--	F	VEH GREEN ON PH	2	IS	On
AND	--	F	VEH GREEN ON PH	6	IS	On

Then:

Assignment	#	State
CTR SET STIME ALL		On

Logic #: 23 - "PCP E/W stp2"

If:

	Peer	T/F	Assignment	#		State
IF	2	F	LP LOGIC FLAG	3	IS	On
AND	2	F	VEH GREEN ON PH	4	IS	On
AND	--	F	VEH GREEN ON PH	4	IS	On
AND	--	F	VEH GREEN ON PH	8	IS	On

Then:

Assignment	#	State
CTR SET STIME ALL		On

Logic #: 24 - "PCP Wstp"

If:

	Peer	T/F	Assignment	#		State
IF	3	F	LP LOGIC FLAG	6	IS	On
AND	3	F	VEH GREEN ON PH	6	IS	On
AND	--	F	VEH GREEN ON PH	4	IS	On
AND	--	F	VEH GREEN ON PH	8	IS	On

Then:

Assignment	#	State
CTR SET STIME ALL		On

Logic #: 25 - "Perry StpTim"

If:

	Peer	T/F	Assignment	#		State
IF	1	F	LP LOGIC FLAG	3	IS	On
OR	1	F	LP LOGIC FLAG	4	IS	On
AND	1	F	VEH GREEN ON PH	6	IS	On
AND	--	F	VEH GREEN ON PH	4	IS	On
AND	--	F	VEH GREEN ON PH	8	IS	On

Then:

Assignment	#	State
CTR SET STIME ALL		On

Logic #: 30 - "Call p2"

If:

	Assignment	#		State
IF	DET	1	IS	On
AND	LP COB CODE OFF			512

Then:

Assignment	#	State
DET SET VEH 1-16	3	On
LP SET LOGIC FLAG	16	On

Logic #: 31 - "P2 GAP CHK"

If:

	Assignment	#		State
IF	DET	2	IS	Off
AND	DET	10	IS	Off
AND	LP LOGIC FLAG	15	IS	Off
AND	VEH GREEN ON PH	2	IS	On
AND	LP COB CODE OFF			512

Then:

Assignment	#	State

Then:

Assignment	#	State
LP DELAY FOR	6.0 Sec.	
LP SET LOGIC FLAG	15	On

Logic #: 32 - "LF 16 on"

If:

	Assignment	#		State
IF	LP LOGIC FLAG	15	IS	Off
	VEH GREEN ON PH	2	IS	On

Then:

Assignment	#	State
LP SET LOGIC FLAG	16	On

Logic #: 33 - "LF 16 off"

If:

	Assignment	#		State
IF	LP LOGIC FLAG	15	IS	On
	VEH GREEN ON PH	2	IS	On

Then:

Assignment	#	State
LP SET LOGIC FLAG	16	Off

Logic #: 34 - "p2 nogap ck "

If:

	Assignment	#		State
IF	LP LOGIC FLAG	16	IS	On
AND	CTR ON PH FORC OFF	2	IS	On
AND	VEH YELLOW ON PH	2	IS	On

Then:

Assignment	#	State
LP SET LOGIC FLAG	8	On
LP SET LOGIC FLAG	16	Off

Logic #: 35 - "flg 8 & alrm"

If:

	Assignment	#		State
IF	LP LOGIC FLAG	8	IS	On

Then:

Assignment	#	State
CTR SET ALARM	8	On

Else:

Assignment	#	State
CTR SET ALARM	8	Off

Logic #: 36 - "LF P2 CLR"

If:

	Assignment	#		State
IF	VEH RED ON PHASE	2	IS	On

Then:

Assignment	#	State
LP SET LOGIC FLAG	8	Off
LP SET LOGIC FLAG	15	Off
LP SET LOGIC FLAG	16	Off

Logic #: 51 - "NB occup"

If:

	Assignment	#		State
IF	COORD PLAN		IS	2
OR	DET OCCUPANCY %	18	>	99
OR	DET OCCUPANCY %	1	>	99

Then:

Assignment	#	State
CTR SET ALARM	2	On

Else:

Assignment	#	State
CTR SET ALARM	2	Off

Logic #: 52 - "SB Occup"

If:

	Assignment	#		State
IF	COORD PLAN		IS	2
AND	DET OCCUPANCY %	2	>	99
OR	DET OCCUPANCY %	17	>	99

Then:

Assignment	#	State
CTR SET ALARM	4	On

Else:

Assignment	#	State
CTR SET ALARM	4	Off

Logic #: 53 - "EB occup"

If:

	Assignment	#		State
IF	COORD PLAN		IS	2
AND	DET OCCUPANCY %	6	>	99
OR	DET OCCUPANCY %	21	>	99

Then:

Assignment	#	State
CTR SET ALARM	3	On

Else:

Assignment	#	State
CTR SET ALARM	3	Off

Logic #: 54 - "WB occup"

If:

	Assignment	#		State
IF	COORD PLAN		IS	2
AND	DET OCCUPANCY %	5	>	99
OR	DET OCCUPANCY %	22	>	99

Then:

Assignment	#	State
CTR SET ALARM	5	On

Else:

Assignment	#	State
CTR SET ALARM	5	Off

Logic #: 100 - ""

If:

	Assignment	#		State
IF	LP LOGIC FLAG	15	IS	Off

Then:

Assignment	#	State
LP SET LOGIC FLAG	15	Off
LP SET LOGIC FLAG	8	Off

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Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	10	5	10	5	10	10	10	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	5	0	5	0	5	0	5	0	0	0	0	0	0	0	0
Walk	0	5	0	7	0	5	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	23	0	18	0	25	0	18	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	1.5	4.0	1.5	3.0	1.5	4.0	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	25	15	10	30	15	25	25	30	0	0	0	0	0	0	0	0
Max2	7	7	12	12	7	7	12	12	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	3	10	3	10	3	10	3	10	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	1.5	4.0	1.5	3.0	1.5	4.0	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	10	5	10	5	10	6	10	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	5	0	5	0	5	0	5	0	0	0	0	0	0	0	0
Walk	0	5	0	7	0	5	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	23	0	18	0	25	0	18	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	1.5	4.0	1.5	3.0	1.5	4.0	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	40	30	10	30	15	30	15	30	0	0	0	0	0	0	0	0
Max2	7	7	12	12	7	7	12	12	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	3	10	3	10	3	10	3	10	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	1.5	4.0	1.5	3.0	1.5	4.0	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	10	5	10	5	10	6	10	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	5	0	5	0	5	0	5	0	0	0	0	0	0	0	0
Walk	0	5	0	7	0	5	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	23	0	18	0	25	0	18	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	1.5	4.0	1.5	3.0	1.5	4.0	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	25	15	10	30	15	25	25	30	0	0	0	0	0	0	0	0
Max2	7	7	12	12	7	7	12	12	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	3	10	3	10	3	10	3	10	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	1.5	4.0	1.5	3.0	1.5	4.0	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	3	10	3	10	3	10	3	10	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	5	0	5	0	5	0	5	0	0	0	0	0	0	0	0
Walk	0	8	0	7	0	8	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	27	0	20	0	27	0	22	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	1.5	4.0	1.5	3.0	1.5	4.0	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	25	15	10	90	15	25	15	90	0	0	0	0	0	0	0	0
Max2	7	7	12	12	7	7	12	12	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	3	10	3	10	3	10	3	10	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	1.5	4.0	1.5	3.0	1.5	4.0	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable
A	1	2	Yellow Ped	9	0.0	0.0	1	No
B	3	4	Yellow Ped	10	0.0	0.0	2	No
C	5	6	Yellow Ped	11	0.0	0.0	3	No
D	7	8	Yellow Ped	12	0.0	0.0	4	No

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	3	0	7	3.0	0.0	5
B02	3	0	7	3.0	0.0	5
C03	3	0	7	3.0	0.0	5
D04	3	0	7	3.0	0.0	5
E05	3	0	7	3.0	0.0	5
F06	3	0	7	3.0	0.0	5
G07	3	0	7	3.0	0.0	5
H08	3	0	7	3.0	0.0	5
I09	5	0	7	3.0	0.0	5
J10	5	0	7	3.0	0.0	5
K11	5	0	7	3.0	0.0	5
L12	5	0	7	3.0	0.0	5
M13	5	0	7	3.0	0.0	5
N14	5	0	7	3.0	0.0	5
O15	5	0	7	3.0	0.0	5
P16	5	0	7	3.0	0.0	5

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Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

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Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	.
3	.
4	Y
5	.
6	.
7	.
8	Y
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
B
C
D

Flash Thru Mon: No
Flash Time: 0
All Red: 6
Power Start Seq: 1
MUTCD Enabled: No
Y->G: n/a

Automatic Flash

Entry
4
8

Exit
4
8

Overlap Exit
A
B
C
D

Flash Thru Mon: No
Exit Flash: W
Minimum Flash: 8
Mimimum Recall: No
Cycle Through Phase: No

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Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guar Passage																
Non-Act I				X				X								
Non-Act II		X				X										
Dual Entry		X		X		X		X								
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk																
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off Unit Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall				X				X								
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
Al Calc																

Plan # 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall				X				X								
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
Al Calc																

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Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	PTN
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Fixed
Offset Reference	Yellow	Use Ped Time	No
Ped Recall	No	Ped Reservice	No
Local Zero Override	Yes	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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Coordination Pattern Data

Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	90	Std (COS)	9	Offsets In	Seconds
Offset Value	32s	Dwell/Add Time	3		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	1		
Max Select	MAXINH	Force Off	Fixed		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 1)	26	13	9	40	11	28	14	37	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	88s	90s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	90	Std (COS)	17	Offsets In	Seconds
Offset Value	34s	Dwell/Add Time	31		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	2		
Max Select	MAXINH	Force Off	Fixed		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 2)	26	18	11	35	15	29	18	28	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	90s	90s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	100	Std (COS)	25	Offsets In	Seconds
Offset Value	69s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	3		
Max Select	MAXINH	Force Off	Fixed		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 3)	26	17	15	42	18	25	20	37	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100s	100s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	100	Std (COS)	33	Offsets In	Seconds
Offset Value	69s	Dwell/Add Time	33		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	4		
Max Select	MAXINH	Force Off	Fixed		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 4)	24	17	10	49	18	18	18	46	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100s	100s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 5

Split Pattern	5	TS2 (Pat-Off)	1-2	Splits In	Seconds
Cycle	120	Std (COS)	41	Offsets In	Seconds
Offset Value	83s	Dwell/Add Time	41		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	5		
Max Select	MAXINH	Force Off	Fixed		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 5)	23	22	13	62	23	22	13	62	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	120s	120s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 6

Split Pattern	6	TS2 (Pat-Off)	1-3	Splits In	Seconds
Cycle	120	Std (COS)	73	Offsets In	Seconds
Offset Value	43s	Dwell/Add Time	41		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	6		
Max Select	MAXINH	Force Off	Fixed		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 6)	29	23	15	53	10	37	15	58	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	120s	120s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 7

Split Pattern	7	TS2 (Pat-Off)	2-1	Splits In	Seconds
Cycle	100	Std (COS)	81	Offsets In	Seconds
Offset Value	32s	Dwell/Add Time	3		
Actuated Coord	Yes	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	0		
Max Select	MAXINH	Force Off	Fixed		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 7)	26	12	12	50	10	28	15	47	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100s	100s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 11

Split Pattern	11	TS2 (Pat-Off)	3-2	Splits In	Seconds
Cycle	120	Std (COS)	137	Offsets In	Seconds
Offset Value	34s	Dwell/Add Time	40		
Actuated Coord	Yes	Timing Plan	3		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	0		
Max Select	MAXINH	Force Off	Fixed		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 11)	41	18	16	45	16	43	16	45	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	120s	120s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 13

Split Pattern	13	TS2 (Pat-Off)	4-1	Splits In	Seconds
Cycle	150	Std (COS)	153	Offsets In	Seconds
Offset Value	69s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 13)	50	24	17	59	18	46	17	59	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	140s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

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Solutions that Move the World™

035 - Plum Creek Pkwy @ Wilcox St - Cobalt @ 10.50.70.51 - Econolite Type - Cobalt

Coordination Split Pattern

Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	26	13	9	40	11	28	14	37	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	88s	90s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	26	18	11	35	15	29	18	28	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	90s	90s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	26	17	15	42	18	25	20	37	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100s	100s	0s	0s

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	24	17	10	49	18	18	18	46	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100s	100s	0s	0s

Split Pattern # 5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	23	22	13	62	23	22	13	62	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	120s	120s	0s	0s

Split Pattern # 6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	29	23	15	53	10	37	15	58	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	120s	120s	0s	0s

Split Pattern # 7

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	26	12	12	50	10	28	15	47	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100s	100s	0s	0s

Split Pattern # 11

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	41	18	16	45	16	43	16	45	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	120s	120s	0s	0s

Split Pattern # 13

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	50	24	17	59	18	46	17	59	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	150s	140s	0s	0s

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Preempt Plan

Preempt Plan (MM) 4-1

Preempt Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Red	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	0	0.0	120	3.0	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Red	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	4.0	1.0
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	0	0.0	120	3.0	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Red	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	4.0	1.0
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	0	0.0	120	3.0	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off

Conditional Delay	Off

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Red	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	4.0	1.0
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	0	0.0	120	3.0	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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035 - Plum Creek Pkwy @ Wilcox St - Cobalt @ 10.50.70.51 - Econolite Type - Cobalt

Preempt Preempt Filtering
Enable Preempt Filtering & TSP/SCP
(MM) 4-2

Input	Solid	Pulsing
1	...BYPASSED...	...BYPASSED...
2	...BYPASSED...	...BYPASSED...
3	PREEMPTION 3	PREEMPTION 7
4	PREEMPTION 4	PREEMPTION 8
5	PREEMPTION 5	PREEMPTION 9
6	PREEMPTION 6	PREEMPTION 10
7	...BYPASSED...	...BYPASSED...
8	...BYPASSED...	...BYPASSED...
9	...BYPASSED...	...BYPASSED...
10	...BYPASSED...	...BYPASSED...

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035 - Plum Creek Pkwy @ Wilcox St - Cobalt @ 10.50.70.51 - Econolite Type - Cobalt

Preempt TSP/SCP Plan and Split

TSP / SCP Plan (MM) 4-3

TSP/SCP Plan	Enable Option	Signal Type	Det Lock	Delay Time	Max Presence	PMT Enables Reservice	No Delay in TSP	Action SF Inhibit	Reservice Cycles	Bus Heading
1	No	Solid	No	0	0	No	False	0	0	NB
2	No	Solid	No	0	0	No	False	0	0	SB
3	No	Solid	No	0	0	No	False	0	0	EB
4	No	Solid	No	0	0	No	False	0	0	WB
5	No	Solid	No	0	0	No	False	0	0	.
6	No	Solid	No	0	0	No	False	0	0	.

Mode: TSP
Free Default Pattern: 120
Headway Allowance: 0

TSP/SCP Plan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

TSP / SCP Split Pattern (MM) 4-4

TSP/SCP Split Pattern	Max Type	Phase															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4	Max Reduction	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255

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Time Base Clock/Calendar

Clock/Calendar Data (MM) 5-1

Manual Action Plan:	0
SYNC Reference Time:	00:00
SYNC Reference:	Reference Time
Day Light Savings:	No
Time Reset Input Set Time:	3:30:00
Standard Time From GMT:	0

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Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1 - "1"

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2 - "2"

Pattern	2	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3 - "3"

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 4 - "4"

Pattern	4	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 5 - "5"

Pattern	5	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)	X		X													
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 6 - "6"

Pattern	6	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)	X		X													
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 7 - "AM peak"

Pattern	7	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 10 - "NB arterial"

Pattern	Free	Override Sys	No
Timing Plan	4	Sequence	0
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 11 - "star exit"

Pattern	11	Override Sys	No
Timing Plan	3	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 13 - "13"

Pattern	13	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 20 - "20"

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 21 - "21"

Pattern	Free	Override Sys	No
Timing Plan	2	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	1	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2	X	X	X	X	X	X	X	X								
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 22 - "22"

Pattern	Free	Override Sys	No
Timing Plan	2	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)	X		X													
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 30 - "30"

Pattern	Free	Override Sys	No
Timing Plan	2	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

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ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

035 - Plum Creek Pkwy @ Wilcox St - Cobalt @ 10.50.70.51 - Econolite Type - Cobalt

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Action Plan	Start Time
1	20	04:30
2	1	05:30
3	7	07:00
4	2	09:00
5	3	15:00
6	2	19:00
7	30	21:00
8	21	23:59

Day Plan #2 - "2"

Event	Action Plan	Start Time
1	20	05:30
2	2	07:00
3	30	21:00
4	21	23:59
5	1	10:00
6	2	14:30

Day Plan #3 - "I25 Nt close"

Event	Action Plan	Start Time
1	1	05:30
2	2	09:00
3	3	15:00
4	2	19:00
5	30	20:00

Day Plan #5 - "5"

Event	Action Plan	Start Time
1	2	05:00
2	30	21:00
3	21	23:59
4	1	09:30
5	2	16:00

Day Plan #6 - "Starlight"

Event	Action Plan	Start Time
1	20	05:30
2	2	07:00
3	1	10:00
4	2	19:00
5	30	21:00
6	21	23:59

Day Plan #7 - "R Fair"

Event	Action Plan	Start Time
1	20	04:30
2	1	05:30
3	2	09:00

4	3	15:00
5	1	19:00
6	30	22:30
7	21	23:59

Day Plan #8 - "F Fair"

Event	Action Plan	Start Time
1	20	04:30
2	1	05:30
3	2	09:00
4	3	15:00
5	2	19:00
6	1	21:00
7	21	23:59

Day Plan #9 - "Sat Fair"

Event	Action Plan	Start Time
1	20	05:30
2	2	07:00
3	1	11:00
4	2	14:30
5	1	21:30
6	21	23:59

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 5

Day Plan No.: 5

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	12	13	14	15	16	17	18	19	20	21	22
	23	24	25	26	27	28	29	30	31		

Schedule Number - 6

Day Plan No.: 6

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	12	13	14	15	16	17	18	19	20	21	22
	23	24	25	26	27	28	29	30	31		

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Solutions that Move the World™

035 - Plum Creek Pkwy @ Wilcox St - Cobalt @ 10.50.70.51 - Econolite Type - Cobalt

Time Base Exceptions

Exception Day Program (MM) 5-5

Excep Day	Float/Fixed	Mon/Mon	DOW/DOM	WOM/Year	Day Plan
1	FLOAT	6	1	1	5
2	FIXED	11	21	2020	6
3	FIXED	6	10	2019	3
4	FIXED	6	11	2019	3
5	FIXED	8	1	2019	7
6	FIXED	8	2	2019	8
7	FIXED	8	3	2019	9

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Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	2		S
4	6		S
5	3	4	S
6	4		S
7	4		S
8	4		S
11	1	2	S
17	5	6	S
18	6		S
19	8		S
20	8		S
21	7	8	S
22	8		S
23	8		S
24	8		S
25	5	6	S
26	6		S
27	3	4	S
29	7	8	S
30	8		S
31	8		S
58	2		S

Vehicle Detector Plan Number - 2

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	2		S
4	2		S
5	3		S
6	4		S
7	4		S
8	4		S
9	2		S
10	2		S
11	4		S
12	4		S
13	6		S
14	6		S
15	8		S
16	8		S
17	5		S
18	6		S
19	6		S
20	6		S
21	7		S
22	8		S
23	8		S
24	8		S
25	2		S

26	4		S
27	6		S
28	8		S

Vehicle Detector Plan Number - 3

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	2		S
4	2		S
5	3		S
6	4		S
7	4		S
8	4		S
9	2		S
10	2		S
11	4		S
12	4		S
13	6		S
14	6		S
15	8		S
16	8		S
17	5		S
18	6		S
19	6		S
20	6		S
21	7		S
22	8		S
23	8		S
24	8		S
25	2		S
26	4		S
27	6		S
28	8		S

Vehicle Detector Plan Number - 4

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	2		S
4	2		S
5	3		S
6	4		S
7	4		S
8	4		S
9	2		S
10	2		S
11	4		S
12	4		S
13	6		S
14	6		S
15	8		S
16	8		S
17	5		S
18	6		S
19	6		S
20	6		S
21	7		S
22	8		S
23	8		S
24	8		S
25	2		S
26	4		S
27	6		S
28	8		S

Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description

1	S-STANDARD	Yes	
2	S-STANDARD	Yes	
3	S-STANDARD	Yes	
4	S-STANDARD	Yes	
5	S-STANDARD	Yes	
6	S-STANDARD	Yes	
7	S-STANDARD	Yes	
8	S-STANDARD	Yes	
9	S-STANDARD	Yes	
10	S-STANDARD	Yes	
11	S-STANDARD	Yes	
12	S-STANDARD	Yes	
13	S-STANDARD	Yes	
14	S-STANDARD	Yes	
15	S-STANDARD	Yes	
16	S-STANDARD	Yes	
17	S-STANDARD	Yes	
18	S-STANDARD	Yes	
19	S-STANDARD	Yes	
20	S-STANDARD	Yes	
21	S-STANDARD	Yes	
22	S-STANDARD	Yes	
23	S-STANDARD	Yes	
24	S-STANDARD	Yes	
25	S-STANDARD	Yes	
26	S-STANDARD	Yes	
27	S-STANDARD	Yes	
28	S-STANDARD	Yes	
29	S-STANDARD	Yes	
30	S-STANDARD	Yes	
31	S-STANDARD	Yes	
32	S-STANDARD	Yes	
33	S-STANDARD	Yes	
34	S-STANDARD	Yes	
35	S-STANDARD	Yes	
36	S-STANDARD	Yes	
37	S-STANDARD	Yes	
38	S-STANDARD	Yes	
39	S-STANDARD	Yes	
40	S-STANDARD	Yes	
41	S-STANDARD	Yes	
42	S-STANDARD	Yes	
43	S-STANDARD	Yes	
44	S-STANDARD	Yes	
45	S-STANDARD	Yes	
46	S-STANDARD	Yes	
47	S-STANDARD	Yes	
48	S-STANDARD	Yes	
49	S-STANDARD	Yes	
50	S-STANDARD	Yes	
51	S-STANDARD	Yes	
52	S-STANDARD	Yes	
53	S-STANDARD	Yes	
54	S-STANDARD	Yes	
55	S-STANDARD	Yes	
56	S-STANDARD	Yes	
57	S-STANDARD	Yes	
58	S-STANDARD	Yes	
59	S-STANDARD	Yes	
60	S-STANDARD	Yes	
61	S-STANDARD	Yes	
62	S-STANDARD	Yes	
63	S-STANDARD	Yes	
64	S-STANDARD	Yes	

Vehicle Detector Plan Number - 1

	Phase												

Veh Detector		ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
3	2	No	Yes	4.0	Passage	0.0	0	No	0	None	Yes	Yes	No
4	6	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
5	3	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
6	4	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
7	4	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
8	4	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
9	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
11	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	0	No	Yes	3.0	Passage	0.0	0	No	0	None	No	No	No
14	0	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
15	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	5	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
18	6	Yes	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
19	8	No	Yes	4.0	Passage	0.0	0	No	0	None	Yes	Yes	No
20	8	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
21	7	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
22	8	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
23	8	No	Yes	4.0	Passage	0.0	0	No	0	None	Yes	Yes	No
24	8	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
25	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	6	No	Yes	4.0	Passage	0.0	0	No	0	None	Yes	Yes	No
27	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	7	No	Yes	3.0	Passage	0.0	0	No	0	None	No	No	No
30	8	No	Yes	4.0	Passage	0.0	0	No	0	None	Yes	Yes	No
31	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	2	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
5	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	4	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	6	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
21	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 3

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	2	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
5	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	4	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	6	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
21	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 4

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	2	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
5	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	4	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	6	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
21	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Ped Detector Phase Assignment (MM) 6-3

Mode: Econolite

Ped Detector Number	Called Phase															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X

Castle Rock, CO

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

035 - Plum Creek Pkwy @ Wilcox St - Cobalt @ 10.50.70.51 - Econolite Type - Cobalt

Detectors

Detectors - Pg 2

Log - Speed Detector Setup (MM) 6-4

NTCIP Log Period: 60 ECPI Log Period: 0 Length Unit: Inches

Speed Detector	Local Detector	One/Two Detector	Vehicle Length	Trap length	Enable Log
1	0	1	0	0	No
2	0	1	0	0	No
3	0	1	0	0	No
4	0	1	0	0	No
5	0	1	0	0	No
6	0	1	0	0	No
7	0	1	0	0	No
8	0	1	0	0	No
9	0	1	0	0	No
10	0	1	0	0	No
11	0	1	0	0	No
12	0	1	0	0	No
13	0	1	0	0	No
14	0	1	0	0	No
15	0	1	0	0	No
16	0	1	0	0	No

Vehicle Detector Diagnostics (MM) 6-5

Veh Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay
1	0	0	60	1	255	0
2	0	0	60	1	255	0
5	0	0	60	1	255	0
6	0	0	60	1	255	0
17	0	0	60	1	255	0
18	0	0	60	1	255	0
21	0	0	60	1	255	0
22	0	0	60	1	255	0
30	0	0	22	15	255	0

Veh Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Pedestrian Detector Diagnostics (MM) 6-6

Ped Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier
2	0	168	1	60

4	0	168	1	60
6	0	168	1	60
8	0	168	1	60

Ped Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 3

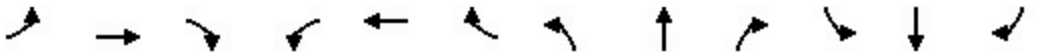
Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier

APPENDIX “C”

INTERSECTION CAPACITY ANALYSIS WORKSHEETS



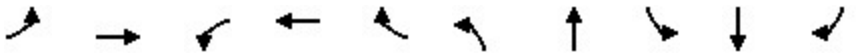
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		325	125		100	225		0	350		350
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.993				0.850		0.875				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3514	0	1770	3539	1583	1770	1630	0	1770	1863	1583
Flt Permitted	0.624			0.344			0.734			0.581		
Satd. Flow (perm)	1162	3514	0	641	3539	1583	1367	1630	0	1082	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				182		86				182
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		922			1021			638			586	
Travel Time (s)		15.7			17.4			14.5			8.9	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	80	391	124	188	159	4	16	204	32	38
Future Volume (vph)	80	391	124	188	159	4	16	204	32	38
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases	4		8		8	2		6		6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	38.0	11.0	40.0	40.0	11.0	33.0	11.0	32.0	32.0
Total Split (s)	11.0	37.0	11.0	37.0	37.0	12.0	30.0	12.0	30.0	30.0
Total Split (%)	12.2%	41.1%	12.2%	41.1%	41.1%	13.3%	33.3%	13.3%	33.3%	33.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max
Act Effct Green (s)	21.8	16.8	23.0	19.0	19.0	38.6	32.9	50.2	47.8	47.8
Actuated g/C Ratio	0.24	0.19	0.26	0.21	0.21	0.43	0.37	0.56	0.53	0.53
v/c Ratio	0.28	0.67	0.60	0.27	0.36	0.01	0.16	0.32	0.04	0.04
Control Delay (s/veh)	24.3	38.5	35.6	30.9	6.5	11.8	8.2	12.3	13.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.3	38.5	35.6	30.9	6.5	11.8	8.2	12.3	13.5	0.1
LOS	C	D	D	C	A	B	A	B	B	A
Approach Delay (s/veh)		36.2		23.9			8.3		10.8	
Approach LOS		D		C			A		B	

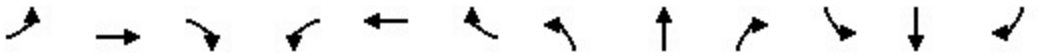
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 1 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay (s/veh): 24.6	Intersection LOS: C
Intersection Capacity Utilization 51.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Prairie Hawk Dr. & Wolfensberger Rd.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	87	445	135	204	173	4	103	222	35	41
v/c Ratio	0.28	0.67	0.60	0.27	0.36	0.01	0.16	0.32	0.04	0.04
Control Delay (s/veh)	24.3	38.5	35.6	30.9	6.5	11.8	8.2	12.3	13.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.3	38.5	35.6	30.9	6.5	11.8	8.2	12.3	13.5	0.1
Queue Length 50th (ft)	36	123	57	53	0	1	6	59	8	0
Queue Length 95th (ft)	65	162	94	79	45	6	45	113	32	0
Internal Link Dist (ft)		842		941			558		506	
Turn Bay Length (ft)	325		125		100	225		350		350
Base Capacity (vph)	315	1214	226	1218	664	618	650	689	989	926
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.37	0.60	0.17	0.26	0.01	0.16	0.32	0.04	0.04

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	391	18	124	188	159	4	16	79	204	32	38
Future Volume (veh/h)	80	391	18	124	188	159	4	16	79	204	32	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	87	425	20	135	204	173	4	17	86	222	35	41
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	569	27	224	587	262	680	120	606	727	950	805
Arrive On Green	0.06	0.16	0.16	0.06	0.17	0.17	0.01	0.45	0.45	0.07	0.51	0.51
Sat Flow, veh/h	1781	3456	162	1781	3554	1585	1781	268	1358	1781	1870	1585
Grp Volume(v), veh/h	87	218	227	135	204	173	4	0	103	222	35	41
Grp Sat Flow(s),veh/h/ln	1781	1777	1841	1781	1777	1585	1781	0	1626	1781	1870	1585
Q Serve(g_s), s	3.6	10.5	10.6	5.0	4.6	9.2	0.1	0.0	3.4	6.0	0.8	1.2
Cycle Q Clear(g_c), s	3.6	10.5	10.6	5.0	4.6	9.2	0.1	0.0	3.4	6.0	0.8	1.2
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.83	1.00		1.00
Lane Grp Cap(c), veh/h	293	293	303	224	587	262	680	0	726	727	950	805
V/C Ratio(X)	0.30	0.74	0.75	0.60	0.35	0.66	0.01	0.00	0.14	0.31	0.04	0.05
Avail Cap(c_a), veh/h	294	612	634	224	1224	546	789	0	726	727	950	805
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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	35.8	35.8	31.6	33.3	35.2	13.6	0.0	14.7	11.5	11.1	11.2
Incr Delay (d2), s/veh	0.6	3.8	3.7	4.5	0.4	2.8	0.0	0.0	0.4	0.2	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	4.7	4.9	2.6	1.9	3.6	0.0	0.0	1.3	2.1	0.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.5	39.5	39.5	36.1	33.6	38.1	13.6	0.0	15.1	11.8	11.2	11.3
LnGrp LOS	C	D	D	D	C	D	B		B	B	B	B
Approach Vol, veh/h		532			512			107			298	
Approach Delay, s/veh		37.9			35.8			15.1			11.6	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	46.2	11.0	20.8	6.5	51.7	11.0	20.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	6.0	24.0	5.0	31.0	6.0	24.0	5.0	31.0
Max Q Clear Time (g_c+I1), s	8.0	5.4	7.0	12.6	2.1	3.2	5.6	11.2
Green Ext Time (p_c), s	0.0	0.5	0.0	2.3	0.0	0.2	0.0	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	30.1
HCM 7th LOS	C

Notes

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

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.946	
Flt Protected	0.950			0.999		
Satd. Flow (prot)	1770	0	0	1861	1762	0
Flt Permitted	0.950			0.999		
Satd. Flow (perm)	1770	0	0	1861	1762	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	671			479	638	
Travel Time (s)	15.3			10.9	14.5	

Intersection Summary	
Area Type:	Other

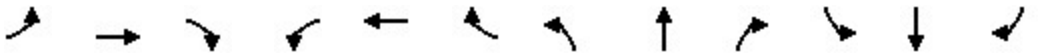
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	42	0	1	44	96	64
Future Vol, veh/h	42	0	1	44	96	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	0	1	48	104	70

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	189	139	174	0	-	0
Stage 1	139	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	800	909	1403	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	972	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	799	909	1403	-	-	-
Mov Cap-2 Maneuver	799	-	-	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	972	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.78	0.17	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	40	-	799	-	-
HCM Lane V/C Ratio	0.001	-	0.057	-	-
HCM Control Delay (s/veh)	7.6	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.997			0.865						0.883	
Flt Protected		0.954						0.980			0.995	
Satd. Flow (prot)	0	1772	0	0	1611	0	0	1825	0	0	1637	0
Flt Permitted		0.954						0.980			0.995	
Satd. Flow (perm)	0	1772	0	0	1611	0	0	1825	0	0	1637	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		479			909			1975			245	
Travel Time (s)		10.9			20.7			44.9			5.6	

Intersection Summary	
Area Type:	Other

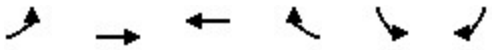
Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	0	1	0	0	8	2	3	0	8	3	74
Future Vol, veh/h	35	0	1	0	0	8	2	3	0	8	3	74
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	0	1	0	0	9	2	3	0	9	3	80

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	9	0	0	1	0	0	78	85	1	82	82	4
Stage 1	-	-	-	-	-	-	77	77	-	4	4	-
Stage 2	-	-	-	-	-	-	2	9	-	78	77	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1611	-	-	1622	-	-	911	805	1084	905	809	1079
Stage 1	-	-	-	-	-	-	932	831	-	1018	892	-
Stage 2	-	-	-	-	-	-	1021	888	-	931	831	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1611	-	-	1622	-	-	819	786	1084	880	790	1079
Mov Cap-2 Maneuver	-	-	-	-	-	-	819	786	-	880	790	-
Stage 1	-	-	-	-	-	-	910	812	-	1018	892	-
Stage 2	-	-	-	-	-	-	942	888	-	905	811	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	7.09	0	9.54	8.79
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	799	1458	-	-	1622	-	-	1043
HCM Lane V/C Ratio	0.007	0.024	-	-	-	-	-	0.089
HCM Control Delay (s/veh)	9.5	7.3	0	-	0	-	-	8.8
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.3



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.995		0.865	
Flt Protected		0.993				
Satd. Flow (prot)	0	1850	1853	0	1611	0
Flt Permitted		0.993				
Satd. Flow (perm)	0	1850	1853	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		340	1975		832	
Travel Time (s)		7.7	44.9		18.9	

Intersection Summary	
Area Type:	Other

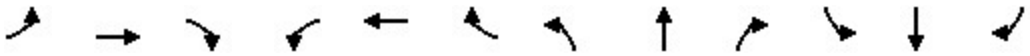
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	11	24	1	0	5
Future Vol, veh/h	2	11	24	1	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	12	26	1	0	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	27	0	-	0	43	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	16	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1587	-	-	-	968	1049
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	1006	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1587	-	-	-	967	1049
Mov Cap-2 Maneuver	-	-	-	-	967	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	1006	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.12	0	8.45
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	277	-	-	-	1049
HCM Lane V/C Ratio	0.001	-	-	-	0.005
HCM Control Delay (s/veh)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



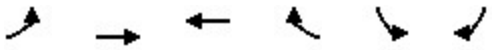
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	250		0	125		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.967			0.950			0.971			0.993	
Flt Protected		0.996			0.995			0.991			0.982	
Satd. Flow (prot)	0	3409	0	0	3345	0	0	3406	0	0	3451	0
Flt Permitted		0.996			0.995			0.991			0.982	
Satd. Flow (perm)	0	3409	0	0	3345	0	0	3406	0	0	3451	0
Link Speed (mph)		40			35			45			45	
Link Distance (ft)		631			610			567			842	
Travel Time (s)		10.8			11.9			8.6			12.8	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	4.2
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	211	156	156	361
Demand Flow Rate, veh/h	215	159	160	368
Vehicles Circulating, veh/h	368	147	302	136
Vehicles Exiting, veh/h	136	315	281	170
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.6	3.5	4.1	4.3
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR
RT Channelized								
Lane Util	0.470	0.530	0.472	0.528	0.469	0.531	0.470	0.530
Follow-Up Headway, s	2.667	2.535	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	4.645	4.328
A (Intercept)	1350	1420	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	9.199e-4	8.501e-4
Entry Flow, veh/h	101	114	75	84	75	85	173	195
Cap Entry Lane, veh/h	962	1039	1179	1253	1022	1099	1191	1265
Entry HV Adj Factor	0.982	0.981	0.979	0.986	0.978	0.973	0.980	0.980
Flow Entry, veh/h	99	112	73	83	73	83	170	191
Cap Entry, veh/h	945	1019	1154	1235	1000	1069	1167	1240
V/C Ratio	0.105	0.110	0.064	0.067	0.073	0.077	0.145	0.154
Control Delay, s/veh	4.8	4.5	3.6	3.5	4.3	4.0	4.3	4.2
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0	0	1	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.954		0.995	
Flt Protected		0.999			0.954	
Satd. Flow (prot)	0	1861	1777	0	1768	0
Flt Permitted		0.999			0.954	
Satd. Flow (perm)	0	1861	1777	0	1768	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		350	935		1177	
Travel Time (s)		8.0	21.3		26.8	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	251	112	58	95	4
Future Vol, veh/h	6	251	112	58	95	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	273	122	63	103	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	185	0	-	0	439	153
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	286	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1390	-	-	-	575	893
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1390	-	-	-	572	893
Mov Cap-2 Maneuver	-	-	-	-	572	-
Stage 1	-	-	-	-	870	-
Stage 2	-	-	-	-	763	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.18	0	12.61
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	42	-	-	-	580
HCM Lane V/C Ratio	0.005	-	-	-	0.185
HCM Control Delay (s/veh)	7.6	0	-	-	12.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7

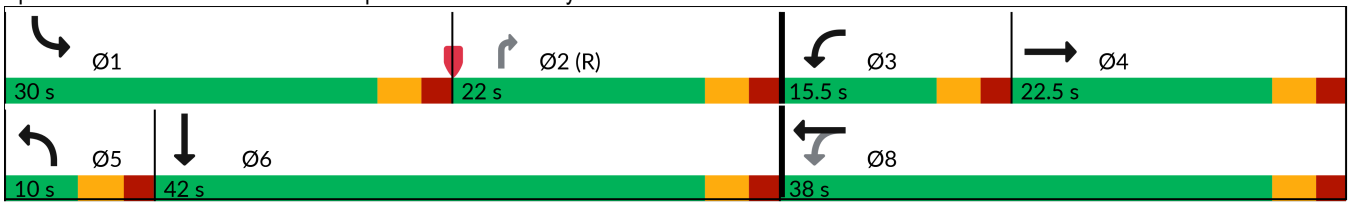
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		0	375		0	0		175
Storage Lanes	1		0	1		0	1		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor												
Frt		0.979							0.850		0.974	
Flt Protected				0.950			0.950			0.950	0.977	
Satd. Flow (prot)	0	4979	0	1770	3539	0	1770	0	1583	3221	1613	0
Flt Permitted				0.308			0.950			0.950	0.977	
Satd. Flow (perm)	0	4979	0	574	3539	0	1770	0	1583	3221	1613	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30							220		11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1497			253			493			625	
Travel Time (s)		34.0			5.8			11.2			14.2	

Intersection Summary	
Area Type:	Other

Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	313	156	211	16	202	661	92
Future Volume (vph)	313	156	211	16	202	661	92
Turn Type	NA	pm+pt	NA	Prot	Perm	Prot	NA
Protected Phases	4	3	8	5		1	6
Permitted Phases		8			2		
Detector Phase	4	3	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	10.0	22.5	10.0	22.5	22.5	22.5
Total Split (s)	22.5	15.5	38.0	10.0	22.0	30.0	42.0
Total Split (%)	25.0%	17.2%	42.2%	11.1%	24.4%	33.3%	46.7%
Yellow Time (s)	3.0	3.0	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
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	Max	Max
Act Effct Green (s)	12.1	27.1	27.1	6.3	17.0	30.9	30.9
Actuated g/C Ratio	0.13	0.30	0.30	0.07	0.19	0.34	0.34
v/c Ratio	0.57	0.56	0.22	0.14	0.46	0.53	0.51
Control Delay (s/veh)	36.7	15.6	11.2	41.6	8.1	26.5	27.4
Queue Delay	0.0	1.4	0.0	0.0	0.2	2.1	3.2
Total Delay (s/veh)	36.7	16.9	11.2	41.6	8.2	28.5	30.6
LOS	D	B	B	D	A	C	C
Approach Delay (s/veh)	36.7		13.7				29.2
Approach LOS	D		B				C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBR, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay (s/veh): 25.2	Intersection LOS: C
Intersection Capacity Utilization 49.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: I-25 SB Ramp & Plum Creek Pkwy.



Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Group Flow (vph)	394	170	229	17	220	582	285
v/c Ratio	0.57	0.56	0.22	0.14	0.46	0.53	0.51
Control Delay (s/veh)	36.7	15.6	11.2	41.6	8.1	26.5	27.4
Queue Delay	0.0	1.4	0.0	0.0	0.2	2.1	3.2
Total Delay (s/veh)	36.7	16.9	11.2	41.6	8.2	28.5	30.6
Queue Length 50th (ft)	72	51	33	9	0	144	135
Queue Length 95th (ft)	99	m52	m34	30	59	213	236
Internal Link Dist (ft)	1417		173				545
Turn Bay Length (ft)				375			
Base Capacity (vph)	992	311	1297	123	477	1107	561
Starvation Cap Reductn	0	43	0	0	0	0	0
Spillback Cap Reductn	2	0	0	0	24	367	183
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.63	0.18	0.14	0.49	0.79	0.75

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

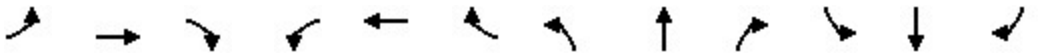
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	313	50	156	211	0	16	0	202	661	92	45
Future Volume (veh/h)	0	313	50	156	211	0	16	0	202	661	92	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	340	54	170	229	0	17	0	220	648	198	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, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	513	79	301	969	0	34	0	0	2196	784	194
Arrive On Green	0.00	0.11	0.11	0.03	0.09	0.00	0.02	0.00	0.00	0.62	0.54	0.54
Sat Flow, veh/h	0	4629	689	1781	3647	0	1781	17		3563	1448	358
Grp Volume(v), veh/h	0	257	137	170	229	0	17	54.4		648	0	247
Grp Sat Flow(s),veh/h/ln	0	1702	1746	1781	1777	0	1781	D		1781	0	1806
Q Serve(g_s), s	0.0	6.5	6.8	7.3	5.4	0.0	0.9			7.7	0.0	6.5
Cycle Q Clear(g_c), s	0.0	6.5	6.8	7.3	5.4	0.0	0.9			7.7	0.0	6.5
Prop In Lane	0.00		0.39	1.00		0.00	1.00			1.00		0.20
Lane Grp Cap(c), veh/h	0	391	201	301	969	0	34			2196	0	978
V/C Ratio(X)	0.00	0.66	0.68	0.56	0.24	0.00	0.50			0.30	0.00	0.25
Avail Cap(c_a), veh/h	0	662	340	327	1303	0	99			2196	0	978
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.35	0.35	0.00	1.00			1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	38.1	38.2	31.6	32.2	0.0	43.7			8.1	0.0	11.0
Incr Delay (d2), s/veh	0.0	1.9	4.0	0.7	0.0	0.0	10.7			0.3	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.8	3.1	3.3	2.4	0.0	0.5			2.8	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	40.0	42.3	32.2	32.3	0.0	54.4			8.4	0.0	11.6
LnGrp LOS		D	D	C	C		D			A		B
Approach Vol, veh/h		394			399						895	
Approach Delay, s/veh		40.8			32.3						9.3	
Approach LOS		D			C						A	

Timer - Assigned Phs	1		3	4	5	6		8				
Phs Duration (G+Y+Rc), s	60.5		14.2	15.3	6.7	53.7		29.5				
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	25.0		10.5	17.5	5.0	37.0		33.0				
Max Q Clear Time (g_c+I1), s	9.7		9.3	8.8	2.9	8.5		7.4				
Green Ext Time (p_c), s	2.2		0.1	1.6	0.0	1.5		1.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	22.4
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



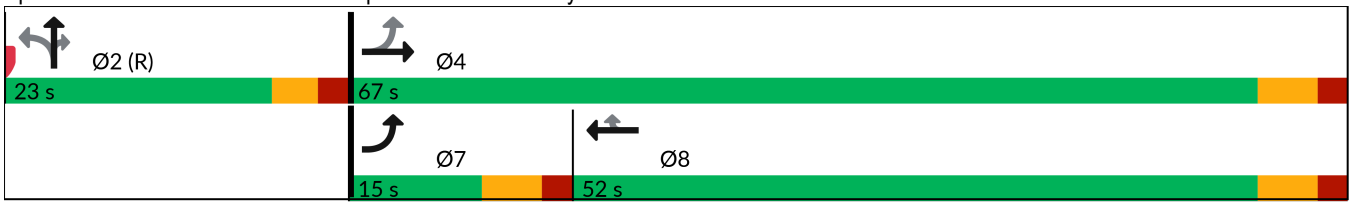
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	400		0	400		175	0		0
Storage Lanes	1		0	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	0.95	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.919	0.850		0.860	0.850			
Flt Protected	0.950						0.950	0.998				
Satd. Flow (prot)	1770	5085	0	0	1626	1504	1681	1455	1504	0	0	0
Flt Permitted	0.086						0.950	0.998				
Satd. Flow (perm)	160	5085	0	0	1626	1504	1681	1455	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					95	719		80	109			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		253			709			503			557	
Travel Time (s)		5.8			16.1			11.4			12.7	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	188	1023	333	1050	33	2	154
Future Volume (vph)	188	1023	333	1050	33	2	154
Turn Type	pm+pt	NA	NA	Perm	Perm	NA	Perm
Protected Phases	7	4	8			2	
Permitted Phases	4			8	2		2
Detector Phase	7	4	8	8	2	2	2
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	24.0	23.0	23.0	23.0
Total Split (s)	15.0	67.0	52.0	52.0	23.0	23.0	23.0
Total Split (%)	16.7%	74.4%	57.8%	57.8%	25.6%	25.6%	25.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	59.7	59.7	44.7	44.7	19.3	19.3	19.3
Actuated g/C Ratio	0.66	0.66	0.50	0.50	0.21	0.21	0.21
v/c Ratio	0.76	0.33	0.92	0.65	0.09	0.23	0.21
Control Delay (s/veh)	34.3	15.1	35.6	4.1	30.3	10.1	5.5
Queue Delay	6.3	3.6	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.6	18.7	35.6	4.1	30.3	10.1	5.5
LOS	D	B	D	A	C	B	A
Approach Delay (s/veh)		22.1	20.6			11.3	
Approach LOS		C	C			B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 51 (57%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 20.6	Intersection LOS: C
Intersection Capacity Utilization 72.1%	ICU Level of Service C
Analysis Period (min) 15	

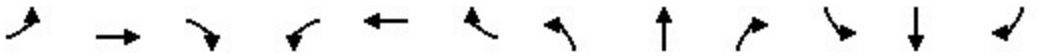
Splits and Phases: 8: NB I-25 Ramp & Plum Creek Pkwy.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	204	1112	784	719	32	86	87
v/c Ratio	0.76	0.33	0.92	0.65	0.09	0.23	0.21
Control Delay (s/veh)	34.3	15.1	35.6	4.1	30.3	10.1	5.5
Queue Delay	6.3	3.6	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.6	18.7	35.6	4.1	30.3	10.1	5.5
Queue Length 50th (ft)	96	194	362	0	15	3	0
Queue Length 95th (ft)	#151	236	#637	56	42	45	28
Internal Link Dist (ft)		173	629			423	
Turn Bay Length (ft)					400		175
Base Capacity (vph)	267	3446	877	1120	361	375	408
Starvation Cap Reductn	32	2211	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.90	0.89	0.64	0.09	0.23	0.21

Intersection Summary

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

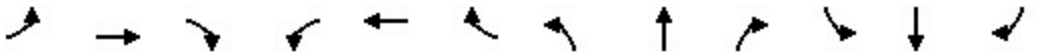


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	1023	0	0	333	1050	33	2	154	0	0	0
Future Volume (veh/h)	188	1023	0	0	333	1050	33	2	154	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	204	1112	0	0	946	752	25	0	180			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	239	3398	0	0	956	810	378	0	673			
Arrive On Green	0.09	0.67	0.00	0.00	0.51	0.51	0.21	0.00	0.21			
Sat Flow, veh/h	1781	5274	0	0	1870	1585	1781	0	3170			
Grp Volume(v), veh/h	204	1112	0	0	946	752	25	0	180			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	5.9	8.4	0.0	0.0	45.0	39.7	1.0	0.0	4.3			
Cycle Q Clear(g_c), s	5.9	8.4	0.0	0.0	45.0	39.7	1.0	0.0	4.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	239	3398	0	0	956	810	378	0	673			
V/C Ratio(X)	0.85	0.33	0.00	0.00	0.99	0.93	0.07	0.00	0.27			
Avail Cap(c_a), veh/h	261	3461	0	0	956	810	378	0	673			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.84	0.84	0.00	0.00	0.75	0.75	1.00	0.00	1.00			
Uniform Delay (d), s/veh	25.0	6.4	0.0	0.0	21.8	20.5	28.3	0.0	29.6			
Incr Delay (d2), s/veh	18.7	0.0	0.0	0.0	22.6	13.5	0.3	0.0	1.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.6	2.6	0.0	0.0	23.9	16.4	0.5	0.0	1.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.7	6.5	0.0	0.0	44.4	34.0	28.7	0.0	30.6			
LnGrp LOS	D	A			D	C	C		C			
Approach Vol, veh/h		1316			1698			205				
Approach Delay, s/veh		12.3			39.8			30.3				
Approach LOS		B			D			C				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		24.1		65.9			13.9	52.0				
Change Period (Y+Rc), s		5.0		6.0			6.0	6.0				
Max Green Setting (Gmax), s		18.0		61.0			9.0	46.0				
Max Q Clear Time (g_c+I1), s		6.3		10.4			7.9	47.0				
Green Ext Time (p_c), s		0.5		10.7			0.1	0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.9
HCM 7th LOS	C

Notes
User approved volume balancing among the lanes for turning movement.



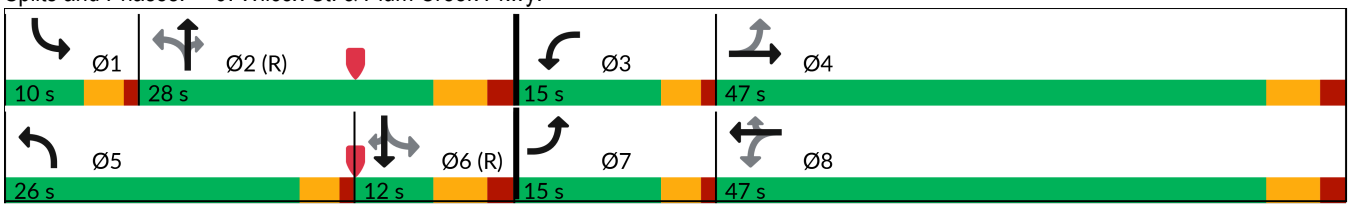
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	225		0	225		250	175		200
Storage Lanes	1		1	1		1	2		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	1863	1583	1770	1863	1583
Flt Permitted	0.133			0.360			0.589			0.686		
Satd. Flow (perm)	248	3539	1583	671	3539	1583	2128	1863	1583	1278	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			385			164			120			164
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			907			521			491	
Travel Time (s)		16.1			20.6			11.8			11.2	

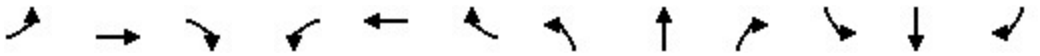
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	193	620	354	46	869	114	356	101	32	59	69	127
Future Volume (vph)	193	620	354	46	869	114	356	101	32	59	69	127
Turn Type	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		8	2		2	6		6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0		9.5	31.0	31.0	9.5	36.0	36.0	9.5	34.0	34.0
Total Split (s)	15.0	47.0		15.0	47.0	47.0	26.0	28.0	28.0	10.0	12.0	12.0
Total Split (%)	15.0%	47.0%		15.0%	47.0%	47.0%	26.0%	28.0%	28.0%	10.0%	12.0%	12.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0	1.0	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)	4.0	6.0		4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	51.8	41.2	100.0	44.1	35.2	35.2	39.9	29.1	29.1	29.3	20.5	20.5
Actuated g/C Ratio	0.52	0.41	1.00	0.44	0.35	0.35	0.40	0.29	0.29	0.29	0.21	0.21
v/c Ratio	0.72	0.46	0.24	0.14	0.76	0.19	0.38	0.20	0.06	0.16	0.20	0.30
Control Delay (s/veh)	29.4	22.5	0.4	11.4	32.5	2.0	22.8	31.5	0.2	23.0	39.0	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.4	22.5	0.4	11.4	32.5	2.0	22.8	31.5	0.2	23.0	39.0	6.2
LOS	C	C	A	B	C	A	C	C	A	C	D	A
Approach Delay (s/veh)		16.9			28.2			23.1			19.0	
Approach LOS		B			C			C			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 32 (32%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay (s/veh): 22.1	Intersection LOS: C
Intersection Capacity Utilization 64.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: Wilcox St. & Plum Creek Pkwy.

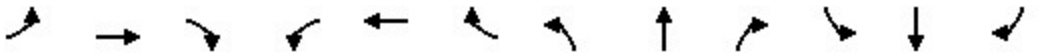




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	210	674	385	50	945	124	387	110	35	64	75	138
v/c Ratio	0.72	0.46	0.24	0.14	0.76	0.19	0.38	0.20	0.06	0.16	0.20	0.30
Control Delay (s/veh)	29.4	22.5	0.4	11.4	32.5	2.0	22.8	31.5	0.2	23.0	39.0	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.4	22.5	0.4	11.4	32.5	2.0	22.8	31.5	0.2	23.0	39.0	6.2
Queue Length 50th (ft)	68	164	0	15	274	0	85	56	0	25	40	0
Queue Length 95th (ft)	#140	201	0	29	318	18	132	108	0	58	91	39
Internal Link Dist (ft)		629			827			441			411	
Turn Bay Length (ft)	150			225			225		250	175		200
Base Capacity (vph)	295	1489	1583	444	1450	745	1136	541	545	409	382	455
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.45	0.24	0.11	0.65	0.17	0.34	0.20	0.06	0.16	0.20	0.30

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)	193	620	354	46	869	114	356	101	32	59	69	127
Future Volume (veh/h)	193	620	354	46	869	114	356	101	32	59	69	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	210	674	0	50	945	124	387	110	35	64	75	138
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	1365		322	1159	517	1060	630	534	483	507	430
Arrive On Green	0.10	0.38	0.00	0.04	0.33	0.33	0.11	0.34	0.34	0.04	0.27	0.27
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	210	674	0	50	945	124	387	110	35	64	75	138
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	7.5	14.4	0.0	1.8	24.4	5.7	7.6	4.1	1.5	2.6	3.0	6.9
Cycle Q Clear(g_c), s	7.5	14.4	0.0	1.8	24.4	5.7	7.6	4.1	1.5	2.6	3.0	6.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	285	1365		322	1159	517	1060	630	534	483	507	430
V/C Ratio(X)	0.74	0.49		0.16	0.82	0.24	0.36	0.17	0.07	0.13	0.15	0.32
Avail Cap(c_a), veh/h	311	1457		451	1457	650	1450	630	534	516	507	430
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)	0.96	0.96	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	23.4	0.0	21.2	30.9	24.6	20.5	23.4	22.5	24.5	27.7	29.1
Incr Delay (d2), s/veh	7.8	0.3	0.0	0.2	3.0	0.2	0.2	0.6	0.2	0.1	0.6	2.0
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	3.6	6.0	0.0	0.8	10.7	2.2	3.0	1.9	0.6	1.1	1.4	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.6	23.7	0.0	21.4	33.9	24.9	20.7	24.0	22.7	24.6	28.3	31.0
LnGrp LOS	C	C		C	C	C	C	C	C	C	C	C
Approach Vol, veh/h		884			1119			532			277	
Approach Delay, s/veh		25.3			32.3			21.5			28.8	
Approach LOS		C			C			C			C	

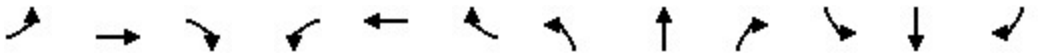
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	39.7	7.8	44.4	14.7	33.1	13.5	38.6
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	6.0	22.0	11.0	41.0	22.0	6.0	11.0	41.0
Max Q Clear Time (g_c+I1), s	4.6	6.1	3.8	16.4	9.6	8.9	9.5	26.4
Green Ext Time (p_c), s	0.0	0.5	0.0	4.9	1.1	0.0	0.1	6.2

Intersection Summary	
HCM 7th Control Delay, s/veh	27.7
HCM 7th LOS	C

Notes

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

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



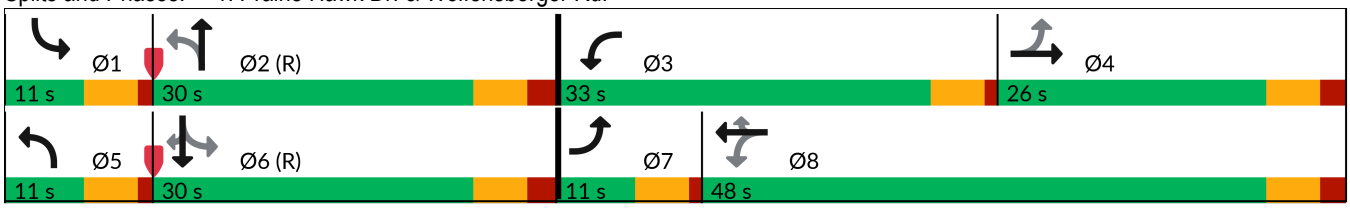
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		325	125		100	225		0	350		350
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.993				0.850		0.877				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3514	0	1770	3539	1583	1770	1634	0	1770	1863	1583
Flt Permitted	0.515			0.317			0.736			0.491		
Satd. Flow (perm)	959	3514	0	590	3539	1583	1371	1634	0	915	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4				200		209				196
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		922			1021			638			586	
Travel Time (s)		15.7			17.4			14.5			8.9	

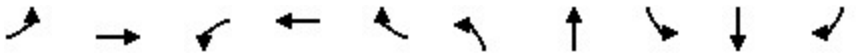
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	48	326	93	344	184	26	42	210	30	97
Future Volume (vph)	48	326	93	344	184	26	42	210	30	97
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases	4		8		8	2		6		6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	38.0	10.0	40.0	40.0	10.0	33.0	10.0	32.0	32.0
Total Split (s)	11.0	26.0	33.0	48.0	48.0	11.0	30.0	11.0	30.0	30.0
Total Split (%)	11.0%	26.0%	33.0%	48.0%	48.0%	11.0%	30.0%	11.0%	30.0%	30.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	1.0	2.0	1.0	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
Total Lost Time (s)	5.0	6.0	5.0	6.0	6.0	5.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max
Act Effct Green (s)	21.5	15.7	28.2	19.2	19.2	50.0	42.7	61.0	53.0	53.0
Actuated g/C Ratio	0.22	0.16	0.28	0.19	0.19	0.50	0.43	0.61	0.53	0.53
v/c Ratio	0.21	0.67	0.36	0.55	0.43	0.04	0.31	0.34	0.03	0.11
Control Delay (s/veh)	24.7	45.2	27.6	38.8	7.5	11.5	7.2	12.1	17.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.7	45.2	27.6	38.8	7.5	11.5	7.2	12.1	17.0	0.2
LOS	C	D	C	D	A	B	A	B	B	A
Approach Delay (s/veh)		42.7		27.8			7.6		9.2	
Approach LOS		D		C			A		A	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay (s/veh): 24.2	Intersection LOS: C
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

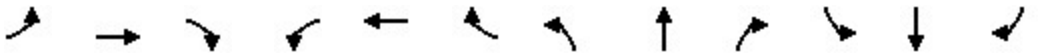
Splits and Phases: 1: Prairie Hawk Dr. & Wolfensberger Rd.





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	52	371	101	374	200	28	255	228	33	105
v/c Ratio	0.21	0.67	0.36	0.55	0.43	0.04	0.31	0.34	0.03	0.11
Control Delay (s/veh)	24.7	45.2	27.6	38.8	7.5	11.5	7.2	12.1	17.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.7	45.2	27.6	38.8	7.5	11.5	7.2	12.1	17.0	0.2
Queue Length 50th (ft)	23	117	47	114	0	7	18	64	11	0
Queue Length 95th (ft)	46	158	77	146	54	22	85	123	33	0
Internal Link Dist (ft)		842		941			558		506	
Turn Bay Length (ft)	325		125		100	225		350		350
Base Capacity (vph)	254	706	519	1486	780	713	818	662	986	930
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.53	0.19	0.25	0.26	0.04	0.31	0.34	0.03	0.11

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	326	16	93	344	184	26	42	192	210	30	97
Future Volume (veh/h)	48	326	16	93	344	184	26	42	192	210	30	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	354	17	101	374	200	28	46	209	228	33	105
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	494	24	234	605	270	760	150	683	652	1018	863
Arrive On Green	0.04	0.14	0.14	0.07	0.17	0.17	0.03	0.51	0.51	0.06	0.54	0.54
Sat Flow, veh/h	1781	3452	165	1781	3554	1585	1781	294	1336	1781	1870	1585
Grp Volume(v), veh/h	52	182	189	101	374	200	28	0	255	228	33	105
Grp Sat Flow(s),veh/h/ln	1781	1777	1841	1781	1777	1585	1781	0	1630	1781	1870	1585
Q Serve(g_s), s	2.5	9.8	9.8	4.8	9.8	12.0	0.7	0.0	9.1	6.0	0.8	3.2
Cycle Q Clear(g_c), s	2.5	9.8	9.8	4.8	9.8	12.0	0.7	0.0	9.1	6.0	0.8	3.2
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.82	1.00		1.00
Lane Grp Cap(c), veh/h	201	254	263	234	605	270	760	0	834	652	1018	863
V/C Ratio(X)	0.26	0.72	0.72	0.43	0.62	0.74	0.04	0.00	0.31	0.35	0.03	0.12
Avail Cap(c_a), veh/h	240	355	368	616	1493	666	819	0	834	652	1018	863
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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	40.9	40.9	33.7	38.5	39.4	10.8	0.0	14.1	11.1	10.6	11.1
Incr Delay (d2), s/veh	0.7	4.0	4.1	1.3	1.0	4.0	0.0	0.0	0.9	0.3	0.1	0.3
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	1.1	4.4	4.6	2.1	4.2	4.8	0.3	0.0	3.4	2.2	0.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.5	44.9	45.0	35.0	39.5	43.4	10.8	0.0	15.1	11.5	10.6	11.4
LnGrp LOS	D	D	D	C	D	D	B		B	B	B	B
Approach Vol, veh/h		423			675			283			366	
Approach Delay, s/veh		43.8			40.0			14.7			11.4	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	57.1	11.6	20.3	7.7	60.4	8.8	23.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	6.0	24.0	28.0	20.0	6.0	24.0	6.0	42.0
Max Q Clear Time (g_c+I1), s	8.0	11.1	6.8	11.8	2.7	5.2	4.5	14.0
Green Ext Time (p_c), s	0.0	1.2	0.2	1.2	0.0	0.4	0.0	3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	30.8
HCM 7th LOS	C

Notes

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

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.904	
Flt Protected	0.953			0.999		
Satd. Flow (prot)	1773	0	0	1861	1684	0
Flt Permitted	0.953			0.999		
Satd. Flow (perm)	1773	0	0	1861	1684	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	671			479	638	
Travel Time (s)	15.3			10.9	14.5	

Intersection Summary	
Area Type:	Other

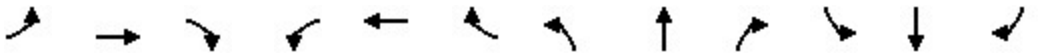
Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	135	1	3	95	42	104
Future Vol, veh/h	135	1	3	95	42	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	1	3	103	46	113

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	212	102	159	0	-	0
Stage 1	102	-	-	-	-	-
Stage 2	110	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	776	953	1421	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	774	953	1421	-	-	-
Mov Cap-2 Maneuver	774	-	-	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	915	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.73	0.23	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	55	-	776	-	-
HCM Lane V/C Ratio	0.002	-	0.191	-	-
HCM Control Delay (s/veh)	7.5	0	10.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.998			0.865						0.896	
Flt Protected		0.953						0.992			0.996	
Satd. Flow (prot)	0	1772	0	0	1611	0	0	1848	0	0	1662	0
Flt Permitted		0.953						0.992			0.996	
Satd. Flow (perm)	0	1772	0	0	1611	0	0	1848	0	0	1662	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		479			909			1975			245	
Travel Time (s)		10.9			20.7			44.9			5.6	

Intersection Summary	
Area Type:	Other

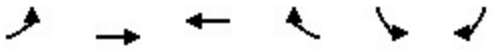
Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	73	0	1	0	0	14	1	5	0	5	7	40
Future Vol, veh/h	73	0	1	0	0	14	1	5	0	5	7	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	79	0	1	0	0	15	1	5	0	5	8	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	15	0	0	1	0	0	163	174	1	169	167	8
Stage 1	-	-	-	-	-	-	159	159	-	8	8	-
Stage 2	-	-	-	-	-	-	4	15	-	161	160	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1603	-	-	1622	-	-	802	719	1084	795	725	1075
Stage 1	-	-	-	-	-	-	843	766	-	1014	889	-
Stage 2	-	-	-	-	-	-	1019	883	-	841	766	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1603	-	-	1622	-	-	724	683	1084	750	689	1075
Mov Cap-2 Maneuver	-	-	-	-	-	-	724	683	-	750	689	-
Stage 1	-	-	-	-	-	-	801	728	-	1014	889	-
Stage 2	-	-	-	-	-	-	969	883	-	793	728	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	7.26	0	10.27	8.98
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	690	1480	-	-	1622	-	-	962
HCM Lane V/C Ratio	0.009	0.05	-	-	-	-	-	0.059
HCM Control Delay (s/veh)	10.3	7.4	0	-	0	-	-	9
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0.2	-	-	0	-	-	0.2



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.974		0.902	
Flt Protected		0.989			0.987	
Satd. Flow (prot)	0	1842	1814	0	1658	0
Flt Permitted		0.989			0.987	
Satd. Flow (perm)	0	1842	1814	0	1658	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		340	1975		832	
Travel Time (s)		7.7	44.9		18.9	

Intersection Summary	
Area Type:	Other

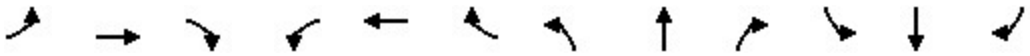
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	29	16	4	3	7
Future Vol, veh/h	8	29	16	4	3	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	32	17	4	3	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	22	0	-	0	68	20
Stage 1	-	-	-	-	20	-
Stage 2	-	-	-	-	49	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1594	-	-	-	936	1058
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	974	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1594	-	-	-	931	1058
Mov Cap-2 Maneuver	-	-	-	-	931	-
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	974	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.57	0	8.58
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	389	-	-	-	1017
HCM Lane V/C Ratio	0.005	-	-	-	0.011
HCM Control Delay (s/veh)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



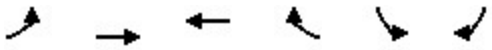
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	250		0	125		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.957			0.934			0.989			0.982	
Flt Protected		0.996			0.995			0.992			0.988	
Satd. Flow (prot)	0	3373	0	0	3289	0	0	3472	0	0	3434	0
Flt Permitted		0.996			0.995			0.992			0.988	
Satd. Flow (perm)	0	3373	0	0	3289	0	0	3472	0	0	3434	0
Link Speed (mph)		40			35			45			45	
Link Distance (ft)		631			610			567			842	
Travel Time (s)		10.8			11.9			8.6			12.8	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	4.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	179	269	284	306
Demand Flow Rate, veh/h	182	275	289	313
Vehicles Circulating, veh/h	302	282	209	199
Vehicles Exiting, veh/h	210	216	275	358
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.2	4.5	4.3	4.3
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR
RT Channelized								
Lane Util	0.473	0.527	0.469	0.531	0.471	0.529	0.470	0.530
Follow-Up Headway, s	2.667	2.535	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	4.645	4.328
A (Intercept)	1350	1420	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	9.199e-4	8.501e-4
Entry Flow, veh/h	86	96	129	146	136	153	147	166
Cap Entry Lane, veh/h	1022	1099	1041	1117	1114	1189	1124	1199
Entry HV Adj Factor	0.977	0.987	0.982	0.978	0.980	0.982	0.979	0.977
Flow Entry, veh/h	84	95	127	143	133	150	144	162
Cap Entry, veh/h	999	1084	1023	1093	1092	1168	1100	1172
V/C Ratio	0.084	0.087	0.124	0.131	0.122	0.129	0.131	0.138
Control Delay, s/veh	4.4	4.1	4.6	4.4	4.4	4.2	4.4	4.3
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0	0	0	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.967		0.994	
Flt Protected		0.999			0.954	
Satd. Flow (prot)	0	1861	1801	0	1766	0
Flt Permitted		0.999			0.954	
Satd. Flow (perm)	0	1861	1801	0	1766	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		350	935		1177	
Travel Time (s)		8.0	21.3		26.8	

Intersection Summary	
Area Type:	Other

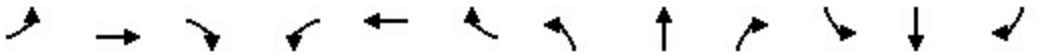
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	243	271	89	80	4
Future Vol, veh/h	6	243	271	89	80	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	264	295	97	87	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	391	0	-	0	620	343
Stage 1	-	-	-	-	343	-
Stage 2	-	-	-	-	277	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1167	-	-	-	452	700
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	770	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1167	-	-	-	449	700
Mov Cap-2 Maneuver	-	-	-	-	449	-
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	770	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.2	0	14.85
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	43	-	-	-	456
HCM Lane V/C Ratio	0.006	-	-	-	0.2
HCM Control Delay (s/veh)	8.1	0	-	-	14.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7



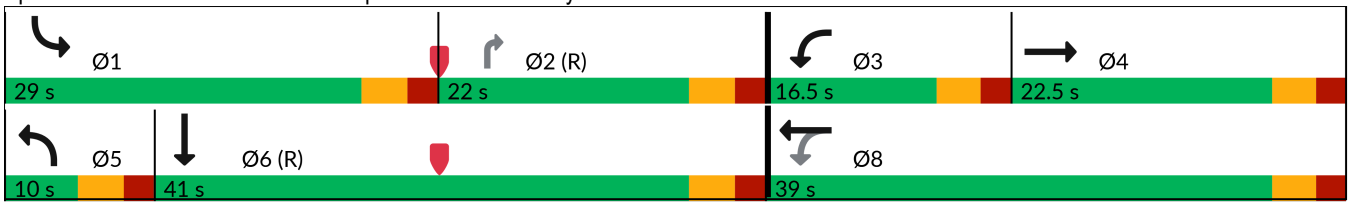
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		0	375		175	0		175
Storage Lanes	1		0	1		0	1		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor												
Frt		0.985							0.850		0.988	
Flt Protected				0.950			0.950			0.950	0.987	
Satd. Flow (prot)	0	5009	0	1770	3539	0	1770	0	1583	3221	1653	0
Flt Permitted				0.312			0.950			0.950	0.987	
Satd. Flow (perm)	0	5009	0	581	3539	0	1770	0	1583	3221	1653	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19							206		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1497			253			493			625	
Travel Time (s)		34.0			5.8			11.2			14.2	

Intersection Summary	
Area Type:	Other

Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	323	253	305	16	183	1276	373
Future Volume (vph)	323	253	305	16	183	1276	373
Turn Type	NA	pm+pt	NA	Prot	Perm	Prot	NA
Protected Phases	4	3	8	5		1	6
Permitted Phases		8			2		
Detector Phase	4	3	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	10.0	22.5	10.0	22.5	10.0	22.5
Total Split (s)	22.5	16.5	39.0	10.0	22.0	29.0	41.0
Total Split (%)	25.0%	18.3%	43.3%	11.1%	24.4%	32.2%	45.6%
Yellow Time (s)	3.0	3.0	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
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.2	28.6	28.6	6.2	17.0	29.4	29.4
Actuated g/C Ratio	0.14	0.32	0.32	0.07	0.19	0.33	0.33
v/c Ratio	0.56	0.82	0.30	0.14	0.43	1.16	1.14
Control Delay (s/veh)	37.6	46.6	34.1	41.7	7.5	113.7	114.3
Queue Delay	0.0	13.9	0.5	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.6	60.4	34.6	41.7	7.5	113.7	114.3
LOS	D	E	C	D	A	F	F
Approach Delay (s/veh)	37.6		46.3				113.9
Approach LOS	D		D				F

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBR and 6:SBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay (s/veh): 83.4	Intersection LOS: F
Intersection Capacity Utilization 71.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: I-25 SB Ramp & Plum Creek Pkwy.



Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Group Flow (vph)	391	275	332	17	199	1221	619
v/c Ratio	0.56	0.82	0.30	0.14	0.43	1.16	1.14
Control Delay (s/veh)	37.6	46.6	34.1	41.7	7.5	113.7	114.3
Queue Delay	0.0	13.9	0.5	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.6	60.4	34.6	41.7	7.5	113.7	114.3
Queue Length 50th (ft)	73	138	86	9	0	~454	~454
Queue Length 95th (ft)	100	m139	m87	30	52	#634	#730
Internal Link Dist (ft)	1417		173				545
Turn Bay Length (ft)				375	175		
Base Capacity (vph)	989	336	1336	122	466	1051	543
Starvation Cap Reductn	0	49	612	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.96	0.46	0.14	0.43	1.16	1.14

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.

m Volume for 95th percentile queue is metered by upstream signal.

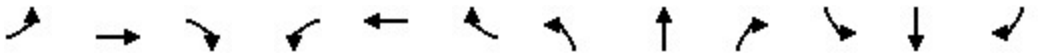
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	323	37	253	305	0	16	0	183	1276	373	44
Future Volume (veh/h)	0	323	37	253	305	0	16	0	183	1276	373	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	351	40	275	332	0	17	0	199	1307	517	48
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, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	529	59	347	1055	0	34	0	0	2109	872	81
Arrive On Green	0.00	0.11	0.11	0.26	0.59	0.00	0.02	0.00	0.00	0.59	0.52	0.52
Sat Flow, veh/h	0	4828	521	1781	3647	0	1781	17		3563	1686	157
Grp Volume(v), veh/h	0	255	136	275	332	0	17	54.4		1307	0	565
Grp Sat Flow(s),veh/h/ln	0	1702	1777	1781	1777	0	1781	D		1781	0	1842
Q Serve(g_s), s	0.0	6.4	6.6	11.5	4.2	0.0	0.9			21.3	0.0	19.2
Cycle Q Clear(g_c), s	0.0	6.4	6.6	11.5	4.2	0.0	0.9			21.3	0.0	19.2
Prop In Lane	0.00		0.29	1.00		0.00	1.00			1.00		0.08
Lane Grp Cap(c), veh/h	0	386	202	347	1055	0	34			2109	0	953
V/C Ratio(X)	0.00	0.66	0.68	0.79	0.31	0.00	0.50			0.62	0.00	0.59
Avail Cap(c_a), veh/h	0	662	345	347	1343	0	99			2109	0	953
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.29	0.29	0.00	1.00			1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	38.2	38.3	25.9	13.7	0.0	43.7			11.8	0.0	15.1
Incr Delay (d2), s/veh	0.0	1.9	3.9	3.7	0.0	0.0	10.7			0.6	0.0	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.8	3.1	4.5	1.5	0.0	0.5			7.7	0.0	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	40.1	42.2	29.6	13.8	0.0	54.4			12.4	0.0	17.8
LnGrp LOS		D	D	C	B		D			B		B
Approach Vol, veh/h		391			607						1872	
Approach Delay, s/veh		40.9			21.0						14.0	
Approach LOS		D			C						B	

Timer - Assigned Phs	1		3	4	5	6		8				
Phs Duration (G+Y+Rc), s	58.3		16.5	15.2	6.7	51.6		31.7				
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	24.0		11.5	17.5	5.0	36.0		34.0				
Max Q Clear Time (g_c+I1), s	23.3		13.5	8.6	2.9	21.2		6.2				
Green Ext Time (p_c), s	0.5		0.0	1.6	0.0	3.3		2.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	19.4
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



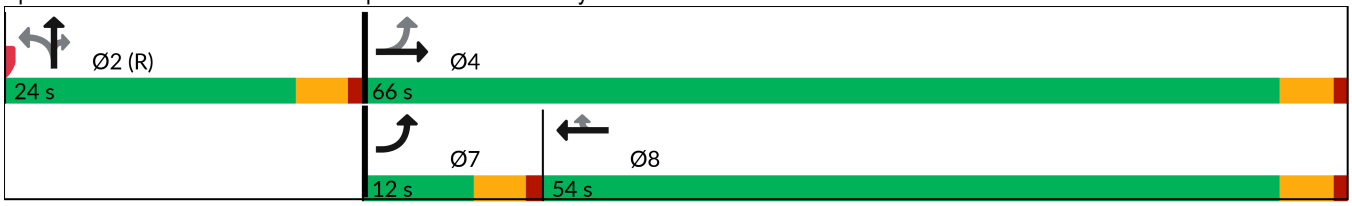
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	0.95	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.947	0.850		0.861	0.850			
Flt Protected	0.950						0.950	0.998				
Satd. Flow (prot)	1770	5085	0	0	1676	1504	1681	1457	1504	0	0	0
Flt Permitted	0.075						0.950	0.998				
Satd. Flow (perm)	140	5085	0	0	1676	1504	1681	1457	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					49	800		35	73			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		364			351			392			179	
Travel Time (s)		8.3			8.0			8.9			4.1	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	146	1606	523	1022	44	3	201
Future Volume (vph)	146	1606	523	1022	44	3	201
Turn Type	pm+pt	NA	NA	Perm	Perm	NA	Perm
Protected Phases	7	4	8			2	
Permitted Phases	4			8	2		2
Detector Phase	7	4	8	8	2	2	2
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	12.0	66.0	54.0	54.0	24.0	24.0	24.0
Total Split (%)	13.3%	73.3%	60.0%	60.0%	26.7%	26.7%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	61.0	61.0	49.0	49.0	20.0	20.0	20.0
Actuated g/C Ratio	0.68	0.68	0.54	0.54	0.22	0.22	0.22
v/c Ratio	0.69	0.51	0.94	0.68	0.11	0.32	0.29
Control Delay (s/veh)	30.7	7.7	37.9	4.1	29.4	23.6	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.7	7.7	37.9	4.1	29.4	23.6	14.7
LOS	C	A	D	A	C	C	B
Approach Delay (s/veh)		9.6	21.8			20.8	
Approach LOS		A	C			C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay (s/veh): 15.7	Intersection LOS: B
Intersection Capacity Utilization 71.8%	ICU Level of Service C
Analysis Period (min) 15	

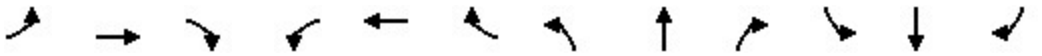
Splits and Phases: 8: NB I-25 Ramps & Plum Creek Pkwy



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	159	1746	879	800	43	113	113
v/c Ratio	0.69	0.51	0.94	0.68	0.11	0.32	0.29
Control Delay (s/veh)	30.7	7.7	37.9	4.1	29.4	23.6	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.7	7.7	37.9	4.1	29.4	23.6	14.7
Queue Length 50th (ft)	35	152	435	0	21	40	18
Queue Length 95th (ft)	#122	183	#738	53	50	93	66
Internal Link Dist (ft)		284	271			312	
Turn Bay Length (ft)							
Base Capacity (vph)	230	3474	943	1187	374	351	391
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.50	0.93	0.67	0.11	0.32	0.29

Intersection Summary

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

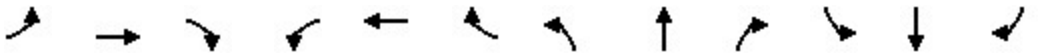


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	1606	0	0	523	1022	44	3	201	0	0	0
Future Volume (veh/h)	146	1606	0	0	523	1022	44	3	201	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	159	1746	0	0	975	840	33	0	236			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	198	3349	0	0	1024	868	435	0	774			
Arrive On Green	0.06	0.66	0.00	0.00	0.55	0.55	0.24	0.00	0.24			
Sat Flow, veh/h	1781	5274	0	0	1870	1585	1781	0	3170			
Grp Volume(v), veh/h	159	1746	0	0	975	840	33	0	236			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	3.3	16.1	0.0	0.0	44.4	45.9	1.3	0.0	5.5			
Cycle Q Clear(g_c), s	3.3	16.1	0.0	0.0	44.4	45.9	1.3	0.0	5.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	198	3349	0	0	1024	868	435	0	774			
V/C Ratio(X)	0.80	0.52	0.00	0.00	0.95	0.97	0.08	0.00	0.31			
Avail Cap(c_a), veh/h	243	3489	0	0	1029	872	435	0	774			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	21.2	8.1	0.0	0.0	19.3	19.6	26.2	0.0	27.8			
Incr Delay (d2), s/veh	14.5	0.1	0.0	0.0	17.7	22.9	0.3	0.0	1.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	5.1	0.0	0.0	22.2	20.6	0.6	0.0	2.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.8	8.2	0.0	0.0	36.9	42.5	26.5	0.0	28.8			
LnGrp LOS	D	A			D	D	C		C			
Approach Vol, veh/h		1905			1815			269				
Approach Delay, s/veh		10.5			39.5			28.5				
Approach LOS		B			D			C				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		26.5		63.5			9.8	53.8				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		19.5		61.5			7.5	49.5				
Max Q Clear Time (g_c+I1), s		7.5		18.1			5.3	47.9				
Green Ext Time (p_c), s		0.8		20.4			0.1	1.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			24.9									
HCM 7th LOS			C									

Notes												
User approved volume balancing among the lanes for turning movement.												



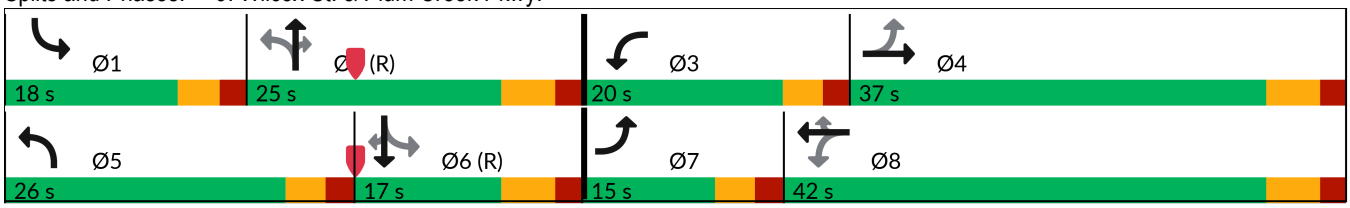
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	225		0	225		250	175		200
Storage Lanes	1		1	1		1	2		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	1863	1583	1770	1863	1583
Flt Permitted	0.149			0.112			0.545			0.665		
Satd. Flow (perm)	278	3539	1583	209	3539	1583	1969	1863	1583	1239	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			390			196			142			242
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			907			521			491	
Travel Time (s)		16.1			20.6			11.8			11.2	

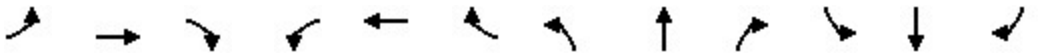
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	1058	548	63	829	105	452	133	56	167	100	223
Future Volume (vph)	234	1058	548	63	829	105	452	133	56	167	100	223
Turn Type	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		8	2		2	6		6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	36.0		10.0	31.0	31.0	10.0	36.0	36.0	10.0	29.0	29.0
Total Split (s)	15.0	37.0		20.0	42.0	42.0	26.0	25.0	25.0	18.0	17.0	17.0
Total Split (%)	15.0%	37.0%		20.0%	42.0%	42.0%	26.0%	25.0%	25.0%	18.0%	17.0%	17.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	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		5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	48.3	39.3	100.0	43.0	34.6	34.6	38.3	22.0	22.0	30.2	17.7	17.7
Actuated g/C Ratio	0.48	0.39	1.00	0.43	0.35	0.35	0.38	0.22	0.22	0.30	0.18	0.18
v/c Ratio	0.90	0.83	0.38	0.33	0.74	0.17	0.50	0.36	0.13	0.42	0.33	0.51
Control Delay (s/veh)	52.6	34.2	0.7	17.0	32.7	0.5	23.9	37.6	0.6	25.0	41.8	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.6	34.2	0.7	17.0	32.7	0.5	23.9	37.6	0.6	25.0	41.8	9.6
LOS	D	C	A	B	C	A	C	D	A	C	D	A
Approach Delay (s/veh)		26.5			28.3			24.7			21.4	
Approach LOS		C			C			C			C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 69 (69%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay (s/veh): 26.1	Intersection LOS: C
Intersection Capacity Utilization 72.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: Wilcox St. & Plum Creek Pkwy.

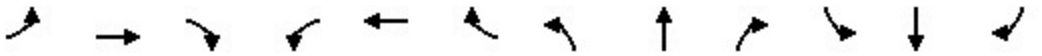




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	254	1150	596	68	901	114	491	145	61	182	109	242
v/c Ratio	0.90	0.83	0.38	0.33	0.74	0.17	0.50	0.36	0.13	0.42	0.33	0.51
Control Delay (s/veh)	52.6	34.2	0.7	17.0	32.7	0.5	23.9	37.6	0.6	25.0	41.8	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.6	34.2	0.7	17.0	32.7	0.5	23.9	37.6	0.6	25.0	41.8	9.6
Queue Length 50th (ft)	87	344	0	21	256	0	114	82	0	79	63	0
Queue Length 95th (ft)	#235	#482	0	42	327	0	157	142	0	132	121	71
Internal Link Dist (ft)		629			827			441			411	
Turn Bay Length (ft)	325			225			225		250	175		200
Base Capacity (vph)	283	1390	1583	339	1274	695	1083	408	458	461	329	479
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.83	0.38	0.20	0.71	0.16	0.45	0.36	0.13	0.39	0.33	0.51

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)	234	1058	548	63	829	105	452	133	56	167	100	223
Future Volume (veh/h)	234	1058	548	63	829	105	452	133	56	167	100	223
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	254	1150	0	68	901	114	491	145	61	182	109	242
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	1286		175	1081	482	997	523	443	501	451	382
Arrive On Green	0.10	0.36	0.00	0.04	0.30	0.30	0.13	0.28	0.28	0.10	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	254	1150	0	68	901	114	491	145	61	182	109	242
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	9.6	30.5	0.0	2.6	23.6	5.4	10.2	6.1	2.9	7.5	4.7	13.7
Cycle Q Clear(g_c), s	9.6	30.5	0.0	2.6	23.6	5.4	10.2	6.1	2.9	7.5	4.7	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	1286		175	1081	482	997	523	443	501	451	382
V/C Ratio(X)	0.88	0.89		0.39	0.83	0.24	0.49	0.28	0.14	0.36	0.24	0.63
Avail Cap(c_a), veh/h	288	1286		367	1279	571	1258	523	443	561	451	382
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)	0.85	0.85	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	30.1	0.0	25.8	32.4	26.1	22.3	28.1	27.0	24.5	30.6	34.0
Incr Delay (d2), s/veh	22.7	7.3	0.0	1.4	4.2	0.2	0.4	1.3	0.6	0.4	1.3	7.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	13.9	0.0	1.1	10.6	2.0	4.1	2.9	1.2	3.2	2.3	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.8	37.4	0.0	27.2	36.7	26.3	22.7	29.5	27.6	24.9	31.8	41.8
LnGrp LOS	D	D		C	D	C	C	C	C	C	C	D
Approach Vol, veh/h		1404			1083			697			533	
Approach Delay, s/veh		39.1			35.0			24.5			34.0	
Approach LOS		D			C			C			C	

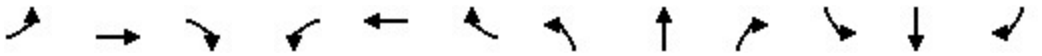
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	33.9	9.2	42.2	18.5	30.1	15.0	36.4
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	13.0	19.0	15.0	31.0	21.0	11.0	10.0	36.0
Max Q Clear Time (g_c+I1), s	9.5	8.1	4.6	32.5	12.2	15.7	11.6	25.6
Green Ext Time (p_c), s	0.2	0.7	0.1	0.0	1.3	0.0	0.0	4.8

Intersection Summary	
HCM 7th Control Delay, s/veh	34.4
HCM 7th LOS	C

Notes

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

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



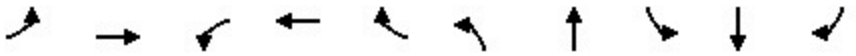
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		325	125		100	225		0	350		350
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.993				0.850		0.875				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3514	0	1770	3539	1583	1770	1630	0	1770	1863	1583
Flt Permitted	0.617			0.322			0.733			0.565		
Satd. Flow (perm)	1149	3514	0	600	3539	1583	1365	1630	0	1052	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				182		90				182
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		922			1021			638			586	
Travel Time (s)		15.7			17.4			14.5			8.9	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	84	411	130	198	167	4	17	214	34	40
Future Volume (vph)	84	411	130	198	167	4	17	214	34	40
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases	4		8		8	2		6		6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	38.0	11.0	40.0	40.0	11.0	33.0	11.0	32.0	32.0
Total Split (s)	14.0	37.0	14.0	37.0	37.0	12.0	27.0	12.0	27.0	27.0
Total Split (%)	15.6%	41.1%	15.6%	41.1%	41.1%	13.3%	30.0%	13.3%	30.0%	30.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max
Act Effct Green (s)	25.0	17.5	26.7	20.3	20.3	34.5	28.9	46.6	44.2	44.2
Actuated g/C Ratio	0.28	0.19	0.30	0.23	0.23	0.38	0.32	0.52	0.49	0.49
v/c Ratio	0.25	0.68	0.50	0.27	0.37	0.01	0.19	0.37	0.04	0.05
Control Delay (s/veh)	20.8	38.0	26.6	30.1	6.8	13.5	9.2	14.9	15.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.8	38.0	26.6	30.1	6.8	13.5	9.2	14.9	15.7	0.1
LOS	C	D	C	C	A	B	A	B	B	A
Approach Delay (s/veh)		35.2		21.3			9.4		12.9	
Approach LOS		D		C			A		B	

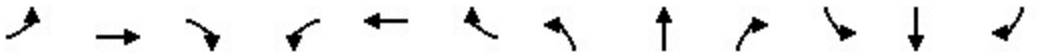
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 23.8	Intersection LOS: C
Intersection Capacity Utilization 52.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Prairie Hawk Dr. & Wolfensberger Rd.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	91	468	141	215	182	4	108	233	37	43
v/c Ratio	0.25	0.68	0.50	0.27	0.37	0.01	0.19	0.37	0.04	0.05
Control Delay (s/veh)	20.8	38.0	26.6	30.1	6.8	13.5	9.2	14.9	15.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.8	38.0	26.6	30.1	6.8	13.5	9.2	14.9	15.7	0.1
Queue Length 50th (ft)	35	130	56	55	0	1	7	69	10	0
Queue Length 95th (ft)	63	168	91	82	50	7	49	130	36	0
Internal Link Dist (ft)		842		941			558		506	
Turn Bay Length (ft)	325		125		100	225		350		350
Base Capacity (vph)	381	1214	282	1218	664	555	583	638	915	870
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.39	0.50	0.18	0.27	0.01	0.19	0.37	0.04	0.05

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	411	19	130	198	167	4	17	83	214	34	40
Future Volume (veh/h)	84	411	19	130	198	167	4	17	83	214	34	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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	447	21	141	215	182	4	18	90	233	37	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	327	594	28	274	704	314	631	111	557	673	884	749
Arrive On Green	0.06	0.17	0.17	0.08	0.20	0.20	0.01	0.41	0.41	0.07	0.47	0.47
Sat Flow, veh/h	1781	3456	162	1781	3554	1585	1781	271	1355	1781	1870	1585
Grp Volume(v), veh/h	91	229	239	141	215	182	4	0	108	233	37	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1841	1781	1777	1585	1781	0	1626	1781	1870	1585
Q Serve(g_s), s	3.7	11.0	11.1	5.8	4.6	9.4	0.1	0.0	3.8	6.0	1.0	1.3
Cycle Q Clear(g_c), s	3.7	11.0	11.1	5.8	4.6	9.4	0.1	0.0	3.8	6.0	1.0	1.3
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.83	1.00		1.00
Lane Grp Cap(c), veh/h	327	305	316	274	704	314	631	0	668	673	884	749
V/C Ratio(X)	0.28	0.75	0.75	0.51	0.31	0.58	0.01	0.00	0.16	0.35	0.04	0.06
Avail Cap(c_a), veh/h	383	612	634	283	1224	546	741	0	668	673	884	749
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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	35.4	35.5	27.9	30.8	32.7	15.4	0.0	16.7	13.8	12.8	12.9
Incr Delay (d2), s/veh	0.5	3.7	3.6	1.5	0.2	1.7	0.0	0.0	0.5	0.3	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.9	5.1	2.4	1.9	3.6	0.0	0.0	1.5	2.5	0.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.7	39.1	39.1	29.4	31.0	34.4	15.4	0.0	17.2	14.1	12.9	13.0
LnGrp LOS	C	D	D	C	C	C	B		B	B	B	B
Approach Vol, veh/h		559			538			112			313	
Approach Delay, s/veh		37.4			31.7			17.2			13.8	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	43.0	13.5	21.5	6.5	48.5	11.2	23.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	6.0	21.0	8.0	31.0	6.0	21.0	8.0	31.0
Max Q Clear Time (g_c+I1), s	8.0	5.8	7.8	13.1	2.1	3.3	5.7	11.4
Green Ext Time (p_c), s	0.0	0.4	0.0	2.4	0.0	0.2	0.0	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	29.1
HCM 7th LOS	C

Notes

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

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.946	
Flt Protected	0.950			0.999		
Satd. Flow (prot)	1770	0	0	1861	1762	0
Flt Permitted	0.950			0.999		
Satd. Flow (perm)	1770	0	0	1861	1762	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	671			479	638	
Travel Time (s)	15.3			10.9	14.5	

Intersection Summary	
Area Type:	Other

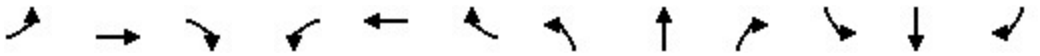
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	44	0	1	46	101	67
Future Vol, veh/h	44	0	1	46	101	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	0	1	50	110	73

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	198	146	183	0	-	0
Stage 1	146	-	-	-	-	-
Stage 2	52	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	790	901	1392	-	-	-
Stage 1	881	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	790	901	1392	-	-	-
Mov Cap-2 Maneuver	790	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	970	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.85	0.16	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	38	-	790	-	-
HCM Lane V/C Ratio	0.001	-	0.061	-	-
HCM Control Delay (s/veh)	7.6	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.882						0.997			0.865	
Flt Protected		0.995			0.980			0.953				
Satd. Flow (prot)	0	1635	0	0	1825	0	0	1770	0	0	1611	0
Flt Permitted		0.995			0.980			0.953				
Satd. Flow (perm)	0	1635	0	0	1825	0	0	1770	0	0	1611	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		479			909			1975			245	
Travel Time (s)		10.9			20.7			44.9			5.6	

Intersection Summary	
Area Type:	Other

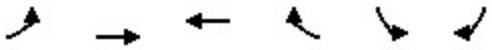
Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	3	78	2	3	0	37	0	1	0	0	8
Future Vol, veh/h	8	3	78	2	3	0	37	0	1	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	3	85	2	3	0	40	0	1	0	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	3	0	0	88	0	0	71	71	46	28	113	3
Stage 1	-	-	-	-	-	-	63	63	-	8	8	-
Stage 2	-	-	-	-	-	-	8	8	-	21	105	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1619	-	-	1508	-	-	921	820	1024	981	777	1081
Stage 1	-	-	-	-	-	-	948	842	-	1014	889	-
Stage 2	-	-	-	-	-	-	1014	889	-	998	808	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1619	-	-	1508	-	-	907	814	1024	973	772	1081
Mov Cap-2 Maneuver	-	-	-	-	-	-	907	814	-	973	772	-
Stage 1	-	-	-	-	-	-	943	838	-	1012	888	-
Stage 2	-	-	-	-	-	-	1004	888	-	991	803	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.65	2.96	9.15	8.36
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	910	136	-	-	720	-	-	1081
HCM Lane V/C Ratio	0.045	0.005	-	-	0.001	-	-	0.008
HCM Control Delay (s/veh)	9.1	7.2	0	-	7.4	0	-	8.4
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			0	150	0
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.995		0.865	
Flt Protected		0.993				
Satd. Flow (prot)	0	1850	1853	0	1611	0
Flt Permitted		0.993				
Satd. Flow (perm)	0	1850	1853	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		340	1975		832	
Travel Time (s)		7.7	44.9		18.9	

Intersection Summary	
Area Type:	Other

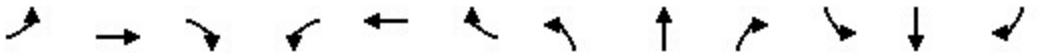
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	12	25	1	0	5
Future Vol, veh/h	2	12	25	1	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	13	27	1	0	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	28	0	-	0	45	28
Stage 1	-	-	-	-	28	-
Stage 2	-	-	-	-	17	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1585	-	-	-	965	1048
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	1005	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1585	-	-	-	964	1048
Mov Cap-2 Maneuver	-	-	-	-	964	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	1005	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.04	0	8.45
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	257	-	-	-	1048
HCM Lane V/C Ratio	0.001	-	-	-	0.005
HCM Control Delay (s/veh)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



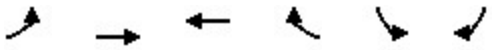
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	250		0	125		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.967			0.950			0.971			0.993	
Flt Protected		0.996			0.995			0.991			0.982	
Satd. Flow (prot)	0	3409	0	0	3345	0	0	3406	0	0	3451	0
Flt Permitted		0.996			0.995			0.991			0.982	
Satd. Flow (perm)	0	3409	0	0	3345	0	0	3406	0	0	3451	0
Link Speed (mph)		40			35			45			45	
Link Distance (ft)		631			610			567			842	
Travel Time (s)		10.8			11.9			8.6			12.8	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	4.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	222	162	164	379
Demand Flow Rate, veh/h	226	165	168	386
Vehicles Circulating, veh/h	385	155	317	141
Vehicles Exiting, veh/h	142	330	294	179
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.8	3.6	4.2	4.4
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR
RT Channelized								
Lane Util	0.469	0.531	0.473	0.527	0.470	0.530	0.469	0.531
Follow-Up Headway, s	2.667	2.535	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	4.645	4.328
A (Intercept)	1350	1420	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	9.199e-4	8.501e-4
Entry Flow, veh/h	106	120	78	87	79	89	181	205
Cap Entry Lane, veh/h	947	1024	1170	1245	1008	1085	1186	1260
Entry HV Adj Factor	0.984	0.980	0.977	0.988	0.975	0.976	0.983	0.979
Flow Entry, veh/h	104	118	76	86	77	87	178	201
Cap Entry, veh/h	932	1003	1144	1230	984	1059	1165	1233
V/C Ratio	0.112	0.117	0.067	0.070	0.078	0.082	0.153	0.163
Control Delay, s/veh	4.9	4.6	3.7	3.5	4.4	4.1	4.4	4.3
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0	0	1	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.954		0.995	
Flt Protected		0.999			0.954	
Satd. Flow (prot)	0	1861	1777	0	1768	0
Flt Permitted		0.999			0.954	
Satd. Flow (perm)	0	1861	1777	0	1768	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		350	935		1177	
Travel Time (s)		8.0	21.3		26.8	

Intersection Summary	
Area Type:	Other

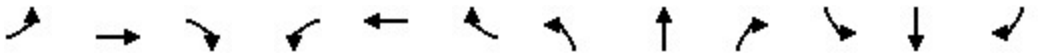
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	264	118	61	100	4
Future Vol, veh/h	6	264	118	61	100	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	287	128	66	109	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	195	0	-	0	461	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	300	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1379	-	-	-	558	884
Stage 1	-	-	-	-	867	-
Stage 2	-	-	-	-	752	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1379	-	-	-	555	884
Mov Cap-2 Maneuver	-	-	-	-	555	-
Stage 1	-	-	-	-	863	-
Stage 2	-	-	-	-	752	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.17	0	12.99
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	40	-	-	-	563
HCM Lane V/C Ratio	0.005	-	-	-	0.201
HCM Control Delay (s/veh)	7.6	0	-	-	13
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7



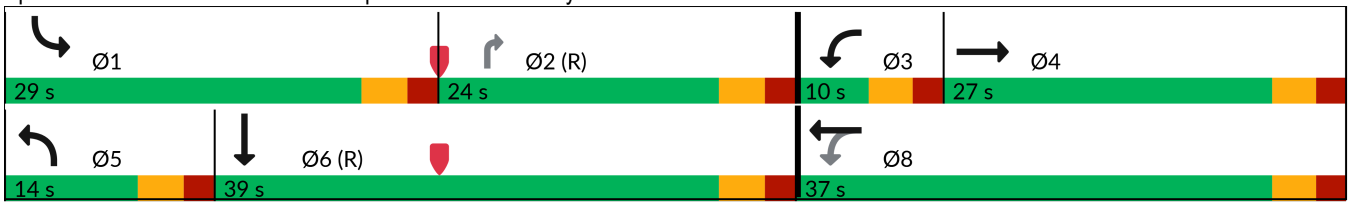
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		0	375		175	0		175
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor												
Frt		0.979							0.850		0.962	
Flt Protected				0.950			0.950			0.950	0.974	
Satd. Flow (prot)	0	4979	0	1770	3539	0	1770	0	1583	3221	1588	0
Flt Permitted				0.296			0.950			0.950	0.974	
Satd. Flow (perm)	0	4979	0	551	3539	0	1770	0	1583	3221	1588	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33							208		18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1476			253			493			625	
Travel Time (s)		33.5			5.8			11.2			14.2	

Intersection Summary	
Area Type:	Other

Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	329	164	222	17	191	486	39
Future Volume (vph)	329	164	222	17	191	486	39
Turn Type	NA	pm+pt	NA	Prot	Perm	Prot	NA
Protected Phases	4	3	8	5		1	6
Permitted Phases		8			2		
Detector Phase	4	3	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	10.0	23.0	10.0	23.0	10.0	23.0
Total Split (s)	27.0	10.0	37.0	14.0	24.0	29.0	39.0
Total Split (%)	30.0%	11.1%	41.1%	15.6%	26.7%	32.2%	43.3%
Yellow Time (s)	3.0	3.0	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
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.6	22.6	22.6	6.5	35.5	16.8	16.8
Actuated g/C Ratio	0.14	0.25	0.25	0.07	0.39	0.19	0.19
v/c Ratio	0.57	0.86	0.27	0.14	0.28	0.69	0.66
Control Delay (s/veh)	36.1	65.1	34.5	41.1	4.5	40.2	40.7
Queue Delay	0.0	57.9	0.0	0.0	0.0	0.0	0.3
Total Delay (s/veh)	36.1	123.0	34.5	41.1	4.5	40.2	41.0
LOS	D	F	C	D	A	D	D
Approach Delay (s/veh)	36.1		72.1				40.5
Approach LOS	D		E				D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBR and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 42.8	Intersection LOS: D
Intersection Capacity Utilization 46.4%	ICU Level of Service A
Analysis Period (min) 15	

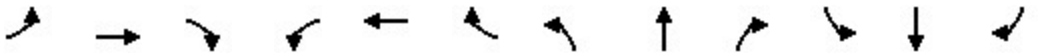
Splits and Phases: 7: I-25 SB Ramp & Plum Creek Pkwy.



Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Group Flow (vph)	416	178	241	18	208	417	204
v/c Ratio	0.57	0.86	0.27	0.14	0.28	0.69	0.66
Control Delay (s/veh)	36.1	65.1	34.5	41.1	4.5	40.2	40.7
Queue Delay	0.0	57.9	0.0	0.0	0.0	0.0	0.3
Total Delay (s/veh)	36.1	123.0	34.5	41.1	4.5	40.2	41.0
Queue Length 50th (ft)	75	107	75	10	0	122	108
Queue Length 95th (ft)	102	m#139	m95	31	48	164	179
Internal Link Dist (ft)	1396		173				545
Turn Bay Length (ft)				375	175		
Base Capacity (vph)	1242	206	1258	177	750	858	311
Starvation Cap Reductn	0	65	0	0	0	0	0
Spillback Cap Reductn	1	0	0	0	47	18	7
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	1.26	0.19	0.10	0.30	0.50	0.67

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



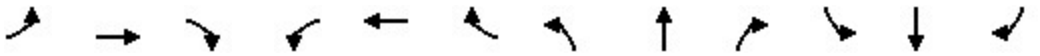
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	329	53	164	222	0	17	0	191	486	39	47
Future Volume (veh/h)	0	329	53	164	222	0	17	0	191	486	39	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	358	58	178	241	0	18	0	208	471	122	51
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, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	554	87	223	838	0	36	0	0	2327	723	302
Arrive On Green	0.00	0.12	0.12	0.11	0.47	0.00	0.02	0.00	0.00	0.65	0.58	0.58
Sat Flow, veh/h	0	4615	701	1781	3647	0	1781	18		3563	1253	524
Grp Volume(v), veh/h	0	272	144	178	241	0	18	54.1		471	0	173
Grp Sat Flow(s),veh/h/ln	0	1702	1744	1781	1777	0	1781	D		1781	0	1776
Q Serve(g_s), s	0.0	6.8	7.1	5.0	3.7	0.0	0.9			4.8	0.0	4.1
Cycle Q Clear(g_c), s	0.0	6.8	7.1	5.0	3.7	0.0	0.9			4.8	0.0	4.1
Prop In Lane	0.00		0.40	1.00		0.00	1.00			1.00		0.29
Lane Grp Cap(c), veh/h	0	424	217	223	838	0	36			2327	0	1026
V/C Ratio(X)	0.00	0.64	0.66	0.80	0.29	0.00	0.50			0.20	0.00	0.17
Avail Cap(c_a), veh/h	0	832	426	223	1264	0	178			2327	0	1026
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	0.84	0.84	0.45	0.45	0.00	1.00			1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	37.5	37.6	34.0	19.2	0.0	43.6			6.2	0.0	8.9
Incr Delay (d2), s/veh	0.0	1.4	2.9	8.9	0.1	0.0	10.4			0.0	0.0	0.4
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
%ile BackOfQ(50%),veh/ln	0.0	2.9	3.2	2.0	1.4	0.0	0.5			1.6	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	38.8	40.5	42.9	19.3	0.0	54.1			6.3	0.0	9.3
LnGrp LOS		D	D	D	B		D			A		A
Approach Vol, veh/h		416			419						644	
Approach Delay, s/veh		39.4			29.3						7.1	
Approach LOS		D			C						A	

Timer - Assigned Phs	1		3	4	5	6		8				
Phs Duration (G+Y+Rc), s	63.8		10.0	16.2	6.8	57.0		26.2				
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	24.0		5.0	22.0	9.0	34.0		32.0				
Max Q Clear Time (g_c+I1), s	6.8		7.0	9.1	2.9	6.1		5.7				
Green Ext Time (p_c), s	1.6		0.0	2.1	0.0	1.0		1.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	22.9
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



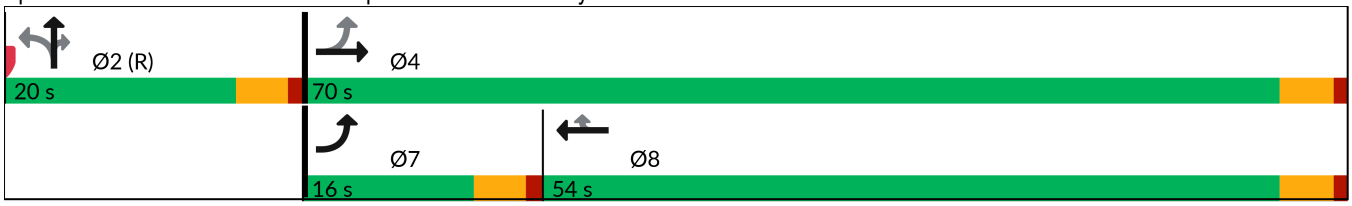
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	0.95	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.919	0.850		0.864	0.850			
Flt Protected	0.950						0.950	0.997				
Satd. Flow (prot)	1770	5085	0	0	1626	1504	1681	1460	1504	0	0	0
Flt Permitted	0.085						0.950	0.997				
Satd. Flow (perm)	158	5085	0	0	1626	1504	1681	1460	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					104	715		59	73			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		398			457			361			428	
Travel Time (s)		9.0			10.4			8.2			9.7	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	198	845	350	1104	35	2	113
Future Volume (vph)	198	845	350	1104	35	2	113
Turn Type	pm+pt	NA	NA	Perm	Perm	NA	Perm
Protected Phases	7	4	8			2	
Permitted Phases	4			8	2		2
Detector Phase	7	4	8	8	2	2	2
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	16.0	70.0	54.0	54.0	20.0	20.0	20.0
Total Split (%)	17.8%	77.8%	60.0%	60.0%	22.2%	22.2%	22.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	63.5	63.5	47.8	47.8	17.5	17.5	17.5
Actuated g/C Ratio	0.71	0.71	0.53	0.53	0.19	0.19	0.19
v/c Ratio	0.69	0.26	0.90	0.67	0.10	0.20	0.18
Control Delay (s/veh)	27.7	4.8	31.2	4.6	32.5	12.2	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.7	4.8	31.2	4.6	32.5	12.2	8.5
LOS	C	A	C	A	C	B	A
Approach Delay (s/veh)		9.2	18.5			15.0	
Approach LOS		A	B			B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay (s/veh): 14.6	Intersection LOS: B
Intersection Capacity Utilization 72.0%	ICU Level of Service C
Analysis Period (min) 15	

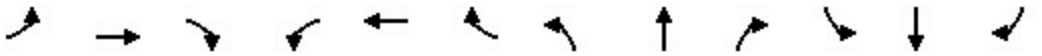
Splits and Phases: 8: I-25 NB Ramps & Plum Creek Pkwy



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	215	918	824	756	34	65	64
v/c Ratio	0.69	0.26	0.90	0.67	0.10	0.20	0.18
Control Delay (s/veh)	27.7	4.8	31.2	4.6	32.5	12.2	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.7	4.8	31.2	4.6	32.5	12.2	8.5
Queue Length 50th (ft)	56	52	358	10	17	3	0
Queue Length 95th (ft)	#145	67	#651	67	45	41	30
Internal Link Dist (ft)		318	377			281	
Turn Bay Length (ft)							
Base Capacity (vph)	317	3700	941	1148	326	331	351
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.25	0.88	0.66	0.10	0.20	0.18

Intersection Summary

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



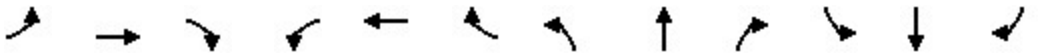
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	845	0	0	350	1104	35	2	113	0	0	0
Future Volume (veh/h)	198	845	0	0	350	1104	35	2	113	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	215	918	0	0	995	790	26	0	137			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	252	3522	0	0	1025	869	375	0	667			
Arrive On Green	0.09	0.69	0.00	0.00	0.55	0.55	0.21	0.00	0.21			
Sat Flow, veh/h	1781	5274	0	0	1870	1585	1781	0	3170			
Grp Volume(v), veh/h	215	918	0	0	995	790	26	0	137			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	6.1	6.1	0.0	0.0	46.2	40.4	1.1	0.0	3.2			
Cycle Q Clear(g_c), s	6.1	6.1	0.0	0.0	46.2	40.4	1.1	0.0	3.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	252	3522	0	0	1025	869	375	0	667			
V/C Ratio(X)	0.85	0.26	0.00	0.00	0.97	0.91	0.07	0.00	0.21			
Avail Cap(c_a), veh/h	317	3716	0	0	1029	872	375	0	667			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	26.0	5.3	0.0	0.0	19.6	18.3	28.5	0.0	29.3			
Incr Delay (d2), s/veh	16.3	0.0	0.0	0.0	21.2	13.4	0.4	0.0	0.7			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.7	1.8	0.0	0.0	23.9	16.5	0.5	0.0	1.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.3	5.3	0.0	0.0	40.8	31.7	28.8	0.0	30.0			
LnGrp LOS	D	A			D	C	C		C			
Approach Vol, veh/h		1133			1785			163				
Approach Delay, s/veh		12.3			36.8			29.8				
Approach LOS		B			D			C				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		23.4		66.6			12.8	53.8				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		15.5		65.5			11.5	49.5				
Max Q Clear Time (g_c+I1), s		5.2		8.1			8.1	48.2				
Green Ext Time (p_c), s		0.4		8.2			0.2	1.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			27.4									
HCM 7th LOS			C									

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



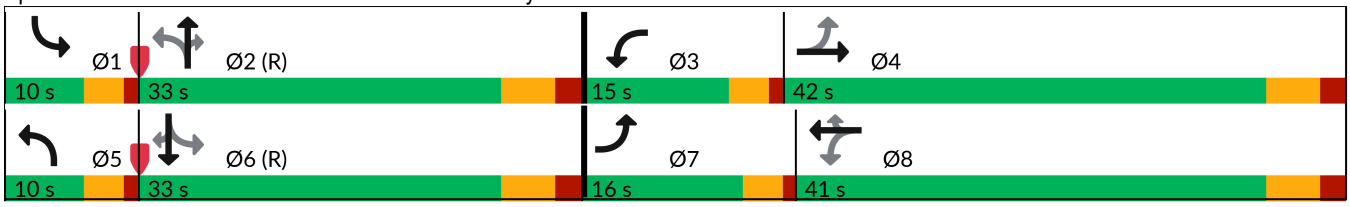
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	225		0	225		250	175		200
Storage Lanes	1		1	1		1	2		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	1863	1583	1770	1863	1583
Flt Permitted	0.105			0.342			0.655			0.683		
Satd. Flow (perm)	196	3539	1583	637	3539	1583	2367	1863	1583	1272	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185			130			120			145
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			907			521			491	
Travel Time (s)		16.1			20.6			11.8			11.2	

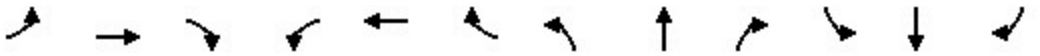
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	652	93	48	913	120	374	106	34	62	73	133
Future Volume (vph)	203	652	93	48	913	120	374	106	34	62	73	133
Turn Type	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		8	2		2	6		6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0		9.5	31.0	31.0	9.5	36.0	36.0	9.5	34.0	34.0
Total Split (s)	16.0	42.0		15.0	41.0	41.0	10.0	33.0	33.0	10.0	33.0	33.0
Total Split (%)	16.0%	42.0%		15.0%	41.0%	41.0%	10.0%	33.0%	33.0%	10.0%	33.0%	33.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0	1.0	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)	4.0	6.0		4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	51.2	40.2	100.0	42.4	33.4	33.4	37.7	30.5	30.5	35.7	27.6	27.6
Actuated g/C Ratio	0.51	0.40	1.00	0.42	0.33	0.33	0.38	0.31	0.31	0.36	0.28	0.28
v/c Ratio	0.77	0.50	0.06	0.15	0.84	0.21	0.42	0.20	0.07	0.14	0.15	0.27
Control Delay (s/veh)	38.8	24.2	0.1	13.0	38.1	5.0	23.1	28.9	0.2	20.1	28.8	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.8	24.2	0.1	13.0	38.1	5.0	23.1	28.9	0.2	20.1	28.8	6.3
LOS	D	C	A	B	D	A	C	C	A	C	C	A
Approach Delay (s/veh)		24.9			33.3			22.8			15.6	
Approach LOS		C			C			C			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 26.9	Intersection LOS: C
Intersection Capacity Utilization 67.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: Wilcox St. & Plum Creek Pkwy.

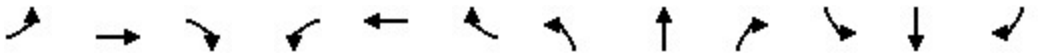




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	221	709	101	52	992	130	407	115	37	67	79	145
v/c Ratio	0.77	0.50	0.06	0.15	0.84	0.21	0.42	0.20	0.07	0.14	0.15	0.27
Control Delay (s/veh)	38.8	24.2	0.1	13.0	38.1	5.0	23.1	28.9	0.2	20.1	28.8	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.8	24.2	0.1	13.0	38.1	5.0	23.1	28.9	0.2	20.1	28.8	6.3
Queue Length 50th (ft)	80	174	0	15	297	0	91	57	0	27	38	0
Queue Length 95th (ft)	#193	235	0	34	378	39	127	104	0	55	76	46
Internal Link Dist (ft)		629			827			441			411	
Turn Bay Length (ft)	325			225			225		250	175		200
Base Capacity (vph)	289	1424	1583	420	1238	638	968	569	567	486	514	542
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.50	0.06	0.12	0.80	0.20	0.42	0.20	0.07	0.14	0.15	0.27

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)	203	652	93	48	913	120	374	106	34	62	73	133
Future Volume (veh/h)	203	652	93	48	913	120	374	106	34	62	73	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	709	0	52	992	130	407	115	37	67	79	145
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	1362		310	1141	509	999	629	533	509	596	505
Arrive On Green	0.10	0.38	0.00	0.04	0.32	0.32	0.06	0.34	0.34	0.04	0.32	0.32
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	221	709	0	52	992	130	407	115	37	67	79	145
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	7.9	15.4	0.0	1.9	26.3	6.1	6.0	4.3	1.6	2.5	3.0	6.9
Cycle Q Clear(g_c), s	7.9	15.4	0.0	1.9	26.3	6.1	6.0	4.3	1.6	2.5	3.0	6.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	1362		310	1141	509	999	629	533	509	596	505
V/C Ratio(X)	0.79	0.52		0.17	0.87	0.26	0.41	0.18	0.07	0.13	0.13	0.29
Avail Cap(c_a), veh/h	315	1362		438	1244	555	999	629	533	541	596	505
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)	0.94	0.94	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.2	23.8	0.0	21.6	32.0	25.1	22.7	23.5	22.5	21.3	24.2	25.6
Incr Delay (d2), s/veh	10.8	0.3	0.0	0.3	6.4	0.3	0.3	0.6	0.3	0.1	0.5	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	4.0	6.4	0.0	0.8	12.0	2.3	0.0	2.0	0.6	1.0	1.4	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.1	24.1	0.0	21.8	38.4	25.4	23.0	24.1	22.8	21.4	24.7	27.0
LnGrp LOS	C	C		C	D	C	C	C	C	C	C	C
Approach Vol, veh/h		930			1174			559			291	
Approach Delay, s/veh		26.5			36.2			23.2			25.1	
Approach LOS		C			D			C			C	

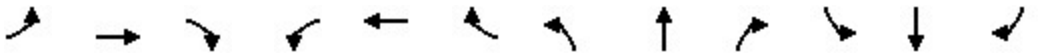
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	39.6	7.8	44.3	10.0	37.9	14.0	38.1
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	6.0	27.0	11.0	36.0	6.0	27.0	12.0	35.0
Max Q Clear Time (g_c+I1), s	4.5	6.3	3.9	17.4	8.0	8.9	9.9	28.3
Green Ext Time (p_c), s	0.0	0.6	0.0	4.8	0.0	0.8	0.1	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.6
HCM 7th LOS	C

Notes

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

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



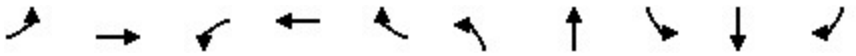
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		325	125		100	225		0	350		350
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.993				0.850		0.877				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3514	0	1770	3539	1583	1770	1634	0	1770	1863	1583
Flt Permitted	0.419			0.369			0.734			0.484		
Satd. Flow (perm)	780	3514	0	687	3539	1583	1367	1634	0	902	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				210		220				142
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		922			1021			638			586	
Travel Time (s)		15.7			17.4			14.5			8.9	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	50	343	98	362	193	27	44	221	32	102
Future Volume (vph)	50	343	98	362	193	27	44	221	32	102
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases	4		8		8	2		6		6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	38.0	10.0	40.0	40.0	10.0	33.0	10.0	32.0	32.0
Total Split (s)	10.0	40.0	10.0	40.0	40.0	10.0	33.0	17.0	40.0	40.0
Total Split (%)	10.0%	40.0%	10.0%	40.0%	40.0%	10.0%	33.0%	17.0%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	1.0	2.0	1.0	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
Total Lost Time (s)	5.0	6.0	5.0	6.0	6.0	5.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	C-Max
Act Effct Green (s)	23.1	17.1	24.1	19.1	19.1	51.3	44.1	61.9	53.9	53.9
Actuated g/C Ratio	0.23	0.17	0.24	0.19	0.19	0.51	0.44	0.62	0.54	0.54
v/c Ratio	0.24	0.65	0.49	0.58	0.44	0.04	0.32	0.36	0.03	0.12
Control Delay (s/veh)	27.7	42.7	35.3	40.6	8.0	9.6	6.2	10.8	14.5	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.7	42.7	35.3	40.6	8.0	9.6	6.2	10.8	14.5	1.8
LOS	C	D	D	D	A	A	A	B	B	A
Approach Delay (s/veh)		40.9		30.1			6.5		8.6	
Approach LOS		D		C			A		A	

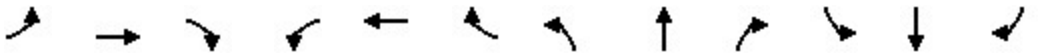
Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay (s/veh): 24.4	Intersection LOS: C
Intersection Capacity Utilization 60.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Prairie Hawk Dr. & Wolfensberger Rd.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	54	391	107	393	210	29	268	240	35	111
v/c Ratio	0.24	0.65	0.49	0.58	0.44	0.04	0.32	0.36	0.03	0.12
Control Delay (s/veh)	27.7	42.7	35.3	40.6	8.0	9.6	6.2	10.8	14.5	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.7	42.7	35.3	40.6	8.0	9.6	6.2	10.8	14.5	1.8
Queue Length 50th (ft)	25	121	52	123	0	7	17	63	11	0
Queue Length 95th (ft)	51	160	88	163	58	20	79	115	31	19
Internal Link Dist (ft)		842		941			558		506	
Turn Bay Length (ft)	325		125		100	225		350		350
Base Capacity (vph)	229	1198	219	1203	676	725	842	672	1004	918
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.33	0.49	0.33	0.31	0.04	0.32	0.36	0.03	0.12

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	343	17	98	362	193	27	44	202	221	32	102
Future Volume (veh/h)	50	343	17	98	362	193	27	44	202	221	32	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	373	18	107	393	210	29	48	220	240	35	111
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	568	27	224	624	278	716	140	641	644	1006	852
Arrive On Green	0.04	0.16	0.16	0.05	0.18	0.18	0.03	0.48	0.48	0.09	0.54	0.54
Sat Flow, veh/h	1781	3451	166	1781	3554	1585	1781	292	1338	1781	1870	1585
Grp Volume(v), veh/h	54	192	199	107	393	210	29	0	268	240	35	111
Grp Sat Flow(s),veh/h/ln	1781	1777	1840	1781	1777	1585	1781	0	1630	1781	1870	1585
Q Serve(g_s), s	2.5	10.1	10.2	5.0	10.2	12.6	0.8	0.0	10.3	6.5	0.9	3.5
Cycle Q Clear(g_c), s	2.5	10.1	10.2	5.0	10.2	12.6	0.8	0.0	10.3	6.5	0.9	3.5
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.82	1.00		1.00
Lane Grp Cap(c), veh/h	201	292	303	224	624	278	716	0	780	644	1006	852
V/C Ratio(X)	0.27	0.66	0.66	0.48	0.63	0.75	0.04	0.00	0.34	0.37	0.03	0.13
Avail Cap(c_a), veh/h	221	604	626	224	1208	539	756	0	780	704	1006	852
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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	39.1	39.1	33.4	38.2	39.2	12.4	0.0	16.3	10.9	10.9	11.5
Incr Delay (d2), s/veh	0.7	2.5	2.4	1.6	1.1	4.1	0.0	0.0	1.2	0.4	0.1	0.3
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	1.1	4.5	4.7	2.2	4.4	5.1	0.3	0.0	4.0	2.3	0.3	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.9	41.6	41.6	35.0	39.3	43.3	12.4	0.0	17.5	11.2	10.9	11.8
LnGrp LOS	C	D	D	D	D	D	B		B	B	B	B
Approach Vol, veh/h		445			710			297			386	
Approach Delay, s/veh		40.7			39.8			17.0			11.4	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	53.9	10.0	22.5	7.8	59.8	8.9	23.6
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	12.0	27.0	5.0	34.0	5.0	34.0	5.0	34.0
Max Q Clear Time (g_c+I1), s	8.5	12.3	7.0	12.2	2.8	5.5	4.5	14.6
Green Ext Time (p_c), s	0.2	1.4	0.0	2.0	0.0	0.5	0.0	3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	30.4
HCM 7th LOS	C

Notes

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

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.904	
Flt Protected	0.953			0.999		
Satd. Flow (prot)	1773	0	0	1861	1684	0
Flt Permitted	0.953			0.999		
Satd. Flow (perm)	1773	0	0	1861	1684	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	671			479	638	
Travel Time (s)	15.3			10.9	14.5	

Intersection Summary	
Area Type:	Other

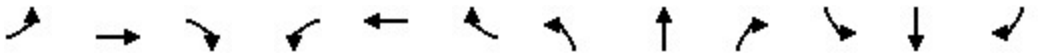
Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	142	1	3	100	44	109
Future Vol, veh/h	142	1	3	100	44	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	154	1	3	109	48	118

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	222	107	166	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	115	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	766	947	1412	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	764	947	1412	-	-	-
Mov Cap-2 Maneuver	764	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	910	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.9	0.22	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	52	-	765	-	-
HCM Lane V/C Ratio	0.002	-	0.203	-	-
HCM Control Delay (s/veh)	7.6	0	10.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.895									0.865	
Flt Protected		0.996			0.992			0.953				
Satd. Flow (prot)	0	1660	0	0	1848	0	0	1775	0	0	1611	0
Flt Permitted		0.996			0.992			0.953				
Satd. Flow (perm)	0	1660	0	0	1848	0	0	1775	0	0	1611	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		479			909			1975			245	
Travel Time (s)		10.9			20.7			44.9			5.6	

Intersection Summary	
Area Type:	Other

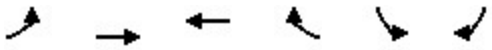
Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	7	42	1	5	0	77	1	0	0	0	15
Future Vol, veh/h	5	7	42	1	5	0	77	1	0	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	8	46	1	5	0	84	1	0	0	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	5	0	0	53	0	0	49	49	30	27	72	5
Stage 1	-	-	-	-	-	-	41	41	-	8	8	-
Stage 2	-	-	-	-	-	-	8	8	-	19	64	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1616	-	-	1552	-	-	951	843	1044	983	819	1078
Stage 1	-	-	-	-	-	-	973	861	-	1014	889	-
Stage 2	-	-	-	-	-	-	1014	889	-	1000	841	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1616	-	-	1552	-	-	933	839	1044	978	815	1078
Mov Cap-2 Maneuver	-	-	-	-	-	-	933	839	-	978	815	-
Stage 1	-	-	-	-	-	-	970	858	-	1013	889	-
Stage 2	-	-	-	-	-	-	998	889	-	995	839	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.67	1.22	9.25	8.39
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	932	142	-	-	300	-	-	1078
HCM Lane V/C Ratio	0.091	0.003	-	-	0.001	-	-	0.015
HCM Control Delay (s/veh)	9.3	7.2	0	-	7.3	0	-	8.4
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			0	150	0
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.975		0.902	
Flt Protected		0.989			0.987	
Satd. Flow (prot)	0	1842	1816	0	1658	0
Flt Permitted		0.989			0.987	
Satd. Flow (perm)	0	1842	1816	0	1658	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		340	1975		832	
Travel Time (s)		7.7	44.9		18.9	

Intersection Summary	
Area Type:	Other

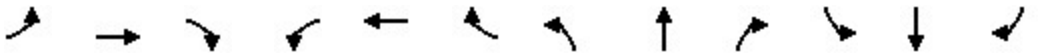
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	30	17	4	3	7
Future Vol, veh/h	8	30	17	4	3	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	33	18	4	3	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	23	0	-	0	71	21
Stage 1	-	-	-	-	21	-
Stage 2	-	-	-	-	50	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1592	-	-	-	934	1057
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	972	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1592	-	-	-	928	1057
Mov Cap-2 Maneuver	-	-	-	-	928	-
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	972	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.53	0	8.59
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	379	-	-	-	1015
HCM Lane V/C Ratio	0.005	-	-	-	0.011
HCM Control Delay (s/veh)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



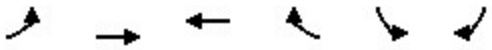
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	250		0	125		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.958			0.934			0.989			0.982	
Flt Protected		0.996			0.995			0.992			0.987	
Satd. Flow (prot)	0	3377	0	0	3289	0	0	3472	0	0	3430	0
Flt Permitted		0.996			0.995			0.992			0.987	
Satd. Flow (perm)	0	3377	0	0	3289	0	0	3472	0	0	3430	0
Link Speed (mph)		40			35			45			45	
Link Distance (ft)		631			610			567			842	
Travel Time (s)		10.8			11.9			8.6			12.8	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	4.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	188	284	298	323
Demand Flow Rate, veh/h	191	291	304	330
Vehicles Circulating, veh/h	318	297	221	210
Vehicles Exiting, veh/h	222	228	288	378
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.3	4.7	4.4	4.4
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR
RT Channelized								
Lane Util	0.471	0.529	0.471	0.529	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.667	2.535	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	4.645	4.328
A (Intercept)	1350	1420	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	9.199e-4	8.501e-4
Entry Flow, veh/h	90	101	137	154	143	161	155	175
Cap Entry Lane, veh/h	1007	1084	1027	1103	1102	1177	1113	1188
Entry HV Adj Factor	0.980	0.984	0.976	0.979	0.981	0.982	0.979	0.978
Flow Entry, veh/h	88	99	134	151	140	158	152	171
Cap Entry, veh/h	987	1067	1002	1080	1080	1156	1090	1162
V/C Ratio	0.089	0.093	0.133	0.140	0.130	0.137	0.139	0.147
Control Delay, s/veh	4.5	4.2	4.8	4.6	4.5	4.3	4.5	4.4
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0	0	0	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.967		0.994	
Flt Protected		0.999			0.954	
Satd. Flow (prot)	0	1861	1801	0	1766	0
Flt Permitted		0.999			0.954	
Satd. Flow (perm)	0	1861	1801	0	1766	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		350	935		1177	
Travel Time (s)		8.0	21.3		26.8	

Intersection Summary	
Area Type:	Other

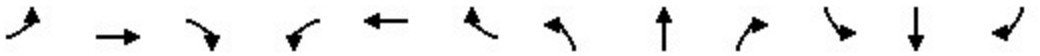
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	255	285	94	84	4
Future Vol, veh/h	6	255	285	94	84	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	277	310	102	91	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	412	0	-	0	651	361
Stage 1	-	-	-	-	361	-
Stage 2	-	-	-	-	290	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1147	-	-	-	433	684
Stage 1	-	-	-	-	705	-
Stage 2	-	-	-	-	759	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1147	-	-	-	430	684
Mov Cap-2 Maneuver	-	-	-	-	430	-
Stage 1	-	-	-	-	701	-
Stage 2	-	-	-	-	759	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.19	0	15.51
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	41	-	-	-	438
HCM Lane V/C Ratio	0.006	-	-	-	0.219
HCM Control Delay (s/veh)	8.2	0	-	-	15.5
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.8



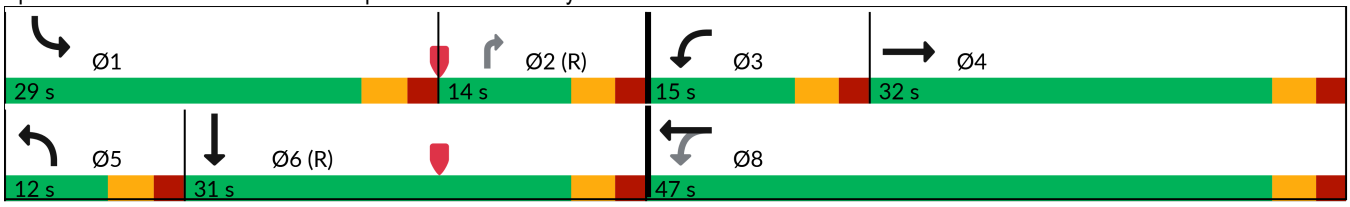
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		0	375		175	0		175
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor												
Frt		0.985							0.850		0.982	
Flt Protected				0.950			0.950			0.950	0.977	
Satd. Flow (prot)	0	5009	0	1770	3539	0	1770	0	1583	3221	1626	0
Flt Permitted				0.303			0.950			0.950	0.977	
Satd. Flow (perm)	0	5009	0	564	3539	0	1770	0	1583	3221	1626	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22							206		7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1484			253			667			625	
Travel Time (s)		33.7			5.8			15.2			14.2	

Intersection Summary	
Area Type:	Other

Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	339	266	321	17	182	939	157
Future Volume (vph)	339	266	321	17	182	939	157
Turn Type	NA	pm+pt	NA	Prot	Perm	Prot	NA
Protected Phases	4	3	8	5		1	6
Permitted Phases		8			2		
Detector Phase	4	3	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	10.0	22.5	10.0	22.5	10.0	22.5
Total Split (s)	32.0	15.0	47.0	12.0	14.0	29.0	31.0
Total Split (%)	35.6%	16.7%	52.2%	13.3%	15.6%	32.2%	34.4%
Yellow Time (s)	3.0	3.0	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
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.7	27.7	27.7	6.5	17.4	29.9	29.9
Actuated g/C Ratio	0.14	0.31	0.31	0.07	0.19	0.33	0.33
v/c Ratio	0.57	0.94	0.32	0.14	0.42	0.77	0.76
Control Delay (s/veh)	49.0	62.8	30.3	41.1	8.2	32.1	35.9
Queue Delay	0.0	47.2	0.2	0.0	0.1	0.2	0.3
Total Delay (s/veh)	49.0	110.0	30.5	41.1	8.3	32.3	36.2
LOS	D	F	C	D	A	C	D
Approach Delay (s/veh)	49.0		66.5				33.6
Approach LOS	D		E				C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBR and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay (s/veh): 42.6	Intersection LOS: D
Intersection Capacity Utilization 62.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: I-25 SB Ramp & Plum Creek Pkwy.



Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Group Flow (vph)	410	289	349	18	198	827	415
v/c Ratio	0.57	0.94	0.32	0.14	0.42	0.77	0.76
Control Delay (s/veh)	49.0	62.8	30.3	41.1	8.2	32.1	35.9
Queue Delay	0.0	47.2	0.2	0.0	0.1	0.2	0.3
Total Delay (s/veh)	49.0	110.0	30.5	41.1	8.3	32.3	36.2
Queue Length 50th (ft)	91	173	107	10	0	228	225
Queue Length 95th (ft)	124	m#208	m124	31	58	276	318
Internal Link Dist (ft)	1404		173				545
Turn Bay Length (ft)				375	175		
Base Capacity (vph)	1518	307	1651	141	472	1071	545
Starvation Cap Reductn	0	92	632	0	0	0	0
Spillback Cap Reductn	34	0	0	0	20	21	11
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	1.34	0.34	0.13	0.44	0.79	0.78

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

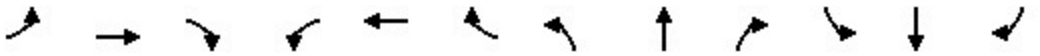
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	339	39	266	321	0	17	0	182	939	157	46
Future Volume (veh/h)	0	339	39	266	321	0	17	0	182	939	157	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	368	42	289	349	0	18	0	198	925	306	50
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, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	596	67	325	1047	0	36	0	0	2117	813	133
Arrive On Green	0.00	0.04	0.04	0.22	0.59	0.00	0.02	0.00	0.00	0.59	0.52	0.52
Sat Flow, veh/h	0	4827	522	1781	3647	0	1781	18		3563	1568	256
Grp Volume(v), veh/h	0	267	143	289	349	0	18	54.1		925	0	356
Grp Sat Flow(s),veh/h/ln	0	1702	1776	1781	1777	0	1781	D		1781	0	1824
Q Serve(g_s), s	0.0	6.9	7.1	10.0	4.5	0.0	0.9			12.8	0.0	10.5
Cycle Q Clear(g_c), s	0.0	6.9	7.1	10.0	4.5	0.0	0.9			12.8	0.0	10.5
Prop In Lane	0.00		0.29	1.00		0.00	1.00			1.00		0.14
Lane Grp Cap(c), veh/h	0	436	227	325	1047	0	36			2117	0	946
V/C Ratio(X)	0.00	0.61	0.63	0.89	0.33	0.00	0.50			0.44	0.00	0.38
Avail Cap(c_a), veh/h	0	1021	533	325	1658	0	139			2117	0	946
HCM Platoon Ratio	1.00	0.33	0.33	2.00	2.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	0.58	0.58	0.40	0.40	0.00	1.00			1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	40.9	41.0	28.6	14.0	0.0	43.6			10.0	0.0	13.0
Incr Delay (d2), s/veh	0.0	0.8	1.7	11.7	0.1	0.0	10.4			0.1	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.1	3.4	5.6	1.6	0.0	0.5			4.6	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	41.7	42.7	40.4	14.0	0.0	54.1			10.1	0.0	14.1
LnGrp LOS		D	D	D	B		D			B		B
Approach Vol, veh/h		410			638						1281	
Approach Delay, s/veh		42.1			26.0						11.2	
Approach LOS		D			C						B	

Timer - Assigned Phs	1		3	4	5	6		8				
Phs Duration (G+Y+Rc), s	58.5		15.0	16.5	6.8	51.7		31.5				
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	24.0		10.0	27.0	7.0	26.0		42.0				
Max Q Clear Time (g_c+I1), s	14.8		12.0	9.1	2.9	12.5		6.5				
Green Ext Time (p_c), s	2.7		0.0	2.4	0.0	1.8		2.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	21.0
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



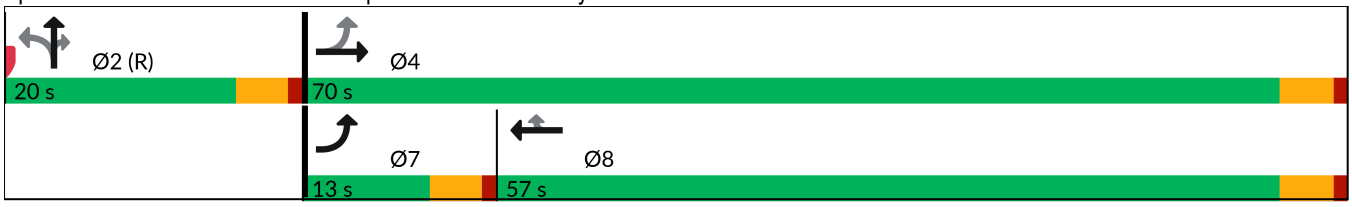
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	0.95	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.947	0.850		0.868	0.850			
Flt Protected	0.950						0.950	0.996				
Satd. Flow (prot)	1770	5085	0	0	1676	1504	1681	1465	1504	0	0	0
Flt Permitted	0.071						0.950	0.996				
Satd. Flow (perm)	132	5085	0	0	1676	1504	1681	1465	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					52	773		60	73			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		396			673			450			375	
Travel Time (s)		9.0			15.3			10.2			8.5	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	153	1276	550	1074	46	3	118
Future Volume (vph)	153	1276	550	1074	46	3	118
Turn Type	pm+pt	NA	NA	Perm	Perm	NA	Perm
Protected Phases	7	4	8			2	
Permitted Phases	4			8	2		2
Detector Phase	7	4	8	8	2	2	2
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	13.0	70.0	57.0	57.0	20.0	20.0	20.0
Total Split (%)	14.4%	77.8%	63.3%	63.3%	22.2%	22.2%	22.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	64.9	64.9	51.9	51.9	16.1	16.1	16.1
Actuated g/C Ratio	0.72	0.72	0.58	0.58	0.18	0.18	0.18
v/c Ratio	0.67	0.38	0.94	0.70	0.15	0.22	0.21
Control Delay (s/veh)	28.7	5.1	34.8	5.0	33.2	12.8	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.7	5.1	34.8	5.0	33.2	12.8	9.3
LOS	C	A	C	A	C	B	A
Approach Delay (s/veh)		7.6	20.6			16.6	
Approach LOS		A	C			B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay (s/veh): 14.6	Intersection LOS: B
Intersection Capacity Utilization 74.7%	ICU Level of Service D
Analysis Period (min) 15	

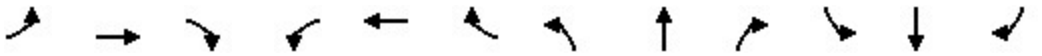
Splits and Phases: 8: I-25 NB Ramps & Plum Creek Pkwy



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	166	1387	925	840	45	68	68
v/c Ratio	0.67	0.38	0.94	0.70	0.15	0.22	0.21
Control Delay (s/veh)	28.7	5.1	34.8	5.0	33.2	12.8	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.7	5.1	34.8	5.0	33.2	12.8	9.3
Queue Length 50th (ft)	38	89	444	15	23	4	0
Queue Length 95th (ft)	#121	109	#765	80	55	43	34
Internal Link Dist (ft)		316	593			370	
Turn Bay Length (ft)							
Base Capacity (vph)	249	3700	999	1199	301	311	329
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.37	0.93	0.70	0.15	0.22	0.21

Intersection Summary

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



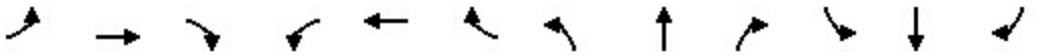
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	1276	0	0	550	1074	46	3	118	0	0	0
Future Volume (veh/h)	153	1276	0	0	550	1074	46	3	118	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	166	1387	0	0	1025	883	34	0	147			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	203	3516	0	0	1083	917	377	0	670			
Arrive On Green	0.06	0.69	0.00	0.00	0.58	0.58	0.21	0.00	0.21			
Sat Flow, veh/h	1781	5274	0	0	1870	1585	1781	0	3170			
Grp Volume(v), veh/h	166	1387	0	0	1025	883	34	0	147			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	3.3	10.5	0.0	0.0	46.0	47.7	1.4	0.0	3.5			
Cycle Q Clear(g_c), s	3.3	10.5	0.0	0.0	46.0	47.7	1.4	0.0	3.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	203	3516	0	0	1083	917	377	0	670			
V/C Ratio(X)	0.82	0.39	0.00	0.00	0.95	0.96	0.09	0.00	0.22			
Avail Cap(c_a), veh/h	264	3716	0	0	1091	925	377	0	670			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	22.4	6.0	0.0	0.0	17.7	18.0	28.5	0.0	29.3			
Incr Delay (d2), s/veh	14.3	0.1	0.0	0.0	16.0	20.9	0.5	0.0	0.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.8	3.1	0.0	0.0	22.2	20.6	0.6	0.0	1.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.7	6.1	0.0	0.0	33.7	38.9	29.0	0.0	30.1			
LnGrp LOS	D	A			C	D	C		C			
Approach Vol, veh/h		1553			1908			181				
Approach Delay, s/veh		9.3			36.1			29.9				
Approach LOS		A			D			C				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		23.5		66.5			9.9	56.6				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		15.5		65.5			8.5	52.5				
Max Q Clear Time (g_c+I1), s		5.5		12.5			5.3	49.7				
Green Ext Time (p_c), s		0.4		15.1			0.1	2.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			24.4									
HCM 7th LOS			C									

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



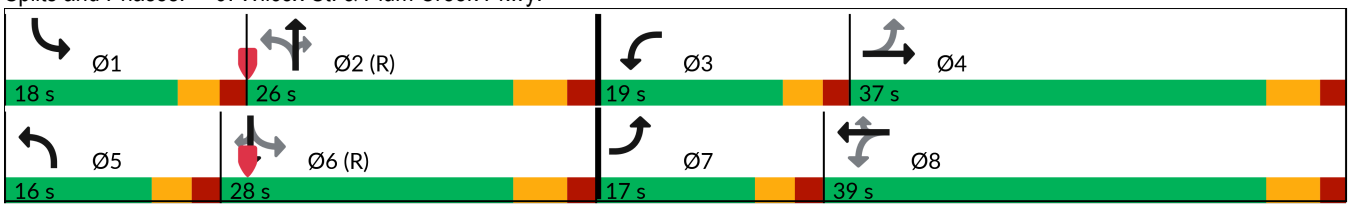
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	225		0	225		250	175		200
Storage Lanes	1		1	1		1	2		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	1863	1583	1770	1863	1583
Flt Permitted	0.114			0.118			0.684			0.596		
Satd. Flow (perm)	212	3539	1583	220	3539	1583	2472	1863	1583	1110	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			207			142			142			254
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			907			521			491	
Travel Time (s)		16.1			20.6			11.8			11.2	

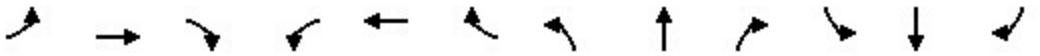
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	246	1112	71	66	871	110	475	140	59	176	105	234
Future Volume (vph)	246	1112	71	66	871	110	475	140	59	176	105	234
Turn Type	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		8	2		2	6		6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	36.0		10.0	31.0	31.0	10.0	36.0	36.0	10.0	29.0	29.0
Total Split (s)	17.0	37.0		19.0	39.0	39.0	16.0	26.0	26.0	18.0	28.0	28.0
Total Split (%)	17.0%	37.0%		19.0%	39.0%	39.0%	16.0%	26.0%	26.0%	18.0%	28.0%	28.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	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		5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	50.1	39.6	100.0	41.6	33.0	33.0	33.3	21.3	21.3	34.7	22.0	22.0
Actuated g/C Ratio	0.50	0.40	1.00	0.42	0.33	0.33	0.33	0.21	0.21	0.35	0.22	0.22
v/c Ratio	0.91	0.86	0.05	0.35	0.81	0.19	0.56	0.38	0.14	0.41	0.28	0.47
Control Delay (s/veh)	58.2	36.8	0.1	17.9	37.3	3.6	25.5	37.7	0.7	24.1	34.6	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.2	36.8	0.1	17.9	37.3	3.6	25.5	37.7	0.7	24.1	34.6	7.3
LOS	E	D	A	B	D	A	C	D	A	C	C	A
Approach Delay (s/veh)		38.7			32.5			25.8			18.6	
Approach LOS		D			C			C			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay (s/veh): 31.7	Intersection LOS: C
Intersection Capacity Utilization 75.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 9: Wilcox St. & Plum Creek Pkwy.

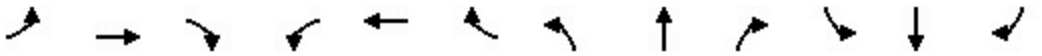




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	267	1209	77	72	947	120	516	152	64	191	114	254
v/c Ratio	0.91	0.86	0.05	0.35	0.81	0.19	0.56	0.38	0.14	0.41	0.28	0.47
Control Delay (s/veh)	58.2	36.8	0.1	17.9	37.3	3.6	25.5	37.7	0.7	24.1	34.6	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.2	36.8	0.1	17.9	37.3	3.6	25.5	37.7	0.7	24.1	34.6	7.3
Queue Length 50th (ft)	112	379	0	22	288	0	119	85	0	82	61	0
Queue Length 95th (ft)	#269	#541	0	45	367	28	162	146	0	135	110	63
Internal Link Dist (ft)		629			827			441			411	
Turn Bay Length (ft)	325			225			225		250	175		200
Base Capacity (vph)	293	1400	1583	322	1167	617	929	397	449	485	409	546
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.86	0.05	0.22	0.81	0.19	0.56	0.38	0.14	0.39	0.28	0.47

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)	246	1112	71	66	871	110	475	140	59	176	105	234
Future Volume (veh/h)	246	1112	71	66	871	110	475	140	59	176	105	234
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	267	1209	0	72	947	120	516	152	64	191	114	254
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	1350		177	1084	483	913	481	408	472	462	391
Arrive On Green	0.12	0.38	0.00	0.04	0.30	0.30	0.11	0.26	0.26	0.10	0.25	0.25
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	267	1209	0	72	947	120	516	152	64	191	114	254
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	9.8	32.0	0.0	2.7	25.2	5.7	11.0	6.6	3.1	7.9	4.9	14.4
Cycle Q Clear(g_c), s	9.8	32.0	0.0	2.7	25.2	5.7	11.0	6.6	3.1	7.9	4.9	14.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	310	1350		177	1084	483	913	481	408	472	462	391
V/C Ratio(X)	0.86	0.90		0.41	0.87	0.25	0.56	0.32	0.16	0.40	0.25	0.65
Avail Cap(c_a), veh/h	314	1350		349	1173	523	913	481	408	527	462	391
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)	0.78	0.78	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.2	29.1	0.0	25.7	32.9	26.1	24.6	30.0	28.7	24.1	30.2	33.8
Incr Delay (d2), s/veh	16.8	6.5	0.0	1.5	7.1	0.3	0.8	1.7	0.8	0.6	1.3	8.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	14.4	0.0	1.2	11.7	2.2	4.6	3.2	1.3	3.3	2.4	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.1	35.7	0.0	27.2	40.1	26.4	25.4	31.7	29.6	24.7	31.5	41.9
LnGrp LOS	D	D		C	D	C	C	C	C	C	C	D
Approach Vol, veh/h		1476			1139			732			559	
Approach Delay, s/veh		36.5			37.8			27.1			33.9	
Approach LOS		D			D			C			C	

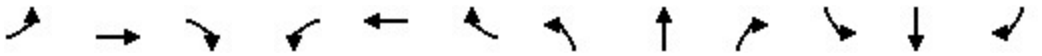
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	31.7	9.3	44.0	16.0	30.7	16.8	36.5
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	13.0	20.0	14.0	31.0	11.0	22.0	12.0	33.0
Max Q Clear Time (g_c+I1), s	9.9	8.6	4.7	34.0	13.0	16.4	11.8	27.2
Green Ext Time (p_c), s	0.2	0.7	0.1	0.0	0.0	0.8	0.0	3.2

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.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



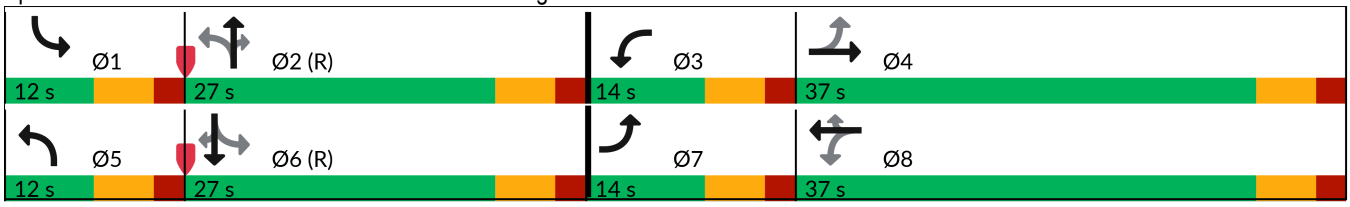
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		325	125		100	225		150	350		350
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.984				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3483	0	1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.617			0.298			0.674			0.571		
Satd. Flow (perm)	1149	3483	0	555	3539	1583	1255	1863	1583	1064	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				182			182			182
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		922			1021			638			586	
Travel Time (s)		15.7			17.4			14.5			8.9	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	84	411	194	198	167	19	83	152	214	120	40
Future Volume (vph)	84	411	194	198	167	19	83	152	214	120	40
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	33.0	11.0	40.0	40.0	11.0	33.0	33.0	11.0	32.0	32.0
Total Split (s)	14.0	37.0	14.0	37.0	37.0	12.0	27.0	27.0	12.0	27.0	27.0
Total Split (%)	15.6%	41.1%	15.6%	41.1%	41.1%	13.3%	30.0%	30.0%	13.3%	30.0%	30.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	25.8	18.3	27.6	21.2	21.2	34.2	28.1	28.1	45.7	40.6	40.6
Actuated g/C Ratio	0.29	0.20	0.31	0.24	0.24	0.38	0.31	0.31	0.51	0.45	0.45
v/c Ratio	0.24	0.69	0.76	0.26	0.36	0.04	0.16	0.27	0.37	0.15	0.05
Control Delay (s/veh)	20.2	37.2	40.6	29.3	6.5	13.8	26.0	4.8	15.4	18.6	0.1
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)	20.2	37.2	40.6	29.3	6.5	13.8	26.0	4.8	15.4	18.6	0.1
LOS	C	D	D	C	A	B	C	A	B	B	A
Approach Delay (s/veh)		34.6		26.4			12.4			14.8	
Approach LOS		C		C			B			B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay (s/veh): 24.4	Intersection LOS: C
Intersection Capacity Utilization 57.2%	ICU Level of Service B
Analysis Period (min) 15	

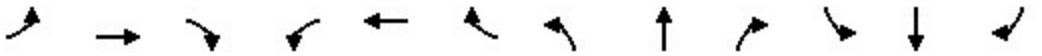
Splits and Phases: 1: Prairie Hawk Dr. & Wolfensberger Rd.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	91	499	211	215	182	21	90	165	233	130	43
v/c Ratio	0.24	0.69	0.76	0.26	0.36	0.04	0.16	0.27	0.37	0.15	0.05
Control Delay (s/veh)	20.2	37.2	40.6	29.3	6.5	13.8	26.0	4.8	15.4	18.6	0.1
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)	20.2	37.2	40.6	29.3	6.5	13.8	26.0	4.8	15.4	18.6	0.1
Queue Length 50th (ft)	35	135	87	55	0	6	37	0	71	37	0
Queue Length 95th (ft)	61	175	#146	81	49	19	82	40	133	100	0
Internal Link Dist (ft)		842		941			558			506	
Turn Bay Length (ft)	325		125		100	225		150	350		350
Base Capacity (vph)	390	1209	277	1218	664	515	580	618	632	841	814
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	0.23	0.41	0.76	0.18	0.27	0.04	0.16	0.27	0.37	0.15	0.05

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)	84	411	48	194	198	167	19	83	152	214	120	40
Future Volume (veh/h)	84	411	48	194	198	167	19	83	152	214	120	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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	447	52	211	215	182	21	90	165	233	130	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	588	68	284	765	341	599	738	625	608	820	695
Arrive On Green	0.06	0.18	0.18	0.09	0.22	0.22	0.02	0.39	0.39	0.07	0.44	0.44
Sat Flow, veh/h	1781	3209	372	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	91	247	252	211	215	182	21	90	165	233	130	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1803	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.7	11.8	12.0	8.0	4.5	9.2	0.6	2.8	6.3	6.0	3.8	1.4
Cycle Q Clear(g_c), s	3.7	11.8	12.0	8.0	4.5	9.2	0.6	2.8	6.3	6.0	3.8	1.4
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	326	330	284	765	341	599	738	625	608	820	695
V/C Ratio(X)	0.26	0.76	0.76	0.74	0.28	0.53	0.04	0.12	0.26	0.38	0.16	0.06
Avail Cap(c_a), veh/h	401	612	621	284	1224	546	677	738	625	608	820	695
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	1.00	1.00
Uniform Delay (d), s/veh	27.4	34.9	34.9	29.1	29.5	31.3	15.5	17.3	18.4	15.5	15.2	14.6
Incr Delay (d2), s/veh	0.4	3.6	3.7	10.2	0.2	1.3	0.0	0.3	1.0	0.4	0.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.2	5.4	4.3	1.9	3.5	0.3	1.2	2.3	2.7	1.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.8	38.5	38.6	39.3	29.7	32.6	15.5	17.7	19.4	15.9	15.7	14.8
LnGrp LOS	C	D	D	D	C	C	B	B	B	B	B	B
Approach Vol, veh/h		590			608			276			406	
Approach Delay, s/veh		36.9			33.9			18.6			15.7	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	41.5	14.0	22.5	8.0	45.5	11.1	25.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	6.0	21.0	8.0	31.0	6.0	21.0	8.0	31.0
Max Q Clear Time (g_c+I1), s	8.0	8.3	10.0	14.0	2.6	5.8	5.7	11.2
Green Ext Time (p_c), s	0.0	0.8	0.0	2.5	0.0	0.6	0.0	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	28.6
HCM 7th LOS	C

Notes

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

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.974	
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	0	1863	1814	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	0	1863	1814	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	671			479	638	
Travel Time (s)	15.3			10.9	14.5	

Intersection Summary	
Area Type:	Other

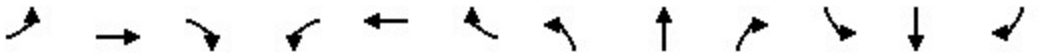
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	44	0	1	196	280	67
Future Vol, veh/h	44	0	1	196	280	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	0	1	213	304	73

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	556	341	377	0	-	0
Stage 1	341	-	-	-	-	-
Stage 2	215	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	492	702	1181	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	492	702	1181	-	-	-
Mov Cap-2 Maneuver	492	-	-	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	821	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	13.11	0.04	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	9	-	492	-	-
HCM Lane V/C Ratio	0.001	-	0.097	-	-
HCM Control Delay (s/veh)	8.1	0	13.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.955						0.997			0.865	
Flt Protected	0.950			0.950				0.953				
Satd. Flow (prot)	1770	1779	0	1770	1863	0	0	1770	0	0	1611	0
Flt Permitted	0.950			0.950				0.953				
Satd. Flow (perm)	1770	1779	0	1770	1863	0	0	1770	0	0	1611	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		479			909			1975			245	
Travel Time (s)		10.9			20.7			44.9			5.6	

Intersection Summary	
Area Type:	Other

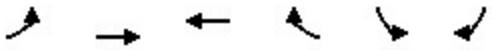
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	182	78	2	153	0	37	0	1	0	0	8
Future Vol, veh/h	8	182	78	2	153	0	37	0	1	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	198	85	2	166	0	40	0	1	0	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	166	0	0	283	0	0	428	428	240	386	471	166
Stage 1	-	-	-	-	-	-	258	258	-	171	171	-
Stage 2	-	-	-	-	-	-	171	171	-	215	300	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1412	-	-	1280	-	-	537	519	799	573	491	878
Stage 1	-	-	-	-	-	-	747	695	-	831	757	-
Stage 2	-	-	-	-	-	-	831	757	-	787	666	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1412	-	-	1280	-	-	527	515	799	567	487	878
Mov Cap-2 Maneuver	-	-	-	-	-	-	527	515	-	567	487	-
Stage 1	-	-	-	-	-	-	742	690	-	830	756	-
Stage 2	-	-	-	-	-	-	822	756	-	781	661	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.23	0.1	12.33	9.14
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	532	1412	-	-	1280	-	-	878
HCM Lane V/C Ratio	0.078	0.006	-	-	0.002	-	-	0.01
HCM Control Delay (s/veh)	12.3	7.6	-	-	7.8	-	-	9.1
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			0	150	0
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.995		0.865	
Flt Protected		0.993				
Satd. Flow (prot)	0	1850	1853	0	1611	0
Flt Permitted		0.993				
Satd. Flow (perm)	0	1850	1853	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		340	1975		832	
Travel Time (s)		7.7	44.9		18.9	

Intersection Summary	
Area Type:	Other

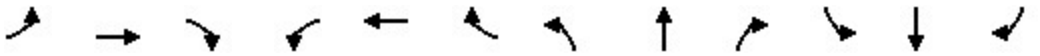
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	12	25	1	0	5
Future Vol, veh/h	2	12	25	1	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	13	27	1	0	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	28	0	-	0	45	28
Stage 1	-	-	-	-	28	-
Stage 2	-	-	-	-	17	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1585	-	-	-	965	1048
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	1005	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1585	-	-	-	964	1048
Mov Cap-2 Maneuver	-	-	-	-	964	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	1005	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.04	0	8.45
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	257	-	-	-	1048
HCM Lane V/C Ratio	0.001	-	-	-	0.005
HCM Control Delay (s/veh)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



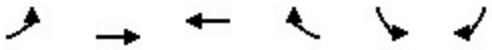
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	250		0	125		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.975			0.964			0.958			0.993	
Flt Protected		0.997			0.994			0.992			0.982	
Satd. Flow (prot)	0	3440	0	0	3391	0	0	3363	0	0	3451	0
Flt Permitted		0.997			0.994			0.992			0.982	
Satd. Flow (perm)	0	3440	0	0	3391	0	0	3363	0	0	3451	0
Link Speed (mph)		40			35			45			45	
Link Distance (ft)		631			610			567			842	
Travel Time (s)		10.8			11.9			8.6			12.8	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	4.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	299	222	184	379
Demand Flow Rate, veh/h	305	227	188	386
Vehicles Circulating, veh/h	398	155	396	203
Vehicles Exiting, veh/h	191	429	307	179
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.2	3.8	4.6	4.6
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR
RT Channelized								
Lane Util	0.469	0.531	0.471	0.529	0.468	0.532	0.469	0.531
Follow-Up Headway, s	2.667	2.535	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	4.645	4.328
A (Intercept)	1350	1420	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	9.199e-4	8.501e-4
Entry Flow, veh/h	143	162	107	120	88	100	181	205
Cap Entry Lane, veh/h	936	1012	1170	1245	938	1014	1120	1195
Entry HV Adj Factor	0.984	0.979	0.976	0.981	0.983	0.975	0.983	0.979
Flow Entry, veh/h	141	159	104	118	86	97	178	201
Cap Entry, veh/h	921	992	1142	1222	921	989	1101	1169
V/C Ratio	0.153	0.160	0.091	0.096	0.094	0.099	0.162	0.172
Control Delay, s/veh	5.4	5.1	3.9	3.7	4.8	4.5	4.7	4.6
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	1	1	0	0	0	0	1	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.965		0.995	
Flt Protected		0.999			0.954	
Satd. Flow (prot)	0	1861	1798	0	1768	0
Flt Permitted		0.999			0.954	
Satd. Flow (perm)	0	1861	1798	0	1768	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		350	935		1177	
Travel Time (s)		8.0	21.3		26.8	

Intersection Summary	
Area Type:	Other

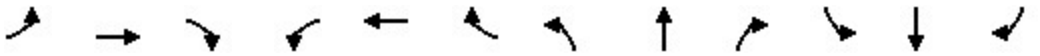
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	354	172	61	100	4
Future Vol, veh/h	6	354	172	61	100	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	385	187	66	109	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	253	0	-	0	618	220
Stage 1	-	-	-	-	220	-
Stage 2	-	-	-	-	398	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1312	-	-	-	453	820
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	679	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1312	-	-	-	450	820
Mov Cap-2 Maneuver	-	-	-	-	450	-
Stage 1	-	-	-	-	811	-
Stage 2	-	-	-	-	679	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.13	0	15.42
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	30	-	-	-	458
HCM Lane V/C Ratio	0.005	-	-	-	0.247
HCM Control Delay (s/veh)	7.8	0	-	-	15.4
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1



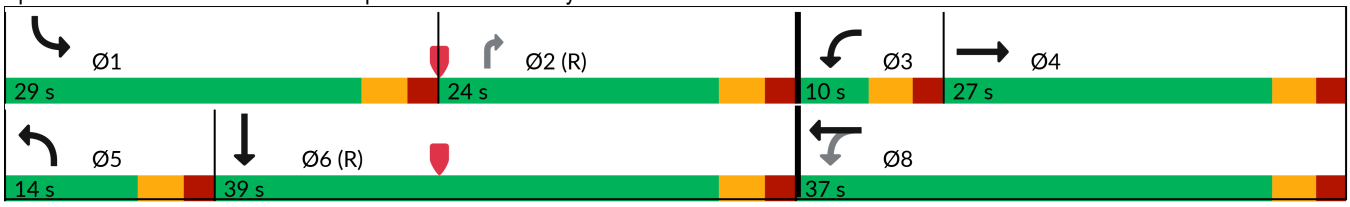
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		0	375		175	0		175
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor												
Frt		0.972							0.850		0.908	
Flt Protected				0.950			0.950			0.950	0.989	
Satd. Flow (prot)	0	4943	0	1770	3539	0	1770	0	1583	3221	1522	0
Flt Permitted				0.212			0.950			0.950	0.989	
Satd. Flow (perm)	0	4943	0	395	3539	0	1770	0	1583	3221	1522	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		55							206		86	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1497			253			493			625	
Travel Time (s)		34.0			5.8			11.2			14.2	

Intersection Summary	
Area Type:	Other

Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	458	164	330	17	191	486	39
Future Volume (vph)	458	164	330	17	191	486	39
Turn Type	NA	pm+pt	NA	Prot	Perm	Prot	NA
Protected Phases	4	3	8	5		1	6
Permitted Phases		8			2		
Detector Phase	4	3	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	10.0	22.5	10.0	22.5	10.0	22.5
Total Split (s)	27.0	10.0	37.0	14.0	24.0	29.0	39.0
Total Split (%)	30.0%	11.1%	41.1%	15.6%	26.7%	32.2%	43.3%
Yellow Time (s)	3.0	3.0	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
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	16.7	26.7	26.7	6.5	29.9	18.4	18.4
Actuated g/C Ratio	0.19	0.30	0.30	0.07	0.33	0.20	0.20
v/c Ratio	0.64	0.92	0.34	0.14	0.31	0.72	0.65
Control Delay (s/veh)	37.8	72.7	35.2	41.1	5.8	39.7	28.7
Queue Delay	0.0	52.5	0.9	0.0	0.1	0.1	0.5
Total Delay (s/veh)	37.8	125.1	36.1	41.1	5.8	39.8	29.2
LOS	D	F	D	D	A	D	C
Approach Delay (s/veh)	37.8		65.6				36.2
Approach LOS	D		E				D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBR and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 41.2	Intersection LOS: D
Intersection Capacity Utilization 51.9%	ICU Level of Service A
Analysis Period (min) 15	

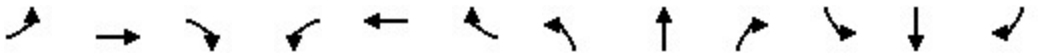
Splits and Phases: 7: I-25 SB Ramp & Plum Creek Pkwy.



Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Group Flow (vph)	613	178	359	18	208	475	245
v/c Ratio	0.64	0.92	0.34	0.14	0.31	0.72	0.65
Control Delay (s/veh)	37.8	72.7	35.2	41.1	5.8	39.7	28.7
Queue Delay	0.0	52.5	0.9	0.0	0.1	0.1	0.5
Total Delay (s/veh)	37.8	125.1	36.1	41.1	5.8	39.8	29.2
Queue Length 50th (ft)	124	107	113	10	1	139	90
Queue Length 95th (ft)	120	m#135	m132	31	55	182	167
Internal Link Dist (ft)	1417		173				545
Turn Bay Length (ft)				375	175		
Base Capacity (vph)	1249	193	1258	177	663	858	379
Starvation Cap Reductn	0	64	615	0	0	0	0
Spillback Cap Reductn	2	0	0	0	36	31	16
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	1.38	0.56	0.10	0.33	0.57	0.67

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



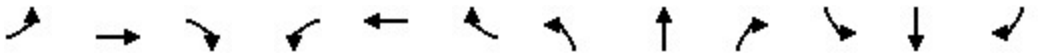
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	458	106	164	330	0	17	0	191	486	39	138
Future Volume (veh/h)	0	458	106	164	330	0	17	0	191	486	39	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	498	115	178	359	0	18	0	208	504	76	150
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, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	719	162	221	1008	0	36	0	0	2156	298	587
Arrive On Green	0.00	0.06	0.06	0.11	0.57	0.00	0.02	0.00	0.00	0.61	0.53	0.53
Sat Flow, veh/h	0	4335	938	1781	3647	0	1781	18		3563	562	1109
Grp Volume(v), veh/h	0	404	209	178	359	0	18	54.1		504	0	226
Grp Sat Flow(s),veh/h/ln	0	1702	1701	1781	1777	0	1781	D		1781	0	1671
Q Serve(g_s), s	0.0	10.5	10.8	5.0	4.9	0.0	0.9			5.9	0.0	6.6
Cycle Q Clear(g_c), s	0.0	10.5	10.8	5.0	4.9	0.0	0.9			5.9	0.0	6.6
Prop In Lane	0.00		0.55	1.00		0.00	1.00			1.00		0.66
Lane Grp Cap(c), veh/h	0	587	293	221	1008	0	36			2156	0	885
V/C Ratio(X)	0.00	0.69	0.71	0.81	0.36	0.00	0.50			0.23	0.00	0.26
Avail Cap(c_a), veh/h	0	832	416	221	1264	0	178			2156	0	885
HCM Platoon Ratio	1.00	0.33	0.33	2.00	2.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	0.86	0.86	0.34	0.34	0.00	1.00			1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	40.1	40.2	31.8	15.0	0.0	43.6			8.2	0.0	11.5
Incr Delay (d2), s/veh	0.0	1.3	2.8	7.3	0.1	0.0	10.4			0.1	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.8	5.1	1.9	1.7	0.0	0.5			2.1	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	41.3	43.0	39.2	15.1	0.0	54.1			8.2	0.0	12.2
LnGrp LOS		D	D	D	B		D			A		B
Approach Vol, veh/h		613			537						730	
Approach Delay, s/veh		41.9			23.1						9.5	
Approach LOS		D			C						A	

Timer - Assigned Phs	1		3	4	5	6		8				
Phs Duration (G+Y+Rc), s	59.5		10.0	20.5	6.8	52.7		30.5				
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	24.0		5.0	22.0	9.0	34.0		32.0				
Max Q Clear Time (g_c+I1), s	7.9		7.0	12.8	2.9	8.6		6.9				
Green Ext Time (p_c), s	1.7		0.0	2.7	0.0	1.4		2.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	24.2
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



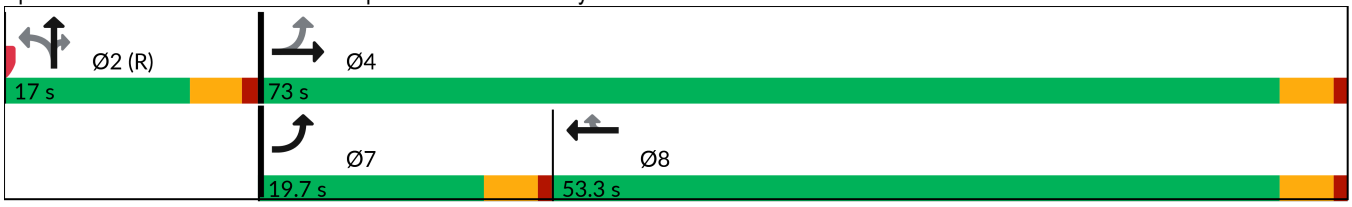
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	0.95	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.928	0.850		0.893	0.850			
Flt Protected	0.950						0.950	0.987				
Satd. Flow (prot)	1770	5085	0	0	1642	1504	1681	1494	1504	0	0	0
Flt Permitted	0.076						0.950	0.987				
Satd. Flow (perm)	142	5085	0	0	1642	1504	1681	1494	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					81	578		52	73			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		451			733			505			498	
Travel Time (s)		10.3			16.7			11.5			11.3	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	281	891	405	1104	87	2	113
Future Volume (vph)	281	891	405	1104	87	2	113
Turn Type	pm+pt	NA	NA	Perm	Perm	NA	Perm
Protected Phases	7	4	8			2	
Permitted Phases	4			8	2		2
Detector Phase	7	4	8	8	2	2	2
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	19.7	73.0	53.3	53.3	17.0	17.0	17.0
Total Split (%)	21.9%	81.1%	59.2%	59.2%	18.9%	18.9%	18.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	67.4	67.4	48.0	48.0	13.6	13.6	13.6
Actuated g/C Ratio	0.75	0.75	0.53	0.53	0.15	0.15	0.15
v/c Ratio	0.81	0.25	0.93	0.74	0.30	0.27	0.25
Control Delay (s/veh)	39.1	3.6	35.8	8.7	38.6	17.8	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.1	3.6	35.8	8.7	38.6	17.8	11.0
LOS	D	A	D	A	D	B	B
Approach Delay (s/veh)		12.1	22.7			22.8	
Approach LOS		B	C			C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay (s/veh): 18.4	Intersection LOS: B
Intersection Capacity Utilization 76.6%	ICU Level of Service D
Analysis Period (min) 15	

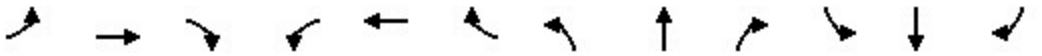
Splits and Phases: 8: I-25 NB Ramps & Plum Creek Pkwy



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	305	968	848	792	76	73	71
v/c Ratio	0.81	0.25	0.93	0.74	0.30	0.27	0.25
Control Delay (s/veh)	39.1	3.6	35.8	8.7	38.6	17.8	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.1	3.6	35.8	8.7	38.6	17.8	11.0
Queue Length 50th (ft)	113	47	401	64	42	12	0
Queue Length 95th (ft)	#244	59	#698	221	86	54	37
Internal Link Dist (ft)		371	653			425	
Turn Bay Length (ft)							
Base Capacity (vph)	381	3870	927	1080	253	269	288
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.25	0.91	0.73	0.30	0.27	0.25

Intersection Summary

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



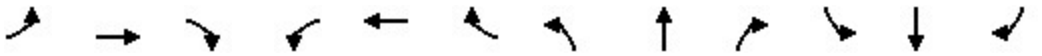
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	281	891	0	0	405	1104	87	2	113	0	0	0
Future Volume (veh/h)	281	891	0	0	405	1104	87	2	113	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	305	968	0	0	1010	820	138	0	78			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	341	3770	0	0	1014	859	576	0	256			
Arrive On Green	0.15	0.74	0.00	0.00	0.54	0.54	0.16	0.00	0.16			
Sat Flow, veh/h	1781	5274	0	0	1870	1585	3563	0	1585			
Grp Volume(v), veh/h	305	968	0	0	1010	820	138	0	78			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	10.9	5.5	0.0	0.0	48.4	44.2	3.0	0.0	3.9			
Cycle Q Clear(g_c), s	10.9	5.5	0.0	0.0	48.4	44.2	3.0	0.0	3.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	341	3770	0	0	1014	859	576	0	256			
V/C Ratio(X)	0.89	0.26	0.00	0.00	1.00	0.95	0.24	0.00	0.30			
Avail Cap(c_a), veh/h	382	3886	0	0	1014	859	576	0	256			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.1	3.8	0.0	0.0	20.5	19.5	32.9	0.0	33.3			
Incr Delay (d2), s/veh	21.0	0.0	0.0	0.0	27.2	20.4	1.0	0.0	3.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.4	1.5	0.0	0.0	26.4	19.4	1.4	0.0	1.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.1	3.8	0.0	0.0	47.7	39.9	33.9	0.0	36.3			
LnGrp LOS	D	A			D	D	C		D			
Approach Vol, veh/h		1273			1830			216				
Approach Delay, s/veh		14.9			44.2			34.8				
Approach LOS		B			D			C				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		19.1		70.9			17.6	53.3				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		12.5		68.5			15.2	48.8				
Max Q Clear Time (g_c+I1), s		5.9		7.5			12.9	50.4				
Green Ext Time (p_c), s		0.4		8.9			0.2	0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	32.4
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



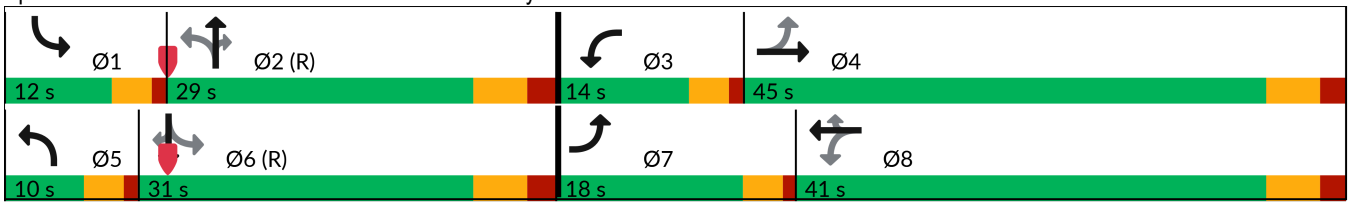
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	225		0	225		250	175		200
Storage Lanes	1		1	1		1	2		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	1863	1583	1770	1863	1583
Flt Permitted	0.103			0.351			0.681			0.683		
Satd. Flow (perm)	192	3539	1583	654	3539	1583	2461	1863	1583	1272	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185			130			120			154
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			907			521			491	
Travel Time (s)		16.1			20.6			11.8			11.2	

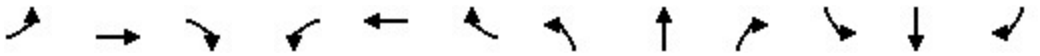
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	671	112	48	936	120	397	106	34	62	73	142
Future Volume (vph)	211	671	112	48	936	120	397	106	34	62	73	142
Turn Type	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		8	2		2	6		6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0		9.5	31.0	31.0	9.5	36.0	36.0	9.5	34.0	34.0
Total Split (s)	18.0	45.0		14.0	41.0	41.0	10.0	29.0	29.0	12.0	31.0	31.0
Total Split (%)	18.0%	45.0%		14.0%	41.0%	41.0%	10.0%	29.0%	29.0%	12.0%	31.0%	31.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0	1.0	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)	4.0	6.0		4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	53.1	42.2	100.0	42.7	33.8	33.8	34.6	27.5	27.5	35.1	25.8	25.8
Actuated g/C Ratio	0.53	0.42	1.00	0.43	0.34	0.34	0.35	0.28	0.28	0.35	0.26	0.26
v/c Ratio	0.74	0.49	0.08	0.15	0.85	0.21	0.47	0.22	0.07	0.14	0.16	0.30
Control Delay (s/veh)	34.4	22.7	0.1	12.1	38.6	5.0	25.8	32.1	0.3	21.4	30.5	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.4	22.7	0.1	12.1	38.6	5.0	25.8	32.1	0.3	21.4	30.5	6.6
LOS	C	C	A	B	D	A	C	C	A	C	C	A
Approach Delay (s/veh)		22.6			33.8			25.4			16.2	
Approach LOS		C			C			C			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay (s/veh): 26.8	Intersection LOS: C
Intersection Capacity Utilization 68.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: Wilcox St. & Plum Creek Pkwy.

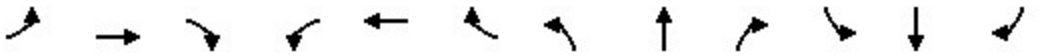




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	229	729	122	52	1017	130	432	115	37	67	79	154
v/c Ratio	0.74	0.49	0.08	0.15	0.85	0.21	0.47	0.22	0.07	0.14	0.16	0.30
Control Delay (s/veh)	34.4	22.7	0.1	12.1	38.6	5.0	25.8	32.1	0.3	21.4	30.5	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.4	22.7	0.1	12.1	38.6	5.0	25.8	32.1	0.3	21.4	30.5	6.6
Queue Length 50th (ft)	83	173	0	15	307	0	101	60	0	28	40	0
Queue Length 95th (ft)	#182	234	0	32	391	39	140	110	0	57	78	48
Internal Link Dist (ft)		629			827			441			411	
Turn Bay Length (ft)	325			225			225		250	175		200
Base Capacity (vph)	322	1492	1583	410	1238	638	919	512	522	495	480	522
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.49	0.08	0.13	0.82	0.20	0.47	0.22	0.07	0.14	0.16	0.30

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)	211	671	112	48	936	120	397	106	34	62	73	142
Future Volume (veh/h)	211	671	112	48	936	120	397	106	34	62	73	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	229	729	0	52	1017	130	432	115	37	67	79	154
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	1390		310	1158	517	975	614	521	499	581	492
Arrive On Green	0.10	0.39	0.00	0.04	0.33	0.33	0.06	0.33	0.33	0.04	0.31	0.31
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	229	729	0	52	1017	130	432	115	37	67	79	154
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	8.1	15.7	0.0	1.9	27.0	6.0	6.0	4.4	1.6	2.5	3.0	7.4
Cycle Q Clear(g_c), s	8.1	15.7	0.0	1.9	27.0	6.0	6.0	4.4	1.6	2.5	3.0	7.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	283	1390		310	1158	517	975	614	521	499	581	492
V/C Ratio(X)	0.81	0.52		0.17	0.88	0.25	0.44	0.19	0.07	0.13	0.14	0.31
Avail Cap(c_a), veh/h	349	1390		420	1244	555	975	614	521	566	581	492
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)	0.93	0.93	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	23.3	0.0	21.3	31.8	24.8	23.7	24.0	23.1	21.8	24.8	26.3
Incr Delay (d2), s/veh	10.3	0.3	0.0	0.3	7.1	0.3	0.3	0.7	0.3	0.1	0.5	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	4.1	6.5	0.0	0.8	12.4	2.3	1.1	2.0	0.6	1.1	1.4	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.3	23.7	0.0	21.5	38.9	25.0	24.0	24.7	23.3	21.9	25.3	28.0
LnGrp LOS	C	C		C	D	C	C	C	C	C	C	C
Approach Vol, veh/h		958			1199			584			300	
Approach Delay, s/veh		26.0			36.7			24.1			25.9	
Approach LOS		C			D			C			C	

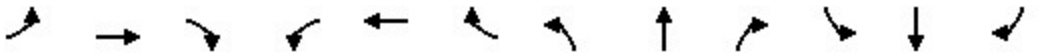
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	38.8	7.8	45.1	10.0	37.1	14.3	38.6
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	8.0	23.0	10.0	39.0	6.0	25.0	14.0	35.0
Max Q Clear Time (g_c+I1), s	4.5	6.4	3.9	17.7	8.0	9.4	10.1	29.0
Green Ext Time (p_c), s	0.0	0.6	0.0	5.2	0.0	0.8	0.2	3.6

Intersection Summary	
HCM 7th Control Delay, s/veh	29.8
HCM 7th LOS	C

Notes

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

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



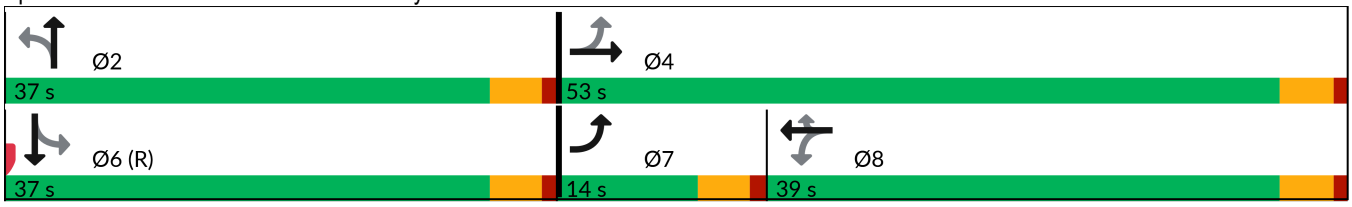
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	100		150	100		0	100		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt						0.850					0.855	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	0	1863	1583	1863	1863	0	1770	1593	0
Flt Permitted	0.270									0.756		
Satd. Flow (perm)	503	1863	0	0	1863	1583	1863	1863	0	1408	1593	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						216					59	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		862			1497			360			1340	
Travel Time (s)		19.6			34.0			8.2			30.5	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	90	382	286	199	3	182	2
Future Volume (vph)	90	382	286	199	3	182	2
Turn Type	pm+pt	NA	NA	Perm	NA	Perm	NA
Protected Phases	7	4	8		2		6
Permitted Phases	4			8		6	
Detector Phase	7	4	8	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	14.0	53.0	39.0	39.0	37.0	37.0	37.0
Total Split (%)	15.6%	58.9%	43.3%	43.3%	41.1%	41.1%	41.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	None	C-Max	C-Max
Act Effct Green (s)	33.2	33.2	22.3	22.3	47.8	47.8	47.8
Actuated g/C Ratio	0.37	0.37	0.25	0.25	0.53	0.53	0.53
v/c Ratio	0.32	0.60	0.67	0.39	0.00	0.27	0.07
Control Delay (s/veh)	19.1	25.7	26.4	4.6	14.3	15.2	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.1	25.7	26.4	4.6	14.3	15.2	4.8
LOS	B	C	C	A	B	B	A
Approach Delay (s/veh)		24.4	17.5		14.3		12.8
Approach LOS		C	B		B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay (s/veh): 19.3	Intersection LOS: B
Intersection Capacity Utilization 63.2%	ICU Level of Service B
Analysis Period (min) 15	

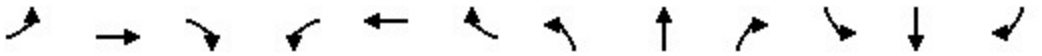
Splits and Phases: 11: Plum Creek Pkwy. & Prairie Hawk Dr.



Lane Group	EBL	EBT	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	98	415	311	216	3	198	61
v/c Ratio	0.32	0.60	0.67	0.39	0.00	0.27	0.07
Control Delay (s/veh)	19.1	25.7	26.4	4.6	14.3	15.2	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.1	25.7	26.4	4.6	14.3	15.2	4.8
Queue Length 50th (ft)	35	181	60	9	1	60	0
Queue Length 95th (ft)	57	227	86	22	6	m129	m23
Internal Link Dist (ft)		782	1417		280		1260
Turn Bay Length (ft)	150			150		100	
Base Capacity (vph)	319	1003	714	740	989	747	873
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.41	0.44	0.29	0.00	0.27	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	382	0	0	286	199	0	3	0	182	2	54
Future Volume (veh/h)	90	382	0	0	286	199	0	3	0	182	2	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	415	0	0	311	216	0	3	0	198	2	59
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	592	0	0	388	329	80	675	0	589	19	556
Arrive On Green	0.06	0.32	0.00	0.00	0.21	0.21	0.00	0.36	0.00	0.36	0.36	0.36
Sat Flow, veh/h	1781	1870	0	0	1870	1585	1341	1870	0	1414	52	1541
Grp Volume(v), veh/h	98	415	0	0	311	216	0	3	0	198	0	61
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1341	1870	0	1414	0	1593
Q Serve(g_s), s	3.7	17.5	0.0	0.0	14.2	11.3	0.0	0.1	0.0	9.4	0.0	2.3
Cycle Q Clear(g_c), s	3.7	17.5	0.0	0.0	14.2	11.3	0.0	0.1	0.0	9.5	0.0	2.3
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		0.97
Lane Grp Cap(c), veh/h	228	592	0	0	388	329	80	675	0	589	0	575
V/C Ratio(X)	0.43	0.70	0.00	0.00	0.80	0.66	0.00	0.00	0.00	0.34	0.00	0.11
Avail Cap(c_a), veh/h	312	1008	0	0	717	608	80	675	0	589	0	575
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	0.00	0.00	0.95	0.95	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.7	27.0	0.0	0.0	33.9	32.7	0.0	18.4	0.0	21.4	0.0	19.1
Incr Delay (d2), s/veh	1.3	1.5	0.0	0.0	3.7	2.1	0.0	0.0	0.0	1.5	0.0	0.4
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	1.6	7.8	0.0	0.0	6.7	4.4	0.0	0.0	0.0	3.3	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.0	28.5	0.0	0.0	37.6	34.8	0.0	18.4	0.0	23.0	0.0	19.5
LnGrp LOS	C	C			D	C		B		C		B
Approach Vol, veh/h		513			527			3			259	
Approach Delay, s/veh		28.3			36.4			18.4			22.1	
Approach LOS		C			D			B			C	

Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		37.0		33.0		37.0	9.8	23.2				
Change Period (Y+Rc), s		4.5		4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		32.5		48.5		32.5	9.5	34.5				
Max Q Clear Time (g_c+I1), s		2.1		19.5		11.5	5.7	16.2				
Green Ext Time (p_c), s		0.0		2.7		0.9	0.1	2.5				

Intersection Summary												
HCM 7th Control Delay, s/veh		30.3										
HCM 7th LOS		C										

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	100	100			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.948	
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1863	1863	1766	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1863	1863	1766	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	473			1039	636	
Travel Time (s)	10.8			23.6	14.5	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	75	0	0	80	113	70
Future Vol, veh/h	75	0	0	80	113	70
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	100	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	0	0	87	123	76

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	248	161	199	0	-	0
Stage 1	161	-	-	-	-	-
Stage 2	87	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	741	884	1373	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	936	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	741	884	1373	-	-	-
Mov Cap-2 Maneuver	741	-	-	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	936	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.46	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1373	-	741	-	-	-
HCM Lane V/C Ratio	-	-	0.11	-	-	-
HCM Control Delay (s/veh)	0	-	10.5	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.869	
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1863	1863	1619	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1863	1863	1619	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	482			849	1039	
Travel Time (s)	11.0			19.3	23.6	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	75	0	0	5	4	109
Future Vol, veh/h	75	0	0	5	4	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	0	0	5	4	118

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	69	64	123	0	-	0
Stage 1	64	-	-	-	-	-
Stage 2	5	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	936	1001	1464	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	1018	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	936	1001	1464	-	-	-
Mov Cap-2 Maneuver	936	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	1018	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.21	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1464	-	936	-	-	-
HCM Lane V/C Ratio	-	-	0.087	-	-	-
HCM Control Delay (s/veh)	0	-	9.2	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	100	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.865	
Flt Protected	0.950			0.950		
Satd. Flow (prot)	1770	1583	0	1770	1611	0
Flt Permitted	0.950			0.950		
Satd. Flow (perm)	1770	1583	0	1770	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	428			524	537	
Travel Time (s)	9.7			11.9	12.2	

Intersection Summary	
Area Type:	Other

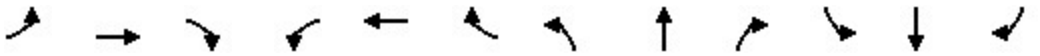
Intersection	
Int Delay, s/veh	8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	271	179	0	0	65
Future Vol, veh/h	22	271	179	0	0	65
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	100	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	295	195	0	0	71

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	424	35	71	0	-	0
Stage 1	35	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	586	1037	1530	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	685	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	512	1037	1530	-	-	-
Mov Cap-2 Maneuver	512	-	-	-	-	-
Stage 1	862	-	-	-	-	-
Stage 2	685	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.03	7.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1530	-	512	1037	-	-
HCM Lane V/C Ratio	0.127	-	0.047	0.284	-	-
HCM Control Delay (s/veh)	7.7	0	12.4	9.8	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.4	-	0.1	1.2	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt					0.995			0.865				
Flt Protected					0.963						0.950	
Satd. Flow (prot)	0	1863	0	0	1785	0	0	1611	0	0	1770	0
Flt Permitted					0.963						0.950	
Satd. Flow (perm)	0	1863	0	0	1785	0	0	1611	0	0	1770	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		610			473			1035			186	
Travel Time (s)		13.9			10.8			23.5			4.2	

Intersection Summary	
Area Type:	Other

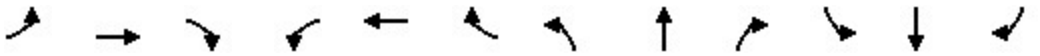
Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	26	0	53	14	3	0	0	40	8	0	0
Future Vol, veh/h	0	26	0	53	14	3	0	0	40	8	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	28	0	58	15	3	0	0	43	9	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	18	0	0	28	0	0	159	162	28	160	160	17
Stage 1	-	-	-	-	-	-	28	28	-	132	132	-
Stage 2	-	-	-	-	-	-	130	134	-	28	28	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1598	-	-	1585	-	-	807	730	1047	805	732	1062
Stage 1	-	-	-	-	-	-	989	872	-	871	787	-
Stage 2	-	-	-	-	-	-	873	786	-	989	872	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1598	-	-	1585	-	-	777	704	1047	743	705	1062
Mov Cap-2 Maneuver	-	-	-	-	-	-	777	704	-	743	705	-
Stage 1	-	-	-	-	-	-	989	872	-	839	758	-
Stage 2	-	-	-	-	-	-	841	757	-	948	872	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	5.57	8.59	9.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1047	1598	-	-	1316	-	-	743
HCM Lane V/C Ratio	0.042	-	-	-	0.036	-	-	0.012
HCM Control Delay (s/veh)	8.6	0	-	-	7.4	0	-	9.9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.863			0.900			0.966			0.913	
Flt Protected	0.950			0.950				0.969			0.989	
Satd. Flow (prot)	1770	1608	0	1770	1676	0	0	1744	0	0	1682	0
Flt Permitted	0.950			0.950				0.969			0.989	
Satd. Flow (perm)	1770	1608	0	1770	1676	0	0	1744	0	0	1682	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		396			482			434			1035	
Travel Time (s)		9.0			11.0			9.9			23.5	

Intersection Summary	
Area Type:	Other

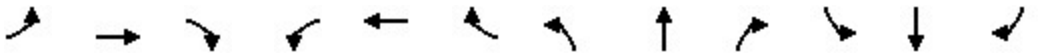
Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	130	11	119	46	25	50	61	9	24	29	18	87
Future Vol, veh/h	130	11	119	46	25	50	61	9	24	29	18	87
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	141	12	129	50	27	54	66	10	26	32	20	95

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	82	0	0	141	0	0	496	541	77	454	578	54
Stage 1	-	-	-	-	-	-	359	359	-	154	154	-
Stage 2	-	-	-	-	-	-	137	182	-	299	424	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1516	-	-	1442	-	-	484	448	984	516	427	1013
Stage 1	-	-	-	-	-	-	659	627	-	848	770	-
Stage 2	-	-	-	-	-	-	866	749	-	709	587	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1516	-	-	1442	-	-	366	392	984	430	373	1013
Mov Cap-2 Maneuver	-	-	-	-	-	-	366	392	-	430	373	-
Stage 1	-	-	-	-	-	-	597	569	-	819	743	-
Stage 2	-	-	-	-	-	-	738	723	-	615	532	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	3.81	2.88	15.65	11.92
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	440	1516	-	-	1442	-	-	665
HCM Lane V/C Ratio	0.232	0.093	-	-	0.035	-	-	0.219
HCM Control Delay (s/veh)	15.7	7.6	-	-	7.6	-	-	11.9
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.9	0.3	-	-	0.1	-	-	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		325	125		100	225		150	350		350
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.984				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3483	0	1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.478			0.320			0.682			0.588		
Satd. Flow (perm)	890	3483	0	596	3539	1583	1270	1863	1583	1095	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14				210			295			142
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		922			1021			522			586	
Travel Time (s)		15.7			17.4			11.9			8.9	

Intersection Summary	
Area Type:	Other

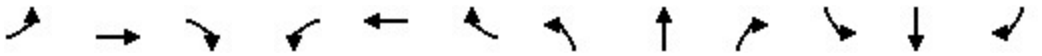
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	50	337	173	356	193	55	133	271	221	108	102
Future Volume (vph)	50	337	173	356	193	55	133	271	221	108	102
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	38.0	10.0	40.0	40.0	10.0	33.0	33.0	10.0	32.0	32.0
Total Split (s)	14.0	40.0	14.0	40.0	40.0	11.0	35.0	35.0	11.0	35.0	35.0
Total Split (%)	14.0%	40.0%	14.0%	40.0%	40.0%	11.0%	35.0%	35.0%	11.0%	35.0%	35.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	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	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	25.5	17.0	28.8	20.6	20.6	47.6	39.6	39.6	57.8	47.1	47.1
Actuated g/C Ratio	0.26	0.17	0.29	0.21	0.21	0.48	0.40	0.40	0.58	0.47	0.47
v/c Ratio	0.18	0.68	0.68	0.53	0.43	0.09	0.20	0.37	0.34	0.13	0.14
Control Delay (s/veh)	24.1	43.1	39.1	38.7	7.6	11.4	23.0	4.6	12.4	18.0	2.2
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)	24.1	43.1	39.1	38.7	7.6	11.4	23.0	4.6	12.4	18.0	2.2
LOS	C	D	D	D	A	B	C	A	B	B	A
Approach Delay (s/veh)		40.9		30.5			10.7			11.4	
Approach LOS		D		C			B			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 24.2	Intersection LOS: C
Intersection Capacity Utilization 57.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Prairie Hawk Dr. & Wolfensberger Rd.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	54	409	188	387	210	60	145	295	240	117	111
v/c Ratio	0.18	0.68	0.68	0.53	0.43	0.09	0.20	0.37	0.34	0.13	0.14
Control Delay (s/veh)	24.1	43.1	39.1	38.7	7.6	11.4	23.0	4.6	12.4	18.0	2.2
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)	24.1	43.1	39.1	38.7	7.6	11.4	23.0	4.6	12.4	18.0	2.2
Queue Length 50th (ft)	24	125	91	120	0	16	59	0	69	42	0
Queue Length 95th (ft)	48	165	137	161	58	38	123	61	127	88	21
Internal Link Dist (ft)		842		941			442			506	
Turn Bay Length (ft)	325		125		100	225		150	350		350
Base Capacity (vph)	319	1193	277	1203	676	642	737	805	716	876	820
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	0.34	0.68	0.32	0.31	0.09	0.20	0.37	0.34	0.13	0.14

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	337	40	173	356	193	55	133	271	221	108	102
Future Volume (veh/h)	50	337	40	173	356	193	55	133	271	221	108	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	366	43	188	387	210	60	145	295	240	117	111
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	486	57	273	721	321	679	895	758	591	931	789
Arrive On Green	0.04	0.15	0.15	0.09	0.20	0.20	0.04	0.48	0.48	0.06	0.50	0.50
Sat Flow, veh/h	1781	3206	374	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	54	202	207	188	387	210	60	145	295	240	117	111
Grp Sat Flow(s),veh/h/ln	1781	1777	1803	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.5	10.9	11.0	8.7	9.7	12.2	1.7	4.4	11.9	6.0	3.4	3.8
Cycle Q Clear(g_c), s	2.5	10.9	11.0	8.7	9.7	12.2	1.7	4.4	11.9	6.0	3.4	3.8
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	228	269	273	273	721	321	679	895	758	591	931	789
V/C Ratio(X)	0.24	0.75	0.76	0.69	0.54	0.65	0.09	0.16	0.39	0.41	0.13	0.14
Avail Cap(c_a), veh/h	319	604	613	273	1208	539	714	895	758	591	931	789
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	1.00	1.00
Uniform Delay (d), s/veh	33.9	40.6	40.7	31.5	35.7	36.6	12.0	14.8	16.7	12.9	13.5	13.6
Incr Delay (d2), s/veh	0.5	4.1	4.3	7.1	0.6	2.2	0.1	0.4	1.5	0.4	0.3	0.4
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	1.1	4.9	5.1	4.1	4.1	4.8	0.7	1.9	4.4	2.6	1.4	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.4	44.7	44.9	38.6	36.3	38.9	12.0	15.1	18.2	13.4	13.7	13.9
LnGrp LOS	C	D	D	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		463			785			500			468	
Approach Delay, s/veh		43.6			37.5			16.6			13.6	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	53.8	14.0	21.2	9.1	55.8	8.9	26.3
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	6.0	29.0	9.0	34.0	6.0	29.0	9.0	34.0
Max Q Clear Time (g_c+I1), s	8.0	13.9	10.7	13.0	3.7	5.8	4.5	14.2
Green Ext Time (p_c), s	0.0	1.6	0.0	2.2	0.0	0.9	0.0	3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	29.0
HCM 7th LOS	C

Notes

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

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.999				0.956	
Flt Protected	0.953					
Satd. Flow (prot)	1773	0	0	1863	1781	0
Flt Permitted	0.953					
Satd. Flow (perm)	1773	0	0	1863	1781	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	611			661	522	
Travel Time (s)	15.5			15.2	12.2	

Intersection Summary	
Area Type:	Other

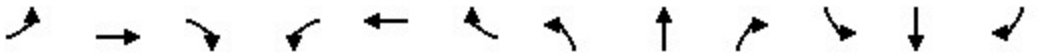
Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	142	1	3	285	226	109
Future Vol, veh/h	142	1	3	285	226	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	154	1	3	310	246	118

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	621	305	364	0	-	0
Stage 1	305	-	-	-	-	-
Stage 2	316	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	451	735	1194	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	449	735	1194	-	-	-
Mov Cap-2 Maneuver	449	-	-	-	-	-
Stage 1	745	-	-	-	-	-
Stage 2	739	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	17.14	0.08	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	19	-	451	-	-
HCM Lane V/C Ratio	0.003	-	0.345	-	-
HCM Control Delay (s/veh)	8	0	17.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	1.5	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.850			0.850						0.976	
Flt Protected	0.950										0.999	
Satd. Flow (prot)	1770	1583	0	1863	1583	0	0	1863	0	0	1816	0
Flt Permitted	0.950										0.999	
Satd. Flow (perm)	1770	1583	0	1863	1583	0	0	1863	0	0	1816	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		661			909			1975			245	
Travel Time (s)		15.2			20.7			44.9			5.6	

Intersection Summary	
Area Type:	Other

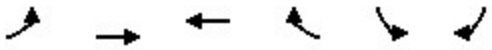
Intersection	
Int Delay, s/veh	11.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	77	0	1	0	0	15	1	190	0	5	189	42
Future Vol, veh/h	77	0	1	0	0	15	1	190	0	5	189	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	84	0	1	0	0	16	1	207	0	5	205	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	16	0	0	1	0	0	271	184	1	279	177	8
Stage 1	-	-	-	-	-	-	168	168	-	8	8	-
Stage 2	-	-	-	-	-	-	103	16	-	271	168	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1601	-	-	1622	-	-	682	710	1084	674	717	1074
Stage 1	-	-	-	-	-	-	834	759	-	1013	889	-
Stage 2	-	-	-	-	-	-	903	882	-	735	759	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1601	-	-	1622	-	-	439	673	1084	450	679	1074
Mov Cap-2 Maneuver	-	-	-	-	-	-	439	673	-	450	679	-
Stage 1	-	-	-	-	-	-	790	720	-	1013	889	-
Stage 2	-	-	-	-	-	-	665	882	-	497	719	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	7.28	0	12.75	12.76
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	671	1601	-	-	1622	-	-	719
HCM Lane V/C Ratio	0.309	0.052	-	-	-	-	-	0.357
HCM Control Delay (s/veh)	12.8	7.4	-	-	0	-	-	12.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.3	0.2	-	-	0	-	-	1.6



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			0	150	0
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.975		0.902	
Flt Protected		0.989			0.987	
Satd. Flow (prot)	0	1842	1816	0	1658	0
Flt Permitted		0.989			0.987	
Satd. Flow (perm)	0	1842	1816	0	1658	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		340	1975		832	
Travel Time (s)		7.7	44.9		18.9	

Intersection Summary	
Area Type:	Other

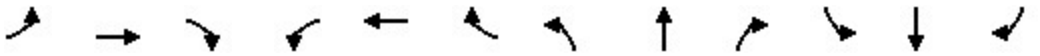
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	30	17	4	3	7
Future Vol, veh/h	8	30	17	4	3	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	33	18	4	3	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	23	0	-	0	71	21
Stage 1	-	-	-	-	21	-
Stage 2	-	-	-	-	50	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1592	-	-	-	934	1057
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	972	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1592	-	-	-	928	1057
Mov Cap-2 Maneuver	-	-	-	-	928	-
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	972	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.53	0	8.59
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	379	-	-	-	1015
HCM Lane V/C Ratio	0.005	-	-	-	0.011
HCM Control Delay (s/veh)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



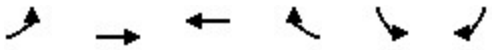
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	250		0	125		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.968			0.949			0.984			0.982	
Flt Protected		0.997			0.994			0.993			0.987	
Satd. Flow (prot)	0	3416	0	0	3339	0	0	3458	0	0	3430	0
Flt Permitted		0.997			0.994			0.993			0.987	
Satd. Flow (perm)	0	3416	0	0	3339	0	0	3458	0	0	3430	0
Link Speed (mph)		40			35			45			45	
Link Distance (ft)		631			610			567			842	
Travel Time (s)		10.8			11.9			8.6			12.8	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	4.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	248	367	309	323
Demand Flow Rate, veh/h	253	375	316	330
Vehicles Circulating, veh/h	332	297	283	294
Vehicles Exiting, veh/h	292	302	302	378
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.7	5.1	4.7	4.8
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR
RT Channelized								
Lane Util	0.470	0.530	0.469	0.531	0.472	0.528	0.470	0.530
Follow-Up Headway, s	2.667	2.535	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	4.645	4.328
A (Intercept)	1350	1420	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	9.199e-4	8.501e-4
Entry Flow, veh/h	119	134	176	199	149	167	155	175
Cap Entry Lane, veh/h	995	1071	1027	1103	1040	1116	1030	1106
Entry HV Adj Factor	0.981	0.982	0.980	0.977	0.976	0.982	0.979	0.978
Flow Entry, veh/h	117	132	172	194	145	164	152	171
Cap Entry, veh/h	976	1052	1007	1078	1015	1096	1009	1082
V/C Ratio	0.120	0.125	0.171	0.180	0.143	0.150	0.150	0.158
Control Delay, s/veh	4.8	4.5	5.2	5.0	4.9	4.6	5.0	4.7
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	0	1	1	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.972		0.994	
Flt Protected		0.999			0.954	
Satd. Flow (prot)	0	1861	1811	0	1766	0
Flt Permitted		0.999			0.954	
Satd. Flow (perm)	0	1861	1811	0	1766	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		350	935		1177	
Travel Time (s)		8.0	21.3		26.8	

Intersection Summary	
Area Type:	Other

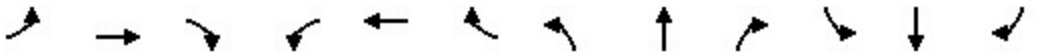
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	320	362	94	84	4
Future Vol, veh/h	6	320	362	94	84	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	348	393	102	91	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	496	0	-	0	805	445
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	361	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1068	-	-	-	352	613
Stage 1	-	-	-	-	646	-
Stage 2	-	-	-	-	705	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1068	-	-	-	349	613
Mov Cap-2 Maneuver	-	-	-	-	349	-
Stage 1	-	-	-	-	641	-
Stage 2	-	-	-	-	705	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.15	0	18.79
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	33	-	-	-	356
HCM Lane V/C Ratio	0.006	-	-	-	0.269
HCM Control Delay (s/veh)	8.4	0	-	-	18.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1.1



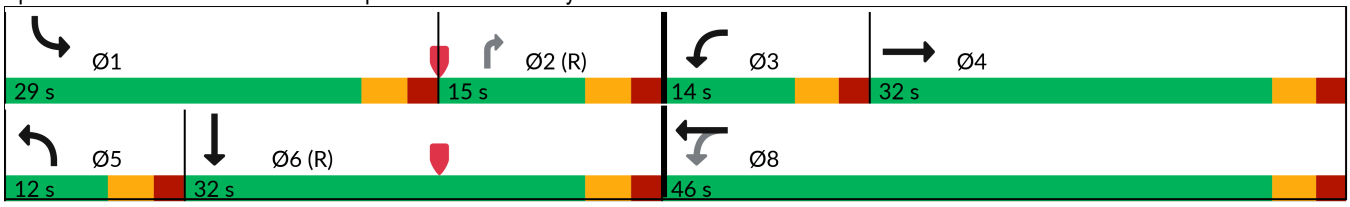
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		0	375		175	0		175
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor												
Frt		0.977							0.850		0.950	
Flt Protected				0.950			0.950			0.950	0.986	
Satd. Flow (prot)	0	4968	0	1770	3539	0	1770	0	1583	3221	1588	0
Flt Permitted				0.211			0.950			0.950	0.986	
Satd. Flow (perm)	0	4968	0	393	3539	0	1770	0	1583	3221	1588	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		43							206		27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1497			253			493			625	
Travel Time (s)		34.0			5.8			11.2			14.2	

Intersection Summary	
Area Type:	Other

Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	482	266	423	17	182	939	157
Future Volume (vph)	482	266	423	17	182	939	157
Turn Type	NA	pm+pt	NA	Prot	Perm	Prot	NA
Protected Phases	4	3	8	5		1	6
Permitted Phases		8			2		
Detector Phase	4	3	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	10.0	22.5	10.0	22.5	10.0	22.5
Total Split (s)	32.0	14.0	46.0	12.0	15.0	29.0	32.0
Total Split (%)	35.6%	15.6%	51.1%	13.3%	16.7%	32.2%	35.6%
Yellow Time (s)	3.0	3.0	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
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	17.0	31.0	31.0	6.5	11.6	32.4	32.4
Actuated g/C Ratio	0.19	0.34	0.34	0.07	0.13	0.36	0.36
v/c Ratio	0.64	1.06	0.38	0.14	0.52	0.78	0.75
Control Delay (s/veh)	33.3	95.2	33.6	41.1	10.5	31.8	33.9
Queue Delay	0.0	19.2	0.7	0.0	0.3	0.2	0.3
Total Delay (s/veh)	33.3	114.4	34.3	41.1	10.8	32.0	34.2
LOS	C	F	C	D	B	C	C
Approach Delay (s/veh)	33.3		65.2				32.8
Approach LOS	C		E				C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBR and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay (s/veh): 39.7	Intersection LOS: D
Intersection Capacity Utilization 68.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: I-25 SB Ramp & Plum Creek Pkwy.



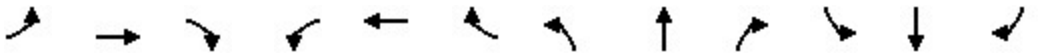
Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT
Lane Group Flow (vph)	621	289	460	18	198	898	440
v/c Ratio	0.64	1.06	0.38	0.14	0.52	0.78	0.75
Control Delay (s/veh)	33.3	95.2	33.6	41.1	10.5	31.8	33.9
Queue Delay	0.0	19.2	0.7	0.0	0.3	0.2	0.3
Total Delay (s/veh)	33.3	114.4	34.3	41.1	10.8	32.0	34.2
Queue Length 50th (ft)	127	~184	143	10	0	238	217
Queue Length 95th (ft)	119	m#235	m166	31	57	#373	#417
Internal Link Dist (ft)	1417		173				545
Turn Bay Length (ft)				375	175		
Base Capacity (vph)	1520	273	1612	141	384	1158	588
Starvation Cap Reductn	0	78	779	0	0	0	0
Spillback Cap Reductn	22	0	0	0	25	24	13
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	1.48	0.55	0.13	0.55	0.79	0.77

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.

m Volume for 95th percentile queue is metered by upstream signal.



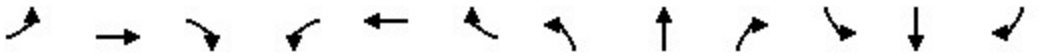
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	482	89	266	423	0	17	0	182	939	157	134
Future Volume (veh/h)	0	482	89	266	423	0	17	0	182	939	157	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	524	97	289	460	0	18	0	198	957	261	146
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, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	768	139	307	1181	0	36	0	0	1983	542	303
Arrive On Green	0.00	0.18	0.18	0.20	0.66	0.00	0.02	0.00	0.00	0.56	0.48	0.48
Sat Flow, veh/h	0	4512	788	1781	3647	0	1781	18		3563	1127	630
Grp Volume(v), veh/h	0	408	213	289	460	0	18	54.1		957	0	407
Grp Sat Flow(s),veh/h/ln	0	1702	1728	1781	1777	0	1781	D		1781	0	1757
Q Serve(g_s), s	0.0	10.1	10.4	9.0	5.3	0.0	0.9			14.7	0.0	14.1
Cycle Q Clear(g_c), s	0.0	10.1	10.4	9.0	5.3	0.0	0.9			14.7	0.0	14.1
Prop In Lane	0.00		0.46	1.00		0.00	1.00			1.00		0.36
Lane Grp Cap(c), veh/h	0	602	306	307	1181	0	36			1983	0	845
V/C Ratio(X)	0.00	0.68	0.70	0.94	0.39	0.00	0.50			0.48	0.00	0.48
Avail Cap(c_a), veh/h	0	1021	519	307	1619	0	139			1983	0	845
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	0.89	0.89	0.39	0.39	0.00	1.00			1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	34.7	34.8	28.2	11.0	0.0	43.6			12.1	0.0	15.8
Incr Delay (d2), s/veh	0.0	1.2	2.5	19.1	0.1	0.0	10.4			0.2	0.0	2.0
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
%ile BackOfQ(50%),veh/ln	0.0	4.2	4.5	6.0	1.7	0.0	0.5			5.4	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	35.9	37.3	47.3	11.0	0.0	54.1			12.3	0.0	17.7
LnGrp LOS		D	D	D	B		D			B		B
Approach Vol, veh/h		621			749						1364	
Approach Delay, s/veh		36.4			25.0						13.9	
Approach LOS		D			C						B	

Timer - Assigned Phs	1		3	4	5	6		8				
Phs Duration (G+Y+Rc), s	55.1		14.0	20.9	6.8	48.3		34.9				
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	24.0		9.0	27.0	7.0	27.0		41.0				
Max Q Clear Time (g_c+I1), s	16.7		11.0	12.4	2.9	16.1		7.3				
Green Ext Time (p_c), s	2.5		0.0	3.5	0.0	1.9		3.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	22.3
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



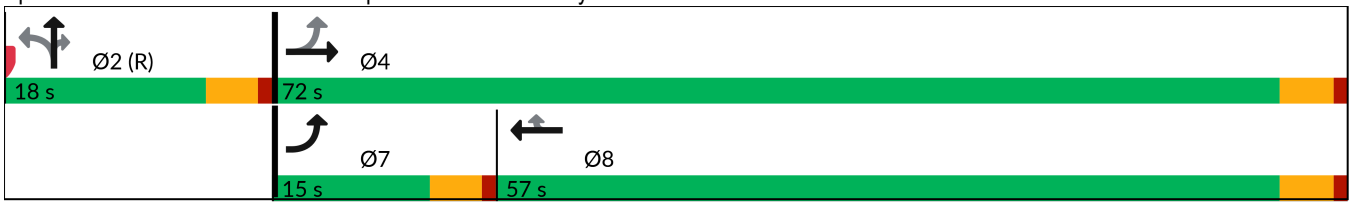
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	0.95	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.953	0.850		0.904	0.850			
Flt Protected	0.950						0.950	0.982				
Satd. Flow (prot)	1770	5085	0	0	1686	1504	1681	1505	1504	0	0	0
Flt Permitted	0.070						0.950	0.982				
Satd. Flow (perm)	130	5085	0	0	1686	1504	1681	1505	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					44	670		73	77			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			518			473			332	
Travel Time (s)		8.4			11.8			10.8			7.5	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	243	1329	602	1074	104	0	118
Future Volume (vph)	243	1329	602	1074	104	0	118
Turn Type	pm+pt	NA	NA	Perm	Perm	NA	Perm
Protected Phases	7	4	8			2	
Permitted Phases	4			8	2		2
Detector Phase	7	4	8	8	2	2	2
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	15.0	72.0	57.0	57.0	18.0	18.0	18.0
Total Split (%)	16.7%	80.0%	63.3%	63.3%	20.0%	20.0%	20.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	67.4	67.4	52.4	52.4	13.6	13.6	13.6
Actuated g/C Ratio	0.75	0.75	0.58	0.58	0.15	0.15	0.15
v/c Ratio	0.92	0.38	0.96	0.75	0.33	0.28	0.26
Control Delay (s/veh)	59.3	4.3	38.4	7.5	38.4	12.9	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.3	4.3	38.4	7.5	38.4	12.9	11.0
LOS	E	A	D	A	D	B	B
Approach Delay (s/veh)		12.8	23.8			21.2	
Approach LOS		B	C			C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay (s/veh): 18.6	Intersection LOS: B
Intersection Capacity Utilization 82.4%	ICU Level of Service E
Analysis Period (min) 15	

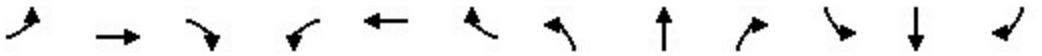
Splits and Phases: 8: I-25 NB Ramps & Plum Creek Pkwy



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	264	1445	957	864	84	80	77
v/c Ratio	0.92	0.38	0.96	0.75	0.33	0.28	0.26
Control Delay (s/veh)	59.3	4.3	38.4	7.5	38.4	12.9	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.3	4.3	38.4	7.5	38.4	12.9	11.0
Queue Length 50th (ft)	98	84	482	51	45	3	0
Queue Length 95th (ft)	#245	102	#810	197	91	47	40
Internal Link Dist (ft)		291	438			393	
Turn Bay Length (ft)							
Base Capacity (vph)	288	3813	1001	1156	253	288	292
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.38	0.96	0.75	0.33	0.28	0.26

Intersection Summary

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



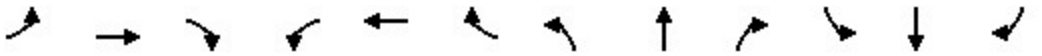
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	243	1329	0	0	602	1074	104	0	118	0	0	0
Future Volume (veh/h)	243	1329	0	0	602	1074	104	0	118	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	264	1445	0	0	1039	911	155	0	83			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	298	3818	0	0	1091	925	543	0	241			
Arrive On Green	0.11	0.75	0.00	0.00	0.58	0.58	0.15	0.00	0.15			
Sat Flow, veh/h	1781	5274	0	0	1870	1585	3563	0	1585			
Grp Volume(v), veh/h	264	1445	0	0	1039	911	155	0	83			
Grp Sat Flow(s),veh/h/ln	1781	1702	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	8.3	9.0	0.0	0.0	46.9	50.7	3.5	0.0	4.2			
Cycle Q Clear(g_c), s	8.3	9.0	0.0	0.0	46.9	50.7	3.5	0.0	4.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	298	3818	0	0	1091	925	543	0	241			
V/C Ratio(X)	0.89	0.38	0.00	0.00	0.95	0.99	0.29	0.00	0.34			
Avail Cap(c_a), veh/h	302	3830	0	0	1091	925	543	0	241			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	28.3	4.0	0.0	0.0	17.6	18.4	33.8	0.0	34.1			
Incr Delay (d2), s/veh	25.3	0.1	0.0	0.0	17.0	25.9	1.3	0.0	3.9			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.3	2.3	0.0	0.0	22.7	22.8	1.6	0.0	1.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.7	4.1	0.0	0.0	34.6	44.3	35.1	0.0	38.0			
LnGrp LOS	D	A			C	D	D		D			
Approach Vol, veh/h		1709			1950			238				
Approach Delay, s/veh		11.7			39.1			36.1				
Approach LOS		B			D			D				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		18.2		71.8			14.8	57.0				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		13.5		67.5			10.5	52.5				
Max Q Clear Time (g_c+I1), s		6.2		11.0			10.3	52.7				
Green Ext Time (p_c), s		0.4		16.3			0.0	0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			26.9									
HCM 7th LOS			C									

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



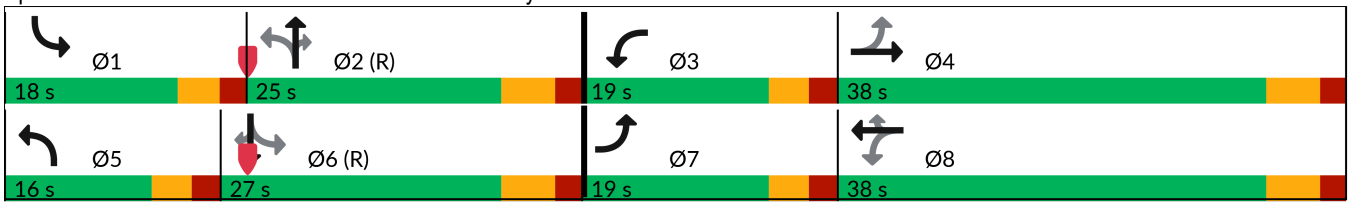
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	225		0	225		250	175		200
Storage Lanes	1		1	1		1	2		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	1863	1583	1770	1863	1583
Flt Permitted	0.104			0.119			0.684			0.592		
Satd. Flow (perm)	194	3539	1583	222	3539	1583	2472	1863	1583	1103	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			207			142			142			265
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			907			521			491	
Travel Time (s)		16.1			20.6			11.8			11.2	

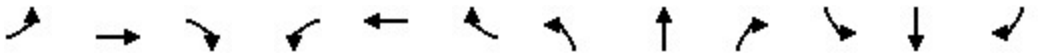
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	256	1134	94	66	893	110	498	139	59	176	105	244
Future Volume (vph)	256	1134	94	66	893	110	498	139	59	176	105	244
Turn Type	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		8	2		2	6		6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	36.0		10.0	31.0	31.0	10.0	36.0	36.0	10.0	29.0	29.0
Total Split (s)	19.0	38.0		19.0	38.0	38.0	16.0	25.0	25.0	18.0	27.0	27.0
Total Split (%)	19.0%	38.0%		19.0%	38.0%	38.0%	16.0%	25.0%	25.0%	18.0%	27.0%	27.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	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		5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	51.9	40.6	100.0	41.0	32.5	32.5	32.3	20.3	20.3	33.7	21.0	21.0
Actuated g/C Ratio	0.52	0.41	1.00	0.41	0.33	0.33	0.32	0.20	0.20	0.34	0.21	0.21
v/c Ratio	0.89	0.86	0.06	0.35	0.85	0.20	0.60	0.40	0.15	0.43	0.29	0.49
Control Delay (s/veh)	53.5	35.7	0.1	17.8	39.9	3.7	27.2	38.9	0.7	25.0	35.7	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.5	35.7	0.1	17.8	39.9	3.7	27.2	38.9	0.7	25.0	35.7	7.6
LOS	D	D	A	B	D	A	C	D	A	C	D	A
Approach Delay (s/veh)		36.5			34.8			27.3			19.1	
Approach LOS		D			C			C			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay (s/veh): 31.9	Intersection LOS: C
Intersection Capacity Utilization 76.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 9: Wilcox St. & Plum Creek Pkwy.

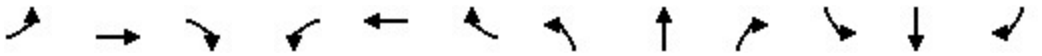




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	278	1233	102	72	971	120	541	151	64	191	114	265
v/c Ratio	0.89	0.86	0.06	0.35	0.85	0.20	0.60	0.40	0.15	0.43	0.29	0.49
Control Delay (s/veh)	53.5	35.7	0.1	17.8	39.9	3.7	27.2	38.9	0.7	25.0	35.7	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.5	35.7	0.1	17.8	39.9	3.7	27.2	38.9	0.7	25.0	35.7	7.6
Queue Length 50th (ft)	123	383	0	22	303	0	128	86	0	83	62	0
Queue Length 95th (ft)	#270	#544	0	44	#396	28	174	147	0	137	112	65
Internal Link Dist (ft)		629			827			441			411	
Turn Bay Length (ft)	325			225			225		250	175		200
Base Capacity (vph)	321	1436	1583	322	1148	610	903	377	434	472	391	541
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.86	0.06	0.22	0.85	0.20	0.60	0.40	0.15	0.40	0.29	0.49

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)	256	1134	94	66	893	110	498	139	59	176	105	244
Future Volume (veh/h)	256	1134	94	66	893	110	498	139	59	176	105	244
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	278	1233	0	72	971	120	541	151	64	191	114	265
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	1369		176	1084	484	898	470	398	467	452	383
Arrive On Green	0.12	0.39	0.00	0.04	0.31	0.31	0.11	0.25	0.25	0.10	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	278	1233	0	72	971	120	541	151	64	191	114	265
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	10.2	32.7	0.0	2.7	26.1	5.7	11.0	6.6	3.2	7.9	4.9	15.2
Cycle Q Clear(g_c), s	10.2	32.7	0.0	2.7	26.1	5.7	11.0	6.6	3.2	7.9	4.9	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	1369		176	1084	484	898	470	398	467	452	383
V/C Ratio(X)	0.88	0.90		0.41	0.90	0.25	0.60	0.32	0.16	0.41	0.25	0.69
Avail Cap(c_a), veh/h	344	1369		348	1137	507	898	470	398	520	452	383
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)	0.77	0.77	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	28.9	0.0	25.7	33.2	26.1	25.5	30.5	29.2	24.5	30.6	34.5
Incr Delay (d2), s/veh	17.5	6.7	0.0	1.5	9.2	0.3	1.1	1.8	0.9	0.6	1.3	9.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	14.7	0.0	1.2	12.3	2.2	5.0	3.2	1.3	3.4	2.4	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.6	35.6	0.0	27.3	42.4	26.4	26.7	32.3	30.1	25.0	32.0	44.4
LnGrp LOS	D	D		C	D	C	C	C	C	C	C	D
Approach Vol, veh/h		1511			1163			756			570	
Approach Delay, s/veh		36.6			39.8			28.1			35.4	
Approach LOS		D			D			C			D	

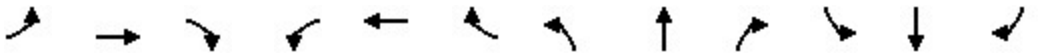
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	31.1	9.3	44.5	16.0	30.1	17.4	36.5
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	13.0	19.0	14.0	32.0	11.0	21.0	14.0	32.0
Max Q Clear Time (g_c+I1), s	9.9	8.6	4.7	34.7	13.0	17.2	12.2	28.1
Green Ext Time (p_c), s	0.1	0.7	0.1	0.0	0.0	0.6	0.2	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	35.7
HCM 7th LOS	D

Notes

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

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



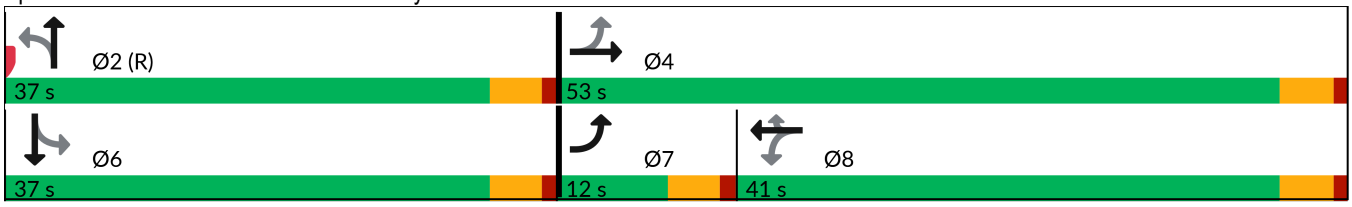
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	100		100	100		0	100		0
Storage Lanes	1		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt						0.850					0.860	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	0	1863	1583	1863	1863	0	1770	1602	0
Flt Permitted	0.208									0.753		
Satd. Flow (perm)	387	1863	0	0	1863	1583	1863	1863	0	1403	1602	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						192					99	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		881			1497			317			1476	
Travel Time (s)		20.0			34.0			7.2			33.5	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	80	363	370	212	6	208	6
Future Volume (vph)	80	363	370	212	6	208	6
Turn Type	pm+pt	NA	NA	Perm	NA	Perm	NA
Protected Phases	7	4	8		2		6
Permitted Phases	4			8		6	
Detector Phase	7	4	8	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	12.0	53.0	41.0	41.0	37.0	37.0	37.0
Total Split (%)	13.3%	58.9%	45.6%	45.6%	41.1%	41.1%	41.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	C-Max	Max	Max
Act Effct Green (s)	35.6	35.6	26.0	26.0	45.4	45.4	45.4
Actuated g/C Ratio	0.40	0.40	0.29	0.29	0.50	0.50	0.50
v/c Ratio	0.33	0.54	0.75	0.39	0.01	0.32	0.12
Control Delay (s/veh)	17.5	22.2	27.4	3.0	15.8	17.8	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.5	22.2	27.4	3.0	15.8	17.8	4.7
LOS	B	C	C	A	B	B	A
Approach Delay (s/veh)		21.4	18.5		15.8		13.6
Approach LOS		C	B		B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay (s/veh): 18.3	Intersection LOS: B
Intersection Capacity Utilization 68.0%	ICU Level of Service C
Analysis Period (min) 15	

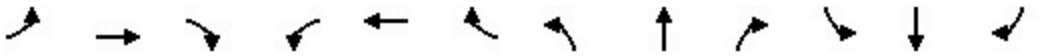
Splits and Phases: 11: Plum Creek Pkwy. & Prairie Hawk Dr.



Lane Group	EBL	EBT	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	87	395	402	230	7	226	106
v/c Ratio	0.33	0.54	0.75	0.39	0.01	0.32	0.12
Control Delay (s/veh)	17.5	22.2	27.4	3.0	15.8	17.8	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.5	22.2	27.4	3.0	15.8	17.8	4.7
Queue Length 50th (ft)	29	161	247	5	2	77	2
Queue Length 95th (ft)	47	197	m335	m14	11	158	34
Internal Link Dist (ft)		801	1417		237		1396
Turn Bay Length (ft)	150			100		100	
Base Capacity (vph)	268	1003	755	756	938	707	856
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.39	0.53	0.30	0.01	0.32	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	363	0	0	370	212	0	6	0	208	6	91
Future Volume (veh/h)	80	363	0	0	370	212	0	6	0	208	6	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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	87	395	0	0	402	230	0	7	0	226	7	99
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	672	0	0	484	410	80	1011	0	839	57	809
Arrive On Green	0.05	0.36	0.00	0.00	0.26	0.26	0.00	0.54	0.00	0.54	0.54	0.54
Sat Flow, veh/h	1781	1870	0	0	1870	1585	1288	1870	0	1409	106	1495
Grp Volume(v), veh/h	87	395	0	0	402	230	0	7	0	226	0	106
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1288	1870	0	1409	0	1601
Q Serve(g_s), s	3.1	15.4	0.0	0.0	18.3	11.3	0.0	0.2	0.0	7.9	0.0	2.9
Cycle Q Clear(g_c), s	3.1	15.4	0.0	0.0	18.3	11.3	0.0	0.2	0.0	8.1	0.0	2.9
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		0.93
Lane Grp Cap(c), veh/h	214	672	0	0	484	410	80	1011	0	839	0	866
V/C Ratio(X)	0.41	0.59	0.00	0.00	0.83	0.56	0.00	0.01	0.00	0.27	0.00	0.12
Avail Cap(c_a), veh/h	273	1008	0	0	759	643	80	1011	0	839	0	866
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	0.00	0.00	0.94	0.94	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	23.4	0.0	0.0	31.5	28.9	0.0	9.5	0.0	11.4	0.0	10.2
Incr Delay (d2), s/veh	1.2	0.8	0.0	0.0	4.3	1.1	0.0	0.0	0.0	0.8	0.0	0.3
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	1.3	6.7	0.0	0.0	8.6	4.3	0.0	0.1	0.0	2.5	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.9	24.2	0.0	0.0	35.8	30.1	0.0	9.5	0.0	12.2	0.0	10.5
LnGrp LOS	C	C			D	C		A		B		B
Approach Vol, veh/h		482			632			7			332	
Approach Delay, s/veh		24.4			33.7			9.5			11.6	
Approach LOS		C			C			A			B	

Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		53.2		36.8		53.2	9.0	27.8				
Change Period (Y+Rc), s		4.5		4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		32.5		48.5		32.5	7.5	36.5				
Max Q Clear Time (g_c+I1), s		2.2		17.4		10.1	5.1	20.3				
Green Ext Time (p_c), s		0.0		2.6		1.3	0.0	3.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			25.4									
HCM 7th LOS			C									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	100	100			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.943	
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1863	1863	1757	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1863	1863	1757	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	346			1064	543	
Travel Time (s)	7.9			24.2	12.3	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	78	0	0	113	110	81
Future Vol, veh/h	78	0	0	113	110	81
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	100	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	85	0	0	123	120	88

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	286	164	208	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	123	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	704	881	1363	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	704	881	1363	-	-	-
Mov Cap-2 Maneuver	704	-	-	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	903	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1363	-	704	-	-	-
HCM Lane V/C Ratio	-	-	0.12	-	-	-
HCM Control Delay (s/veh)	0	-	10.8	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.875	
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1863	1863	1630	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1863	1863	1630	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	348			849	1064	
Travel Time (s)	7.9			19.3	24.2	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	107	0	0	6	8	102
Future Vol, veh/h	107	0	0	6	8	102
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	116	0	0	7	9	111

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	71	64	120	0	-	0
Stage 1	64	-	-	-	-	-
Stage 2	7	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	934	1000	1468	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	934	1000	1468	-	-	-
Mov Cap-2 Maneuver	934	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1468	-	934	-	-	-
HCM Lane V/C Ratio	-	-	0.125	-	-	-
HCM Control Delay (s/veh)	0	-	9.4	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	100	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.865	
Flt Protected	0.950			0.950		
Satd. Flow (prot)	1770	1583	0	1770	1611	0
Flt Permitted	0.950			0.950		
Satd. Flow (perm)	1770	1583	0	1770	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	577			485	556	
Travel Time (s)	13.1			11.0	12.6	

Intersection Summary	
Area Type:	Other

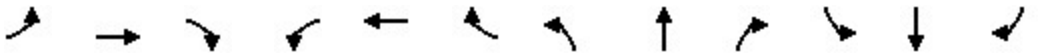
Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	248	274	0	0	35
Future Vol, veh/h	50	248	274	0	0	35
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	100	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	270	298	0	0	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	615	19	38	0	-	0
Stage 1	19	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	455	1059	1572	-	-	-
Stage 1	1004	-	-	-	-	-
Stage 2	551	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	369	1059	1572	-	-	-
Mov Cap-2 Maneuver	369	-	-	-	-	-
Stage 1	814	-	-	-	-	-
Stage 2	551	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.71	7.82	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1572	-	369	1059	-	-
HCM Lane V/C Ratio	0.189	-	0.147	0.255	-	-
HCM Control Delay (s/veh)	7.8	0	16.4	9.6	-	-
HCM Lane LOS	A	A	C	A	-	-
HCM 95th %tile Q(veh)	0.7	-	0.5	1	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt					0.988			0.865				
Flt Protected					0.971						0.950	
Satd. Flow (prot)	0	1863	0	0	1787	0	0	1611	0	0	1770	0
Flt Permitted					0.971						0.950	
Satd. Flow (perm)	0	1863	0	0	1787	0	0	1611	0	0	1770	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		610			346			1050			199	
Travel Time (s)		13.9			7.9			23.9			4.5	

Intersection Summary	
Area Type:	Other

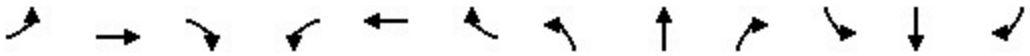
Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	15	0	48	26	7	0	0	60	4	0	0
Future Vol, veh/h	0	15	0	48	26	7	0	0	60	4	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	16	0	52	28	8	0	0	65	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	36	0	0	16	0	0	149	157	16	153	153	32
Stage 1	-	-	-	-	-	-	16	16	-	136	136	-
Stage 2	-	-	-	-	-	-	133	140	-	16	16	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1575	-	-	1601	-	-	819	735	1063	814	739	1042
Stage 1	-	-	-	-	-	-	1003	882	-	867	784	-
Stage 2	-	-	-	-	-	-	871	781	-	1003	882	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1575	-	-	1601	-	-	792	711	1063	739	714	1042
Mov Cap-2 Maneuver	-	-	-	-	-	-	792	711	-	739	714	-
Stage 1	-	-	-	-	-	-	1003	882	-	838	758	-
Stage 2	-	-	-	-	-	-	842	755	-	942	882	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	4.34	8.61	9.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1063	1575	-	-	1023	-	-	739
HCM Lane V/C Ratio	0.061	-	-	-	0.033	-	-	0.006
HCM Control Delay (s/veh)	8.6	0	-	-	7.3	0	-	9.9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.874			0.902			0.966			0.908	
Flt Protected	0.950			0.950				0.969			0.988	
Satd. Flow (prot)	1770	1628	0	1770	1680	0	0	1744	0	0	1671	0
Flt Permitted	0.950			0.950				0.969			0.988	
Satd. Flow (perm)	1770	1628	0	1770	1680	0	0	1744	0	0	1671	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		391			348			346			1050	
Travel Time (s)		8.9			7.9			7.9			23.9	

Intersection Summary	
Area Type:	Other

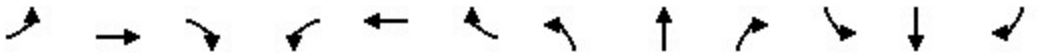
Intersection	
Int Delay, s/veh	9.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	116	20	105	41	20	39	119	18	46	43	16	124
Future Vol, veh/h	116	20	105	41	20	39	119	18	46	43	16	124
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	126	22	114	45	22	42	129	20	50	47	17	135

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	64	0	0	136	0	0	451	484	79	416	520	43
Stage 1	-	-	-	-	-	-	331	331	-	132	132	-
Stage 2	-	-	-	-	-	-	120	153	-	284	388	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1538	-	-	1448	-	-	519	483	982	547	460	1027
Stage 1	-	-	-	-	-	-	682	645	-	871	787	-
Stage 2	-	-	-	-	-	-	885	771	-	723	609	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1538	-	-	1448	-	-	386	429	982	443	410	1027
Mov Cap-2 Maneuver	-	-	-	-	-	-	386	429	-	443	410	-
Stage 1	-	-	-	-	-	-	626	592	-	845	763	-
Stage 2	-	-	-	-	-	-	728	747	-	609	559	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	3.63	3.1	18.61	11.99
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	461	1538	-	-	1448	-	-	713
HCM Lane V/C Ratio	0.432	0.082	-	-	0.031	-	-	0.279
HCM Control Delay (s/veh)	18.6	7.5	-	-	7.6	-	-	12
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	2.1	0.3	-	-	0.1	-	-	1.1



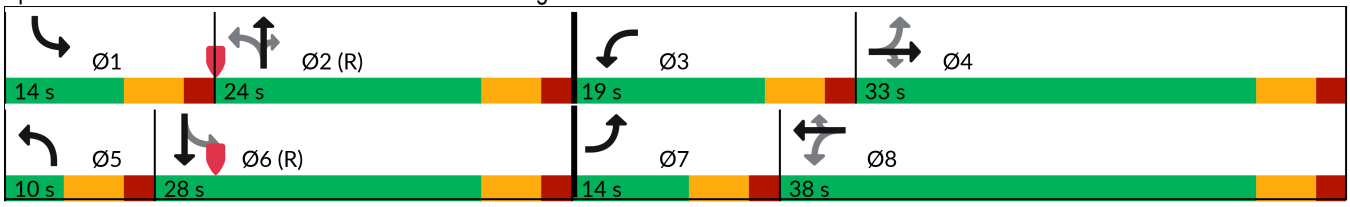
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		150	125		100	225		150	350		0
Storage Lanes	1		1	1		1	1		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	3405	0
Flt Permitted	0.585			0.230			0.617			0.533		
Satd. Flow (perm)	1090	3539	1583	428	3539	1583	1149	3539	1583	1926	3405	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182			228			264		48	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		592			902			575			563	
Travel Time (s)		13.5			20.5			13.1			12.8	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	106	517	39	233	248	210	11	110	243	270	148
Future Volume (vph)	106	517	39	233	248	210	11	110	243	270	148
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases	4		4	8		8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0
Minimum Split (s)	11.0	33.0	33.0	11.0	39.0	39.0	10.0	30.0	30.0	10.0	30.0
Total Split (s)	14.0	33.0	33.0	19.0	38.0	38.0	10.0	24.0	24.0	14.0	28.0
Total Split (%)	15.6%	36.7%	36.7%	21.1%	42.2%	42.2%	11.1%	26.7%	26.7%	15.6%	31.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
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	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	28.3	20.6	20.6	38.1	27.8	27.8	29.2	23.7	23.7	38.7	36.9
Actuated g/C Ratio	0.31	0.23	0.23	0.42	0.31	0.31	0.32	0.26	0.26	0.43	0.41
v/c Ratio	0.29	0.69	0.08	0.69	0.25	0.35	0.03	0.13	0.43	0.30	0.15
Control Delay (s/veh)	16.8	36.1	0.3	26.6	23.9	4.7	18.2	28.1	6.6	17.9	15.6
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)	16.8	36.1	0.3	26.6	23.9	4.7	18.2	28.1	6.6	17.9	15.6
LOS	B	D	A	C	C	A	B	C	A	B	B
Approach Delay (s/veh)		31.0			19.0			13.5			16.9
Approach LOS		C			B			B			B

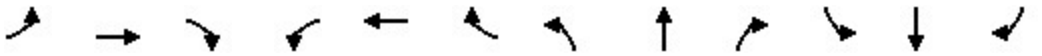
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 21.2	Intersection LOS: C
Intersection Capacity Utilization 56.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Prairie Hawk Dr. & Wolfensberger Rd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	115	562	42	253	270	228	12	120	264	293	215
v/c Ratio	0.29	0.69	0.08	0.69	0.25	0.35	0.03	0.13	0.43	0.30	0.15
Control Delay (s/veh)	16.8	36.1	0.3	26.6	23.9	4.7	18.2	28.1	6.6	17.9	15.6
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)	16.8	36.1	0.3	26.6	23.9	4.7	18.2	28.1	6.6	17.9	15.6
Queue Length 50th (ft)	38	155	0	92	62	0	4	27	0	52	28
Queue Length 95th (ft)	62	193	0	128	86	47	16	54	63	89	70
Internal Link Dist (ft)		512			822			495			483
Turn Bay Length (ft)	325		150	125		100	225		150	350	
Base Capacity (vph)	407	1061	602	375	1258	709	410	930	610	986	1425
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	0.28	0.53	0.07	0.67	0.21	0.32	0.03	0.13	0.43	0.30	0.15

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	517	39	233	248	210	11	110	243	270	148	50
Future Volume (veh/h)	106	517	39	233	248	210	11	110	243	270	148	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	562	42	253	270	228	12	120	264	293	161	54
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	387	729	325	358	948	423	474	1139	508	1003	1019	330
Arrive On Green	0.07	0.21	0.21	0.13	0.27	0.27	0.01	0.32	0.32	0.08	0.39	0.39
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	3456	2638	855
Grp Volume(v), veh/h	115	562	42	253	270	228	12	120	264	293	107	108
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1728	1777	1716
Q Serve(g_s), s	4.5	13.4	1.9	9.6	5.4	11.1	0.4	2.1	12.2	4.8	3.5	3.7
Cycle Q Clear(g_c), s	4.5	13.4	1.9	9.6	5.4	11.1	0.4	2.1	12.2	4.8	3.5	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	387	729	325	358	948	423	474	1139	508	1003	686	663
V/C Ratio(X)	0.30	0.77	0.13	0.71	0.28	0.54	0.03	0.11	0.52	0.29	0.16	0.16
Avail Cap(c_a), veh/h	423	1066	476	383	1264	564	533	1139	508	1042	686	663
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	1.00	1.00
Uniform Delay (d), s/veh	25.4	33.8	29.2	23.7	26.2	28.2	20.2	21.5	24.9	16.7	18.0	18.1
Incr Delay (d2), s/veh	0.4	2.1	0.2	5.5	0.2	1.1	0.0	0.2	3.8	0.2	0.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.9	0.7	4.4	2.3	4.2	0.2	0.9	5.0	1.9	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.8	35.9	29.4	29.2	26.3	29.3	20.2	21.7	28.7	16.9	18.5	18.6
LnGrp LOS	C	D	C	C	C	C	C	C	C	B	B	B
Approach Vol, veh/h		719			751			396			508	
Approach Delay, s/veh		33.9			28.2			26.3			17.6	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	34.8	17.7	24.5	7.0	40.8	12.2	30.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	8.0	18.0	13.0	27.0	4.0	22.0	8.0	32.0
Max Q Clear Time (g_c+I1), s	6.8	14.2	11.6	15.4	2.4	5.7	6.5	13.1
Green Ext Time (p_c), s	0.1	0.6	0.1	3.0	0.0	1.0	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	27.3
HCM 7th LOS	C

Notes

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

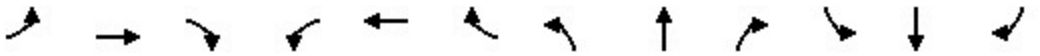
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						0.850
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	0	1863	1863	1583
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	0	1863	1863	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	519			602	535	
Travel Time (s)	11.8			13.7	12.2	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	3.0
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	212	167	438
Demand Flow Rate, veh/h	216	170	446
Vehicles Circulating, veh/h	173	216	1
Vehicles Exiting, veh/h	1	173	385
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.8	4.7	1.4
Approach LOS	A	A	A

Lane	Left	Left	Left	Bypass
Designated Moves	LR	LT	T	R
Assumed Moves	LR	LT	T	
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	
A (Intercept)	1380	1380	1380	
B (Slope)	1.02e-3	1.02e-3	1.02e-3	
Entry Flow, veh/h	216	170	173	273
Cap Entry Lane, veh/h	1157	1107	1378	1938
Entry HV Adj Factor	0.981	0.981	0.980	0.980
Flow Entry, veh/h	212	167	170	268
Cap Entry, veh/h	1135	1085	1351	1900
V/C Ratio	0.187	0.154	0.126	0.141
Control Delay, s/veh	4.8	4.7	3.7	0.0
LOS	A	A	A	A
95th %tile Queue, veh	1	1	0	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.997			0.865						0.907	
Flt Protected		0.953						0.999			0.996	
Satd. Flow (prot)	0	1770	0	0	1611	0	0	1861	0	0	1683	0
Flt Permitted		0.953						0.999			0.996	
Satd. Flow (perm)	0	1770	0	0	1611	0	0	1861	0	0	1683	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		602			909			1975			245	
Travel Time (s)		13.7			20.7			44.9			5.6	

Intersection Summary	
Area Type:	Other

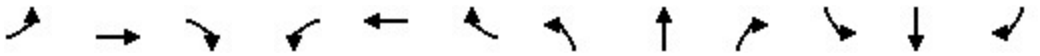
Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	46	0	1	0	0	11	3	99	0	11	33	98
Future Vol, veh/h	46	0	1	0	0	11	3	99	0	11	33	98
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	50	0	1	0	0	12	3	108	0	12	36	107

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	12	0	0	1	0	0	118	113	1	160	107	6
Stage 1	-	-	-	-	-	-	101	101	-	6	6	-
Stage 2	-	-	-	-	-	-	18	12	-	154	101	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1607	-	-	1622	-	-	857	778	1084	806	783	1077
Stage 1	-	-	-	-	-	-	906	812	-	1016	891	-
Stage 2	-	-	-	-	-	-	1001	886	-	849	811	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1607	-	-	1622	-	-	714	753	1084	672	759	1077
Mov Cap-2 Maneuver	-	-	-	-	-	-	714	753	-	672	759	-
Stage 1	-	-	-	-	-	-	877	787	-	1016	891	-
Stage 2	-	-	-	-	-	-	866	886	-	710	786	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	7.16	0	10.61	9.57
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	752	1468	-	-	1622	-	-	941
HCM Lane V/C Ratio	0.147	0.031	-	-	-	-	-	0.164
HCM Control Delay (s/veh)	10.6	7.3	0	-	0	-	-	9.6
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0	-	-	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt					0.996						0.994	
Flt Protected	0.950											
Satd. Flow (prot)	1770	1863	0	1863	1855	0	1863	1863	0	1863	1852	0
Flt Permitted	0.950											
Satd. Flow (perm)	1770	1863	0	1863	1855	0	1863	1863	0	1863	1852	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		340			1975			760			832	
Travel Time (s)		7.7			44.9			17.3			18.9	

Intersection Summary	
Area Type:	Other

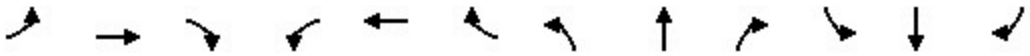
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	15	0	0	32	1	0	145	0	0	172	7
Future Vol, veh/h	3	15	0	0	32	1	0	145	0	0	172	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	0	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	16	0	0	35	1	0	158	0	0	187	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	366	348	191	353	352	158	195	0	0	158	0	0
Stage 1	191	191	-	158	158	-	-	-	-	-	-	-
Stage 2	175	158	-	195	195	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	590	575	851	602	573	888	1379	-	-	1422	-	-
Stage 1	811	742	-	845	767	-	-	-	-	-	-	-
Stage 2	827	767	-	807	740	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	554	575	851	585	573	888	1379	-	-	1422	-	-
Mov Cap-2 Maneuver	554	575	-	585	573	-	-	-	-	-	-	-
Stage 1	811	742	-	845	767	-	-	-	-	-	-	-
Stage 2	788	767	-	789	740	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.46	11.63	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1379	-	-	554	575	-	579	1422	-	-
HCM Lane V/C Ratio	-	-	-	0.006	0.028	-	0.062	-	-	-
HCM Control Delay (s/veh)	0	-	-	11.5	11.4	0	11.6	0	-	-
HCM Lane LOS	A	-	-	B	B	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	-	0.2	0	-	-



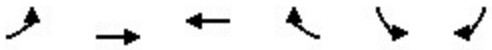
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	250		0	125		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.985			0.975			0.950			0.993	
Flt Protected		0.998			0.994			0.992			0.981	
Satd. Flow (prot)	0	3479	0	0	3430	0	0	3335	0	0	3448	0
Flt Permitted		0.998			0.994			0.992			0.981	
Satd. Flow (perm)	0	3479	0	0	3430	0	0	3335	0	0	3448	0
Link Speed (mph)		40			35			45			45	
Link Distance (ft)		631			610			567			842	
Travel Time (s)		10.8			11.9			8.6			12.8	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	7.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	627	479	250	497
Demand Flow Rate, veh/h	639	489	256	507
Vehicles Circulating, veh/h	547	195	773	447
Vehicles Exiting, veh/h	407	834	413	237
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.7	5.0	7.3	6.7
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR
RT Channelized								
Lane Util	0.469	0.531	0.470	0.530	0.469	0.531	0.469	0.531
Follow-Up Headway, s	2.667	2.535	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	4.645	4.328
A (Intercept)	1350	1420	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	9.199e-4	8.501e-4
Entry Flow, veh/h	300	339	230	259	120	136	238	269
Cap Entry Lane, veh/h	816	892	1128	1203	663	736	895	971
Entry HV Adj Factor	0.983	0.981	0.979	0.981	0.981	0.976	0.982	0.980
Flow Entry, veh/h	295	332	225	254	118	133	234	264
Cap Entry, veh/h	802	875	1105	1180	650	718	879	952
V/C Ratio	0.368	0.380	0.204	0.215	0.181	0.185	0.266	0.277
Control Delay, s/veh	8.9	8.5	5.1	5.0	7.7	7.1	6.9	6.6
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	2	2	1	1	1	1	1	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			150	0	0
Storage Lanes	1			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor						
Frt				0.850	0.996	
Flt Protected	0.950				0.954	
Satd. Flow (prot)	1770	3539	3539	1583	1770	0
Flt Permitted	0.950				0.954	
Satd. Flow (perm)	1770	3539	3539	1583	1770	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		350	935		1177	
Travel Time (s)		8.0	21.3		26.8	

Intersection Summary	
Area Type:	Other

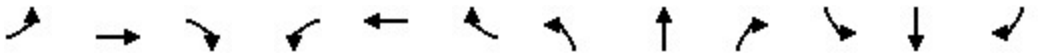
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	710	399	83	141	5
Future Vol, veh/h	8	710	399	83	141	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	772	434	90	153	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	524	0	-	0	837	217
Stage 1	-	-	-	-	434	-
Stage 2	-	-	-	-	403	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1039	-	-	-	305	788
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	643	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1039	-	-	-	303	788
Mov Cap-2 Maneuver	-	-	-	-	303	-
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	643	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.09	0	28.28
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1039	-	-	-	309
HCM Lane V/C Ratio	0.008	-	-	-	0.513
HCM Control Delay (s/veh)	8.5	-	-	-	28.3
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	2.8



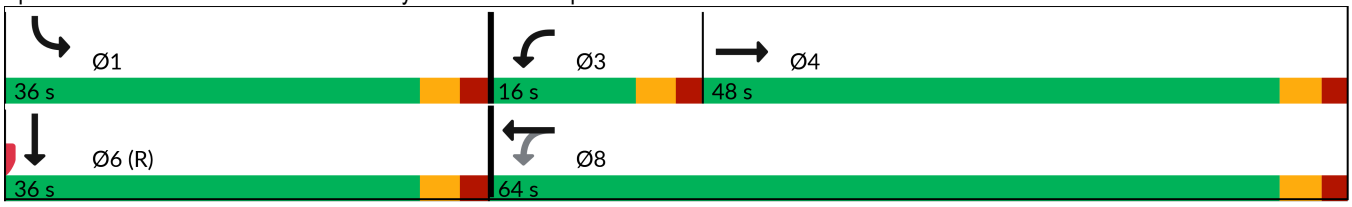
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	375		0	0		0
Storage Lanes	0		1	1		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor												
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.953	
Satd. Flow (prot)	0	5085	1583	1770	3539	0	0	0	0	3221	1615	1583
Flt Permitted				0.094						0.950	0.953	
Satd. Flow (perm)	0	5085	1583	175	3539	0	0	0	0	3221	1615	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			294									447
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		510			603			473			545	
Travel Time (s)		11.6			13.7			10.8			12.4	

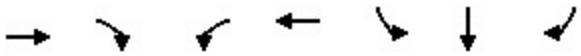
Intersection Summary	
Area Type:	Other

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1227	334	206	884	611	5	411
Future Volume (vph)	1227	334	206	884	611	5	411
Turn Type	NA	Free	pm+pt	NA	Prot	NA	Free
Protected Phases	4		3	8	1	6	
Permitted Phases		Free	8				Free
Detector Phase	4		3	8	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5		10.0	22.5	10.0	22.5	
Total Split (s)	48.0		16.0	64.0	36.0	36.0	
Total Split (%)	48.0%		16.0%	64.0%	36.0%	36.0%	
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	None		None	None	None	C-Max	
Act Effct Green (s)	37.6	100.0	53.4	53.4	36.6	36.6	100.0
Actuated g/C Ratio	0.38	1.00	0.53	0.53	0.37	0.37	1.00
v/c Ratio	0.70	0.23	0.85	0.51	0.38	0.38	0.28
Control Delay (s/veh)	28.2	0.3	48.7	15.6	25.6	27.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.2	0.3	48.7	15.6	25.6	27.2	0.4
LOS	C	A	D	B	C	C	A
Approach Delay (s/veh)	22.3			21.8		15.9	
Approach LOS	C			C		B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 78 (78%), Referenced to phase 2: and 6:SBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay (s/veh): 20.3	Intersection LOS: C
Intersection Capacity Utilization 59.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: Plum Creek Pkwy. & I-25 SB Ramps

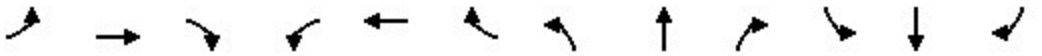




Lane Group	EBT	EBR	WBL	WBT	SBL	SBR	
Lane Group Flow (vph)	1334	363	224	961	445	224	447
v/c Ratio	0.70	0.23	0.85	0.51	0.38	0.38	0.28
Control Delay (s/veh)	28.2	0.3	48.7	15.6	25.6	27.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.2	0.3	48.7	15.6	25.6	27.2	0.4
Queue Length 50th (ft)	256	0	88	192	114	115	0
Queue Length 95th (ft)	282	0	#204	215	173	203	0
Internal Link Dist (ft)	430			523		465	
Turn Bay Length (ft)							
Base Capacity (vph)	2186	1583	268	2088	1179	591	1583
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.23	0.84	0.46	0.38	0.38	0.28

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)	0	1227	334	206	884	0	0	0	0	611	5	411
Future Volume (veh/h)	0	1227	334	206	884	0	0	0	0	611	5	411
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1334	0	224	961	0				668	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1758		293	1750	0				2179	0	
Arrive On Green	0.00	0.34	0.00	0.10	0.49	0.00				0.41	0.00	0.00
Sat Flow, veh/h	0	5274	1585	1781	3647	0				5344	0	1585
Grp Volume(v), veh/h	0	1334	0	224	961	0				668	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1585	1781	1777	0				1781	0	1585
Q Serve(g_s), s	0.0	23.2	0.0	7.7	18.8	0.0				8.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	23.2	0.0	7.7	18.8	0.0				8.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1758		293	1750	0				2179	0	
V/C Ratio(X)	0.00	0.76		0.77	0.55	0.00				0.31	0.00	
Avail Cap(c_a), veh/h	0	2196		314	2097	0				2179	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	29.1	0.0	22.0	17.7	0.0				20.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	10.1	0.3	0.0				0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.4	0.0	3.9	7.4	0.0				3.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	30.3	0.0	32.1	17.9	0.0				20.1	0.0	0.0
LnGrp LOS		C		C	B					C		
Approach Vol, veh/h		1334			1185						668	
Approach Delay, s/veh		30.3			20.6						20.1	
Approach LOS		C			C						C	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		14.8	39.4		45.8		54.2					
Change Period (Y+Rc), s		5.0	5.0		5.0		5.0					
Max Green Setting (Gmax), s		11.0	43.0		31.0		59.0					
Max Q Clear Time (g_c+I1), s		9.7	25.2		10.5		20.8					
Green Ext Time (p_c), s		0.1	9.2		2.6		8.5					

Intersection Summary	
HCM 7th Control Delay, s/veh	24.6
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

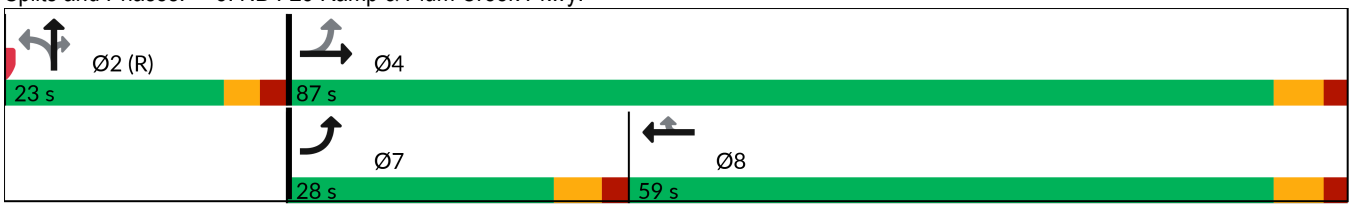
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	400		0	400		175	0		0
Storage Lanes	2		0	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.928	0.850		0.988	0.850			
Flt Protected	0.950						0.950	0.957				
Satd. Flow (prot)	3433	5085	0	0	3146	1441	1681	1603	1504	0	0	0
Flt Permitted	0.067						0.950	0.957				
Satd. Flow (perm)	242	5085	0	0	3146	1441	1681	1603	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					294	495		3	89			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		253			709			503			557	
Travel Time (s)		5.8			16.1			11.4			12.7	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	596	1287	746	1387	343	3	142
Future Volume (vph)	596	1287	746	1387	343	3	142
Turn Type	pm+pt	NA	NA	Perm	Perm	NA	Perm
Protected Phases	7	4	8			2	
Permitted Phases	4			8	2		2
Detector Phase	7	4	8	8	2	2	2
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	28.0	87.0	59.0	59.0	23.0	23.0	23.0
Total Split (%)	25.5%	79.1%	53.6%	53.6%	20.9%	20.9%	20.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	81.0	81.0	53.4	53.4	18.0	18.0	18.0
Actuated g/C Ratio	0.74	0.74	0.49	0.49	0.16	0.16	0.16
v/c Ratio	0.80	0.37	0.93	0.79	0.72	0.73	0.43
Control Delay (s/veh)	37.1	5.6	23.2	10.1	59.6	60.3	21.3
Queue Delay	51.1	3.9	0.3	0.3	0.0	0.0	0.0
Total Delay (s/veh)	88.1	9.5	23.4	10.4	59.6	60.3	21.3
LOS	F	A	C	B	E	E	C
Approach Delay (s/veh)		34.4	19.2			49.8	
Approach LOS		C	B			D	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay (s/veh): 28.8	Intersection LOS: C
Intersection Capacity Utilization 99.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 8: NB I-25 Ramp & Plum Creek Pkwy.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	648	1399	1565	754	198	193	139
v/c Ratio	0.80	0.37	0.93	0.79	0.72	0.73	0.43
Control Delay (s/veh)	37.1	5.6	23.2	10.1	59.6	60.3	21.3
Queue Delay	51.1	3.9	0.3	0.3	0.0	0.0	0.0
Total Delay (s/veh)	88.1	9.5	23.4	10.4	59.6	60.3	21.3
Queue Length 50th (ft)	171	112	180	100	141	141	32
Queue Length 95th (ft)	239	133	#248	131	#247	#257	95
Internal Link Dist (ft)		173	629			423	
Turn Bay Length (ft)					400		175
Base Capacity (vph)	816	3744	1678	953	275	264	320
Starvation Cap Reductn	232	2232	8	22	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.93	0.94	0.81	0.72	0.73	0.43

Intersection Summary

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

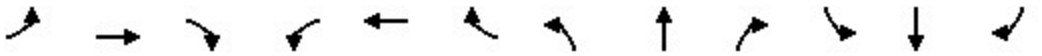
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	596	1287	0	0	746	1387	343	3	142	0	0	0
Future Volume (veh/h)	596	1287	0	0	746	1387	343	3	142	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	648	1399	0	0	811	1508	422	0	104			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	730	3586	0	0	901	1527	704	0	313			
Arrive On Green	0.17	0.70	0.00	0.00	0.48	0.48	0.20	0.00	0.20			
Sat Flow, veh/h	3456	5274	0	0	1870	3170	3563	0	1585			
Grp Volume(v), veh/h	648	1399	0	0	811	1508	422	0	104			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	15.0	12.4	0.0	0.0	43.6	51.7	11.9	0.0	6.2			
Cycle Q Clear(g_c), s	15.0	12.4	0.0	0.0	43.6	51.7	11.9	0.0	6.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	730	3586	0	0	901	1527	704	0	313			
V/C Ratio(X)	0.89	0.39	0.00	0.00	0.90	0.99	0.60	0.00	0.33			
Avail Cap(c_a), veh/h	848	3760	0	0	901	1527	704	0	313			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.32	0.32	0.00	0.00	0.57	0.57	1.00	0.00	1.00			
Uniform Delay (d), s/veh	33.6	6.7	0.0	0.0	26.1	28.2	40.2	0.0	37.9			
Incr Delay (d2), s/veh	3.6	0.0	0.0	0.0	7.4	14.5	3.7	0.0	2.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.8	4.0	0.0	0.0	20.4	21.7	5.5	0.0	2.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.3	6.7	0.0	0.0	33.5	42.6	43.9	0.0	40.7			
LnGrp LOS	D	A			C	D	D		D			
Approach Vol, veh/h		2047			2319			526				
Approach Delay, s/veh		16.4			39.4			43.3				
Approach LOS		B			D			D				

Timer - Assigned Phs	2	4	7	8
Phs Duration (G+Y+Rc), s	26.7	83.3	24.3	59.0
Change Period (Y+Rc), s	5.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	18.0	81.0	22.0	53.0
Max Q Clear Time (g_c+I1), s	13.9	14.4	17.0	53.7
Green Ext Time (p_c), s	0.8	15.9	1.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	30.2
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



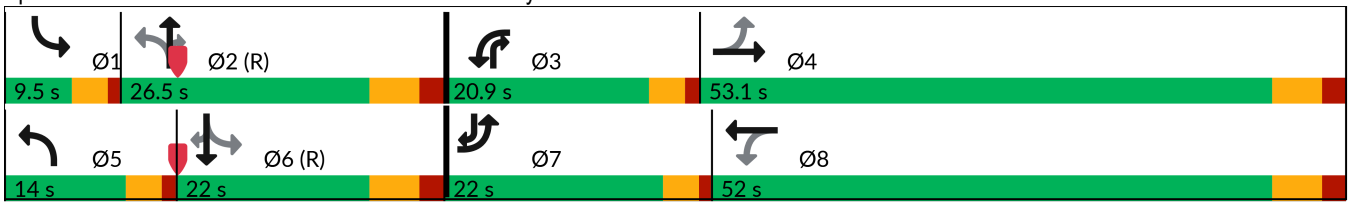
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	225		0	225		250	175		200
Storage Lanes	1		1	1		0	2		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.985				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	5009	0	3433	1863	1583	1770	1863	1583
Flt Permitted	0.080			0.254			0.549			0.665		
Satd. Flow (perm)	149	3539	1583	473	5009	0	1984	1863	1583	1239	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			208		21				69			109
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			907			521			491	
Travel Time (s)		16.1			20.6			11.8			11.2	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	290	940	184	61	1343	551	133	42	78	91	198
Future Volume (vph)	290	940	184	61	1343	551	133	42	78	91	198
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	2	3	1	6	7
Permitted Phases	4		Free	8		2		2	6		6
Detector Phase	7	4		3	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0		9.5	31.0	9.5	36.0	9.5	9.5	34.0	9.5
Total Split (s)	22.0	53.1		20.9	52.0	14.0	26.5	20.9	9.5	22.0	22.0
Total Split (%)	20.0%	48.3%		19.0%	47.3%	12.7%	24.1%	19.0%	8.6%	20.0%	20.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	3.0	4.0	3.0	3.0	4.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0	1.0	2.0	1.0	1.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0		4.0	6.0	4.0	6.0	4.0	4.0	6.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	68.8	57.7	110.0	53.9	44.9	33.2	23.5	36.5	23.7	16.0	39.9
Actuated g/C Ratio	0.63	0.52	1.00	0.49	0.41	0.30	0.21	0.33	0.22	0.15	0.36
v/c Ratio	0.88	0.55	0.13	0.21	0.79	0.81	0.36	0.08	0.29	0.37	0.33
Control Delay (s/veh)	71.0	15.1	0.2	10.4	31.3	43.7	41.7	3.3	32.8	46.8	13.7
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)	71.0	15.1	0.2	10.4	31.3	43.7	41.7	3.3	32.8	46.8	13.7
LOS	E	B	A	B	C	D	D	A	C	D	B
Approach Delay (s/veh)		24.6			30.5		41.0			26.0	
Approach LOS		C			C		D			C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay (s/veh): 29.9	Intersection LOS: C
Intersection Capacity Utilization 82.6%	ICU Level of Service E
Analysis Period (min) 15	

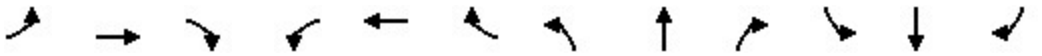
Splits and Phases: 9: Wilcox St. & Plum Creek Pkwy.



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	315	1022	200	66	1624	599	145	46	85	99	215
v/c Ratio	0.88	0.55	0.13	0.21	0.79	0.81	0.36	0.08	0.29	0.37	0.33
Control Delay (s/veh)	71.0	15.1	0.2	10.4	31.3	43.7	41.7	3.3	32.8	46.8	13.7
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)	71.0	15.1	0.2	10.4	31.3	43.7	41.7	3.3	32.8	46.8	13.7
Queue Length 50th (ft)	179	128	0	16	350	187	91	0	45	64	51
Queue Length 95th (ft)	#325	331	0	33	410	#262	154	15	85	117	111
Internal Link Dist (ft)		629			827		441			411	
Turn Bay Length (ft)	325			225		225		250	175		200
Base Capacity (vph)	358	1857	1583	473	2106	744	398	707	294	270	645
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	0.88	0.55	0.13	0.14	0.77	0.81	0.36	0.07	0.29	0.37	0.33

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)	290	940	184	61	1343	151	551	133	42	78	91	198
Future Volume (veh/h)	290	940	184	61	1343	151	551	133	42	78	91	198
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	315	1022	0	66	1460	164	599	145	46	85	99	215
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	339	1696		345	1769	199	789	470	461	379	394	551
Arrive On Green	0.27	0.95	0.00	0.04	0.38	0.38	0.09	0.25	0.25	0.05	0.21	0.21
Sat Flow, veh/h	1781	3554	1585	1781	4657	523	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	315	1022	0	66	1067	557	599	145	46	85	99	215
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1702	1776	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	12.7	3.4	0.0	2.5	31.1	31.2	10.0	6.9	2.3	4.1	4.9	11.3
Cycle Q Clear(g_c), s	12.7	3.4	0.0	2.5	31.1	31.2	10.0	6.9	2.3	4.1	4.9	11.3
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	339	1696		345	1293	675	789	470	461	379	394	551
V/C Ratio(X)	0.93	0.60		0.19	0.83	0.83	0.76	0.31	0.10	0.22	0.25	0.39
Avail Cap(c_a), veh/h	387	1696		549	1424	743	789	470	461	379	394	551
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	1.4	0.0	19.3	30.8	30.8	34.1	33.4	28.5	31.6	36.2	27.1
Incr Delay (d2), s/veh	25.4	0.6	0.0	0.3	3.8	7.0	4.3	1.7	0.4	0.3	1.5	2.1
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	6.3	0.7	0.0	1.0	13.2	14.4	3.2	3.4	0.9	1.8	2.4	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.5	1.9	0.0	19.5	34.6	37.9	38.5	35.1	28.9	31.9	37.7	29.2
LnGrp LOS	D	A		B	C	D	D	D	C	C	D	C
Approach Vol, veh/h		1337			1690			790			399	
Approach Delay, s/veh		12.4			35.1			37.3			31.9	
Approach LOS		B			D			D			C	

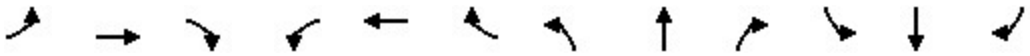
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	33.7	8.3	58.5	14.0	29.2	19.1	47.8
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.5	20.5	16.9	47.1	10.0	16.0	18.0	46.0
Max Q Clear Time (g_c+I1), s	6.1	8.9	4.5	5.4	12.0	13.3	14.7	33.2
Green Ext Time (p_c), s	0.0	0.6	0.1	9.5	0.0	0.3	0.3	8.6

Intersection Summary	
HCM 7th Control Delay, s/veh	28.0
HCM 7th LOS	C

Notes

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

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



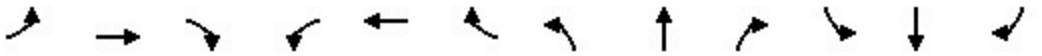
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.923									0.945	
Flt Protected		0.979						0.992				
Satd. Flow (prot)	0	1683	0	0	1863	0	0	3511	0	0	3345	0
Flt Permitted		0.979						0.992				
Satd. Flow (perm)	0	1683	0	0	1863	0	0	3511	0	0	3345	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		632			421			664			760	
Travel Time (s)		14.4			9.6			15.1			17.3	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	3.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	174	0	222	186
Demand Flow Rate, veh/h	178	0	227	189
Vehicles Circulating, veh/h	120	303	76	38
Vehicles Exiting, veh/h	107	0	221	266
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.0	0.0	3.5	3.3
Approach LOS	A	-	A	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.471	0.529	0.471	0.529
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	178	0	107	120	89	100
Cap Entry Lane, veh/h	1282	1098	1259	1331	1303	1375
Entry HV Adj Factor	0.978	1.000	0.976	0.982	0.980	0.984
Flow Entry, veh/h	174	0	104	118	87	98
Cap Entry, veh/h	1254	1098	1229	1307	1278	1353
V/C Ratio	0.139	0.000	0.085	0.090	0.068	0.073
Control Delay, s/veh	4.0	3.3	3.6	3.5	3.4	3.2
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0	0



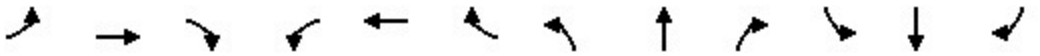
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		250	250		0	250		150	250		150
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.196			0.195			0.722			0.728		
Satd. Flow (perm)	365	3539	1583	705	3539	1583	1345	3539	1583	2631	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182			454			322			182
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		881			686			431			741	
Travel Time (s)		20.0			15.6			9.8			16.8	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	643	76	225	653	418	107	40	599	319	47	90
Future Volume (vph)	142	643	76	225	653	418	107	40	599	319	47	90
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		Free	2		Free	6		6
Detector Phase	7	4	4	3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.5	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.0	22.5	22.5	9.5	22.5		22.5	17.0		22.5	17.0	17.0
Total Split (s)	14.0	31.0	31.0	20.0	37.0		23.0	16.0		23.0	16.0	16.0
Total Split (%)	15.6%	34.4%	34.4%	22.2%	41.1%		25.6%	17.8%		25.6%	17.8%	17.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		Max	C-Max		Max	Max	Max
Act Effct Green (s)	34.0	25.0	25.0	34.6	25.3	90.0	37.7	11.5	90.0	37.7	11.5	11.5
Actuated g/C Ratio	0.38	0.28	0.28	0.38	0.28	1.00	0.42	0.13	1.00	0.42	0.13	0.13
v/c Ratio	0.55	0.71	0.15	0.44	0.71	0.29	0.17	0.10	0.41	0.26	0.11	0.27
Control Delay (s/veh)	22.9	33.1	0.5	18.6	34.9	0.2	16.4	35.3	0.8	16.1	35.5	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.9	33.1	0.5	18.6	34.9	0.2	16.4	35.3	0.8	16.1	35.5	1.8
LOS	C	C	A	B	C	A	B	D	A	B	D	A
Approach Delay (s/veh)		28.5			20.9			4.9			15.3	
Approach LOS		C			C			A			B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay (s/veh): 18.5	Intersection LOS: B
Intersection Capacity Utilization 52.9%	ICU Level of Service A
Analysis Period (min) 15	

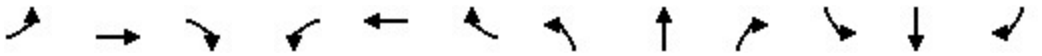
Splits and Phases: 11: Plum Creek Pkwy. & Prairie Hawk Dr.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	154	699	83	245	710	454	116	43	651	347	51	98
v/c Ratio	0.55	0.71	0.15	0.44	0.71	0.29	0.17	0.10	0.41	0.26	0.11	0.27
Control Delay (s/veh)	22.9	33.1	0.5	18.6	34.9	0.2	16.4	35.3	0.8	16.1	35.5	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.9	33.1	0.5	18.6	34.9	0.2	16.4	35.3	0.8	16.1	35.5	1.8
Queue Length 50th (ft)	53	187	0	56	207	0	36	11	0	57	13	0
Queue Length 95th (ft)	78	224	0	m67	m225	m0	80	27	0	100	31	0
Internal Link Dist (ft)		801			606			351			661	
Turn Bay Length (ft)	250		250	250			250		150	250		150
Base Capacity (vph)	288	1090	613	773	1277	1583	687	452	1583	1335	452	361
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.64	0.14	0.32	0.56	0.29	0.17	0.10	0.41	0.26	0.11	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	643	76	225	653	418	107	40	599	319	47	90
Future Volume (veh/h)	142	643	76	225	653	418	107	40	599	319	47	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	154	699	83	245	710	0	116	43	0	347	51	98
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	921	411	537	904		750	911		1524	911	406
Arrive On Green	0.08	0.26	0.26	0.08	0.25	0.00	0.21	0.26	0.00	0.21	0.26	0.26
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	154	699	83	245	710	0	116	43	0	347	51	98
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	5.6	16.3	3.7	4.6	16.8	0.0	3.4	0.8	0.0	5.4	1.0	4.4
Cycle Q Clear(g_c), s	5.6	16.3	3.7	4.6	16.8	0.0	3.4	0.8	0.0	5.4	1.0	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	921	411	537	904		750	911		1524	911	406
V/C Ratio(X)	0.55	0.76	0.20	0.46	0.79		0.15	0.05		0.23	0.06	0.24
Avail Cap(c_a), veh/h	318	1046	467	860	1283		750	911		1524	911	406
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	30.7	26.1	23.2	31.3	0.0	13.9	25.2	0.0	14.5	25.3	26.5
Incr Delay (d2), s/veh	1.7	2.9	0.2	0.6	2.1	0.0	0.4	0.1	0.0	0.3	0.1	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	2.4	7.2	1.4	1.9	7.3	0.0	1.4	0.4	0.0	2.1	0.4	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.2	33.6	26.3	23.9	33.4	0.0	14.4	25.3	0.0	14.8	25.4	27.9
LnGrp LOS	C	C	C	C	C		B	C		B	C	C
Approach Vol, veh/h		936			955			159			496	
Approach Delay, s/veh		31.6			31.0			17.3			18.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	27.6	11.6	27.8	23.0	27.6	12.0	27.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.5	11.5	15.5	26.5	18.5	11.5	9.5	32.5
Max Q Clear Time (g_c+I1), s	7.4	2.8	6.6	18.3	5.4	6.4	7.6	18.8
Green Ext Time (p_c), s	0.9	0.1	0.5	3.2	0.2	0.2	0.1	4.1

Intersection Summary	
HCM 7th Control Delay, s/veh	27.9
HCM 7th LOS	C

Notes

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

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor						
Frt		0.865		0.850		
Flt Protected					0.950	
Satd. Flow (prot)	0	1611	3539	1583	1770	3539
Flt Permitted					0.950	
Satd. Flow (perm)	0	1611	3539	1583	1770	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	1150		741			664
Travel Time (s)	26.1		16.8			15.1

Intersection Summary	
Area Type:	Other

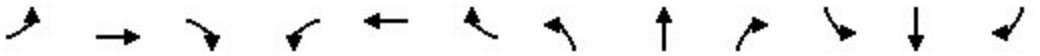
Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	126	637	29	10	499
Future Vol, veh/h	0	126	637	29	10	499
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	137	692	32	11	542

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	346	0	-	692	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	650	-	0	899	-
Stage 1	0	-	-	0	-	-
Stage 2	0	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	650	-	-	899	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.01	0	0.18
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	SBL	SBT
Capacity (veh/h)	-	650	899	-
HCM Lane V/C Ratio	-	0.211	0.012	-
HCM Control Delay (s/veh)	-	12	9.1	-
HCM Lane LOS	-	B	A	-
HCM 95th %tile Q(veh)	-	0.8	0	-



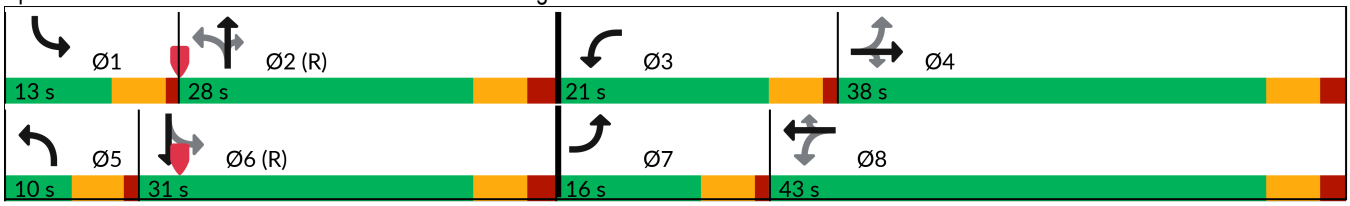
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		100	125		100	225		150	350		0
Storage Lanes	1		1	1		1	1		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.923	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	3267	0
Flt Permitted	0.471			0.260			0.584			0.568		
Satd. Flow (perm)	877	3539	1583	484	3539	1583	1088	3539	1583	2053	3267	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			142			264			366		139	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		622			647			464			371	
Travel Time (s)		14.1			14.7			10.5			8.4	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	63	431	29	231	455	243	47	153	337	277	122
Future Volume (vph)	63	431	29	231	455	243	47	153	337	277	122
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases	4		4	8		8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	38.0	38.0	10.0	40.0	40.0	10.0	33.0	33.0	10.0	32.0
Total Split (s)	16.0	38.0	38.0	21.0	43.0	43.0	10.0	28.0	28.0	13.0	31.0
Total Split (%)	16.0%	38.0%	38.0%	21.0%	43.0%	43.0%	10.0%	28.0%	28.0%	13.0%	31.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	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	6.0	6.0	5.0	6.0
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	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	28.0	19.2	19.2	39.9	28.3	28.3	41.7	33.6	33.6	49.0	39.1
Actuated g/C Ratio	0.28	0.19	0.19	0.40	0.28	0.28	0.42	0.34	0.34	0.49	0.39
v/c Ratio	0.22	0.69	0.08	0.66	0.49	0.41	0.10	0.14	0.47	0.26	0.20
Control Delay (s/veh)	19.4	42.7	0.3	28.8	31.7	5.5	16.0	26.1	5.6	15.5	12.2
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)	19.4	42.7	0.3	28.8	31.7	5.5	16.0	26.1	5.6	15.5	12.2
LOS	B	D	A	C	C	A	B	C	A	B	B
Approach Delay (s/veh)		37.5			24.1			12.3			13.9
Approach LOS		D			C			B			B

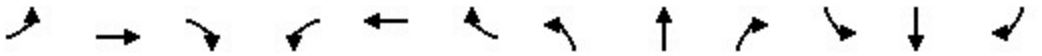
Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 22.3	Intersection LOS: C
Intersection Capacity Utilization 55.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Prairie Hawk Dr. & Wolfensberger Rd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	68	468	32	251	495	264	51	166	366	301	272
v/c Ratio	0.22	0.69	0.08	0.66	0.49	0.41	0.10	0.14	0.47	0.26	0.20
Control Delay (s/veh)	19.4	42.7	0.3	28.8	31.7	5.5	16.0	26.1	5.6	15.5	12.2
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)	19.4	42.7	0.3	28.8	31.7	5.5	16.0	26.1	5.6	15.5	12.2
Queue Length 50th (ft)	26	146	0	107	139	0	17	39	0	53	29
Queue Length 95th (ft)	48	187	0	151	181	56	41	73	74	88	66
Internal Link Dist (ft)		542			567			384			291
Turn Bay Length (ft)	325		100	125		100	225		150	350	
Base Capacity (vph)	372	1132	603	399	1309	752	502	1189	774	1152	1361
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	0.18	0.41	0.05	0.63	0.38	0.35	0.10	0.14	0.47	0.26	0.20

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	431	29	231	455	243	47	153	337	277	122	128
Future Volume (veh/h)	63	431	29	231	455	243	47	153	337	277	122	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	468	32	251	495	264	51	166	366	301	133	139
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	622	277	353	937	418	561	1427	636	1019	772	689
Arrive On Green	0.04	0.18	0.18	0.13	0.26	0.26	0.04	0.40	0.40	0.07	0.43	0.43
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	3456	1777	1585
Grp Volume(v), veh/h	68	468	32	251	495	264	51	166	366	301	133	139
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	3.1	12.5	1.7	11.0	11.9	14.7	1.7	2.9	18.0	5.0	4.6	5.4
Cycle Q Clear(g_c), s	3.1	12.5	1.7	11.0	11.9	14.7	1.7	2.9	18.0	5.0	4.6	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	252	622	277	353	937	418	561	1427	636	1019	772	689
V/C Ratio(X)	0.27	0.75	0.12	0.71	0.53	0.63	0.09	0.12	0.58	0.30	0.17	0.20
Avail Cap(c_a), veh/h	370	1137	507	402	1315	586	582	1427	636	1050	772	689
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	1.00	1.00
Uniform Delay (d), s/veh	31.8	39.2	34.7	27.8	31.5	32.5	16.2	18.8	23.3	15.1	17.3	17.5
Incr Delay (d2), s/veh	0.6	1.9	0.2	5.0	0.5	1.6	0.1	0.2	3.8	0.2	0.5	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	5.6	0.7	5.1	5.1	5.7	0.7	1.2	7.2	1.9	1.9	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.3	41.1	34.9	32.8	32.0	34.1	16.3	19.0	27.0	15.3	17.8	18.2
LnGrp LOS	C	D	C	C	C	C	B	B	C	B	B	B
Approach Vol, veh/h		568			1010			583			573	
Approach Delay, s/veh		39.7			32.7			23.8			16.5	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	46.1	18.2	23.5	8.8	49.5	9.4	32.4
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	8.0	22.0	16.0	32.0	5.0	25.0	11.0	37.0
Max Q Clear Time (g_c+I1), s	7.0	20.0	13.0	14.5	3.7	7.4	5.1	16.7
Green Ext Time (p_c), s	0.1	0.5	0.2	3.0	0.0	1.5	0.1	4.2

Intersection Summary	
HCM 7th Control Delay, s/veh	28.9
HCM 7th LOS	C

Notes

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

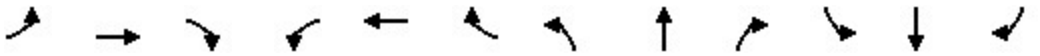
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						0.850
Flt Protected	0.953			0.999		
Satd. Flow (prot)	1775	0	0	1861	1863	1583
Flt Permitted	0.953			0.999		
Satd. Flow (perm)	1775	0	0	1861	1863	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	444			608	533	
Travel Time (s)	10.1			13.8	12.1	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	3.8
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	359	189	424
Demand Flow Rate, veh/h	366	193	433
Vehicles Circulating, veh/h	138	365	4
Vehicles Exiting, veh/h	4	139	554
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.9	5.9	1.1
Approach LOS	A	A	A

Lane	Left	Left	Left	Bypass
Designated Moves	LR	LT	T	R
Assumed Moves	LR	LT	T	
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	
A (Intercept)	1380	1380	1380	
B (Slope)	1.02e-3	1.02e-3	1.02e-3	
Entry Flow, veh/h	366	193	138	295
Cap Entry Lane, veh/h	1199	951	1374	1938
Entry HV Adj Factor	0.981	0.981	0.980	0.980
Flow Entry, veh/h	359	189	135	289
Cap Entry, veh/h	1176	933	1347	1900
V/C Ratio	0.305	0.203	0.100	0.152
Control Delay, s/veh	5.9	5.9	3.5	0.0
LOS	A	A	A	A
95th %tile Queue, veh	1	1	0	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.999			0.865						0.948	
Flt Protected		0.953						0.999			0.997	
Satd. Flow (prot)	0	1773	0	0	1611	0	0	1861	0	0	1761	0
Flt Permitted		0.953						0.999			0.997	
Satd. Flow (perm)	0	1773	0	0	1611	0	0	1861	0	0	1761	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		608			909			1975			245	
Travel Time (s)		13.8			20.7			44.9			5.6	

Intersection Summary	
Area Type:	Other

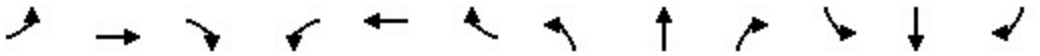
Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	96	0	1	0	0	18	1	51	0	7	78	53
Future Vol, veh/h	96	0	1	0	0	18	1	51	0	7	78	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	104	0	1	0	0	20	1	55	0	8	85	58

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	20	0	0	1	0	0	252	229	1	246	220	10
Stage 1	-	-	-	-	-	-	209	209	-	10	10	-
Stage 2	-	-	-	-	-	-	42	20	-	236	210	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1597	-	-	1622	-	-	702	671	1084	708	679	1072
Stage 1	-	-	-	-	-	-	793	729	-	1011	887	-
Stage 2	-	-	-	-	-	-	972	879	-	767	729	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1597	-	-	1622	-	-	542	627	1084	606	634	1072
Mov Cap-2 Maneuver	-	-	-	-	-	-	542	627	-	606	634	-
Stage 1	-	-	-	-	-	-	741	681	-	1011	887	-
Stage 2	-	-	-	-	-	-	832	879	-	658	681	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	7.34	0	11.33	10.99
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	625	1485	-	-	1622	-	-	750
HCM Lane V/C Ratio	0.09	0.065	-	-	-	-	-	0.2
HCM Control Delay (s/veh)	11.3	7.4	0	-	0	-	-	11
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0	-	-	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt					0.973						0.990	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	1863	1812	0	1863	1863	0	1770	1844	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	1863	0	1863	1812	0	1863	1863	0	1770	1844	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		340			1975			760			832	
Travel Time (s)		7.7			44.9			17.3			18.9	

Intersection Summary	
Area Type:	Other

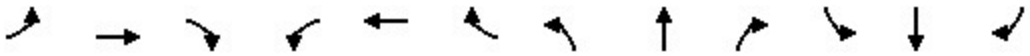
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	38	0	0	21	5	0	159	0	4	134	9
Future Vol, veh/h	11	38	0	0	21	5	0	159	0	4	134	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	0	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	41	0	0	23	5	0	173	0	4	146	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	343	332	151	348	337	173	155	0	0	173	0	0
Stage 1	159	159	-	173	173	-	-	-	-	-	-	-
Stage 2	184	173	-	175	164	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	611	588	896	607	584	871	1425	-	-	1404	-	-
Stage 1	843	766	-	829	756	-	-	-	-	-	-	-
Stage 2	818	756	-	827	762	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	581	586	896	562	582	871	1425	-	-	1404	-	-
Mov Cap-2 Maneuver	581	586	-	562	582	-	-	-	-	-	-	-
Stage 1	840	764	-	829	756	-	-	-	-	-	-	-
Stage 2	788	756	-	780	760	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.55	11.07	0	0.21
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1425	-	-	581	586	-	622	1404	-	-
HCM Lane V/C Ratio	-	-	-	0.021	0.071	-	0.045	0.003	-	-
HCM Control Delay (s/veh)	0	-	-	11.3	11.6	0	11.1	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	-	0.1	0	-	-



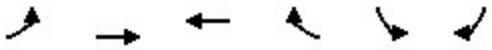
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	250		0	125		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.979			0.960			0.976			0.982	
Flt Protected		0.998			0.995			0.993			0.987	
Satd. Flow (prot)	0	3458	0	0	3381	0	0	3430	0	0	3430	0
Flt Permitted		0.998			0.995			0.993			0.987	
Satd. Flow (perm)	0	3458	0	0	3381	0	0	3430	0	0	3430	0
Link Speed (mph)		40			35			45			45	
Link Distance (ft)		631			610			567			842	
Travel Time (s)		10.8			11.9			8.6			12.8	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	472	631	413	417
Demand Flow Rate, veh/h	481	643	421	425
Vehicles Circulating, veh/h	443	373	529	531
Vehicles Exiting, veh/h	513	577	395	485
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.5	7.0	6.8	6.8
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	0.470	0.530	0.471	0.529
Follow-Up Headway, s	2.667	2.535	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	4.645	4.328
A (Intercept)	1350	1420	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	9.199e-4	8.501e-4
Entry Flow, veh/h	226	255	302	341	198	223	200	225
Cap Entry Lane, veh/h	898	974	958	1034	830	906	828	904
Entry HV Adj Factor	0.982	0.982	0.982	0.981	0.981	0.982	0.980	0.982
Flow Entry, veh/h	222	250	297	334	194	219	196	221
Cap Entry, veh/h	882	956	941	1014	814	889	811	888
V/C Ratio	0.252	0.262	0.315	0.330	0.239	0.246	0.241	0.249
Control Delay, s/veh	6.7	6.4	7.2	6.9	7.0	6.6	7.1	6.6
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	1	1	1	1	1	1	1	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			150	0	0
Storage Lanes	1			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor						
Frt				0.850	0.995	
Flt Protected	0.950				0.954	
Satd. Flow (prot)	1770	3539	3539	1583	1768	0
Flt Permitted	0.950				0.954	
Satd. Flow (perm)	1770	3539	3539	1583	1768	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		350	935		1177	
Travel Time (s)		8.0	21.3		26.8	

Intersection Summary	
Area Type:	Other

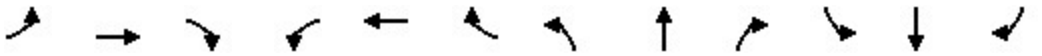
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	585	612	131	114	5
Future Vol, veh/h	8	585	612	131	114	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	636	665	142	124	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	808	0	-	0	1001	333
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	335	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	813	-	-	-	240	663
Stage 1	-	-	-	-	473	-
Stage 2	-	-	-	-	696	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	813	-	-	-	237	663
Mov Cap-2 Maneuver	-	-	-	-	237	-
Stage 1	-	-	-	-	468	-
Stage 2	-	-	-	-	696	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.13	0	35.37
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	813	-	-	-	244
HCM Lane V/C Ratio	0.011	-	-	-	0.531
HCM Control Delay (s/veh)	9.5	-	-	-	35.4
HCM Lane LOS	A	-	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	2.8



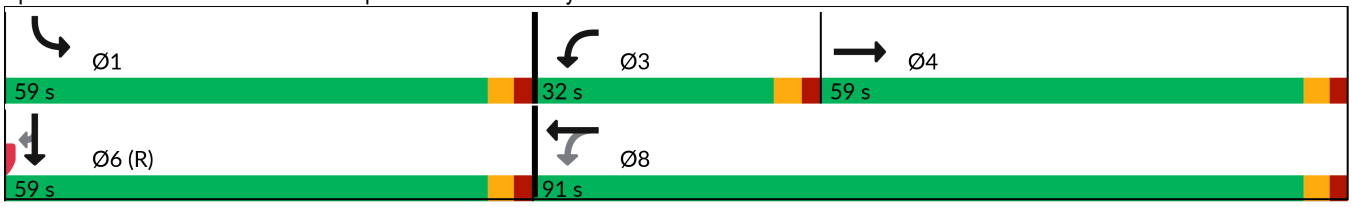
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		0	375		175	0		175
Storage Lanes	1		1	1		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor												
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.953	
Satd. Flow (prot)	0	5085	1583	1770	3539	0	0	0	0	3221	1615	1583
Flt Permitted				0.073						0.950	0.953	
Satd. Flow (perm)	0	5085	1583	136	3539	0	0	0	0	3221	1615	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			187									125
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		819			253			493			625	
Travel Time (s)		18.6			5.8			11.2			14.2	

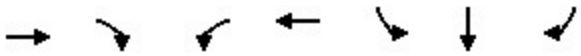
Intersection Summary	
Area Type:	Other

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1221	317	334	867	1181	5	385
Future Volume (vph)	1221	317	334	867	1181	5	385
Turn Type	NA	Free	pm+pt	NA	Prot	NA	Perm
Protected Phases	4		3	8	1	6	
Permitted Phases		Free	8				6
Detector Phase	4		3	8	1	6	6
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		10.0	22.5	10.0	22.5	22.5
Total Split (s)	59.0		32.0	91.0	59.0	59.0	59.0
Total Split (%)	39.3%		21.3%	60.7%	39.3%	39.3%	39.3%
Yellow Time (s)	3.0		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
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	None		None	None	None	C-Max	C-Max
Act Effct Green (s)	49.7	150.0	81.7	81.7	58.3	58.3	58.3
Actuated g/C Ratio	0.33	1.00	0.54	0.54	0.39	0.39	0.39
v/c Ratio	0.79	0.22	0.99	0.49	0.69	0.68	0.60
Control Delay (s/veh)	48.9	0.3	72.5	19.0	42.5	46.0	30.1
Queue Delay	2.1	0.0	40.5	16.6	41.2	44.8	0.0
Total Delay (s/veh)	51.1	0.3	113.0	35.6	83.7	90.8	30.1
LOS	D	A	F	D	F	F	C
Approach Delay (s/veh)	40.6			57.1		72.3	
Approach LOS	D			E		E	

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 56.8	Intersection LOS: E
Intersection Capacity Utilization 121.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 7: I-25 SB Ramp & Plum Creek Pkwy.

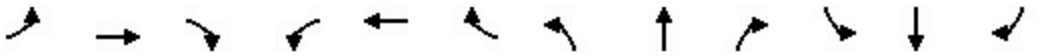




Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1327	345	363	942	860	429	418
v/c Ratio	0.79	0.22	0.99	0.49	0.69	0.68	0.60
Control Delay (s/veh)	48.9	0.3	72.5	19.0	42.5	46.0	30.1
Queue Delay	2.1	0.0	40.5	16.6	41.2	44.8	0.0
Total Delay (s/veh)	51.1	0.3	113.0	35.6	83.7	90.8	30.1
Queue Length 50th (ft)	425	0	293	190	389	387	233
Queue Length 95th (ft)	468	0	m289	m174	487	551	366
Internal Link Dist (ft)	739			173		545	
Turn Bay Length (ft)							175
Base Capacity (vph)	1830	1583	368	2029	1251	627	691
Starvation Cap Reductn	0	0	135	1090	0	0	0
Spillback Cap Reductn	347	0	0	0	452	227	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.22	1.56	1.00	1.08	1.07	0.60

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1221	317	334	867	0	0	0	0	1181	5	385
Future Volume (veh/h)	0	1221	317	334	867	0	0	0	0	1181	5	385
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1327	0	363	942	0				1288	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1592		382	1835	0				2228	0	
Arrive On Green	0.00	0.31	0.00	0.23	0.69	0.00				0.42	0.00	0.00
Sat Flow, veh/h	0	5274	1585	1781	3647	0				5344	0	1585
Grp Volume(v), veh/h	0	1327	0	363	942	0				1288	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1585	1781	1777	0				1781	0	1585
Q Serve(g_s), s	0.0	36.2	0.0	23.5	19.2	0.0				27.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	36.2	0.0	23.5	19.2	0.0				27.8	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1592		382	1835	0				2228	0	
V/C Ratio(X)	0.00	0.83		0.95	0.51	0.00				0.58	0.00	
Avail Cap(c_a), veh/h	0	1838		398	2037	0				2228	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.09	0.09	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	48.0	0.0	38.1	14.4	0.0				33.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.1	0.0	5.6	0.0	0.0				0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.9	0.0	13.5	6.7	0.0				12.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	51.1	0.0	43.7	14.4	0.0				34.0	0.0	0.0
LnGrp LOS		D		D	B					C		
Approach Vol, veh/h		1327			1305						1288	
Approach Delay, s/veh		51.1			22.5						34.0	
Approach LOS		D			C						C	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		30.7	51.8		67.5		82.5					
Change Period (Y+Rc), s		5.0	5.0		5.0		5.0					
Max Green Setting (Gmax), s		27.0	54.0		54.0		86.0					
Max Q Clear Time (g_c+I1), s		25.5	38.2		29.8		21.2					
Green Ext Time (p_c), s		0.2	8.5		5.8		8.8					

Intersection Summary	
HCM 7th Control Delay, s/veh	36.0
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

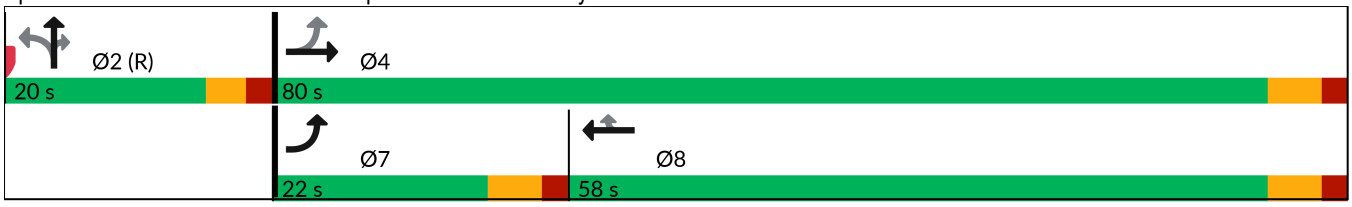
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.939	0.850		0.986	0.850			
Flt Protected	0.950						0.950	0.958				
Satd. Flow (prot)	3433	5085	0	0	3183	1441	1681	1601	1504	0	0	0
Flt Permitted	0.068						0.950	0.958				
Satd. Flow (perm)	246	5085	0	0	3183	1441	1681	1601	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					217	526		4	98			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		592			541			529			558	
Travel Time (s)		13.5			12.3			12.0			12.7	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	492	1870	918	1350	295	4	149
Future Volume (vph)	492	1870	918	1350	295	4	149
Turn Type	pm+pt	NA	NA	Perm	Perm	NA	Perm
Protected Phases	7	4	8			2	
Permitted Phases	4			8	2		2
Detector Phase	7	4	8	8	2	2	2
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.0	80.0	58.0	58.0	20.0	20.0	20.0
Total Split (%)	22.0%	80.0%	58.0%	58.0%	20.0%	20.0%	20.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	74.0	74.0	52.4	52.4	15.0	15.0	15.0
Actuated g/C Ratio	0.74	0.74	0.52	0.52	0.15	0.15	0.15
v/c Ratio	0.79	0.54	0.95	0.77	0.67	0.70	0.47
Control Delay (s/veh)	33.3	6.3	33.4	12.0	54.7	56.3	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.3	6.3	33.4	12.0	54.7	56.3	20.4
LOS	C	A	C	B	D	E	C
Approach Delay (s/veh)		11.9	26.6			45.0	
Approach LOS		B	C			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 21.4	Intersection LOS: C
Intersection Capacity Utilization 93.7%	ICU Level of Service F
Analysis Period (min) 15	

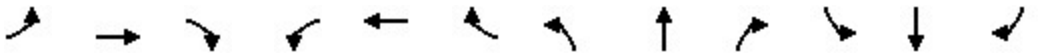
Splits and Phases: 8: I-25 NB Ramps & Plum Creek Pkwy.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	535	2033	1687	778	170	171	146
v/c Ratio	0.79	0.54	0.95	0.77	0.67	0.70	0.47
Control Delay (s/veh)	33.3	6.3	33.4	12.0	54.7	56.3	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.3	6.3	33.4	12.0	54.7	56.3	20.4
Queue Length 50th (ft)	116	172	491	124	109	112	28
Queue Length 95th (ft)	176	202	#697	325	#201	#215	91
Internal Link Dist (ft)		512	461			449	
Turn Bay Length (ft)							150
Base Capacity (vph)	691	3762	1771	1005	252	243	308
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.54	0.95	0.77	0.67	0.70	0.47

Intersection Summary

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



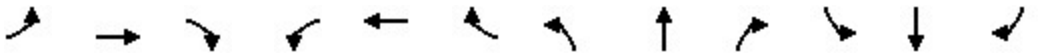
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	492	1870	0	0	918	1350	295	4	149	0	0	0
Future Volume (veh/h)	492	1870	0	0	918	1350	295	4	149	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	535	2033	0	0	998	1467	373	0	109			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	613	3655	0	0	973	1648	621	0	276			
Arrive On Green	0.14	0.72	0.00	0.00	0.52	0.52	0.17	0.00	0.17			
Sat Flow, veh/h	3456	5274	0	0	1870	3170	3563	0	1585			
Grp Volume(v), veh/h	535	2033	0	0	998	1467	373	0	109			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	10.9	18.8	0.0	0.0	52.0	41.3	9.7	0.0	6.1			
Cycle Q Clear(g_c), s	10.9	18.8	0.0	0.0	52.0	41.3	9.7	0.0	6.1			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	613	3655	0	0	973	1648	621	0	276			
V/C Ratio(X)	0.87	0.56	0.00	0.00	1.03	0.89	0.60	0.00	0.39			
Avail Cap(c_a), veh/h	697	3779	0	0	973	1648	621	0	276			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	31.9	6.7	0.0	0.0	24.0	21.4	38.1	0.0	36.6			
Incr Delay (d2), s/veh	10.7	0.2	0.0	0.0	35.7	6.5	4.3	0.0	4.2			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.2	5.7	0.0	0.0	30.8	15.7	4.5	0.0	2.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.6	6.9	0.0	0.0	59.7	27.9	42.4	0.0	40.8			
LnGrp LOS	D	A			F	C	D		D			
Approach Vol, veh/h		2568			2465			482				
Approach Delay, s/veh		14.3			40.8			42.0				
Approach LOS		B			D			D				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		22.4		77.6			19.6	58.0				
Change Period (Y+Rc), s		5.0		6.0			6.0	6.0				
Max Green Setting (Gmax), s		15.0		74.0			16.0	52.0				
Max Q Clear Time (g_c+I1), s		11.7		20.8			12.9	54.0				
Green Ext Time (p_c), s		0.6		28.6			0.7	0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh		28.6										
HCM 7th LOS		C										

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



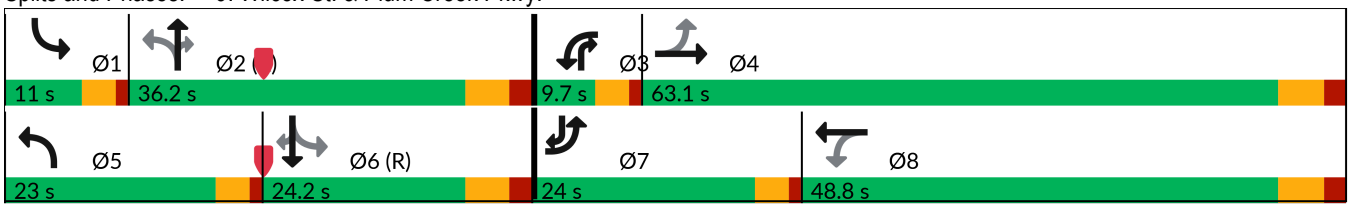
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	225		0	225		250	175		200
Storage Lanes	1		1	1		0	2		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.985				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	5009	0	3433	1863	1583	1770	1863	1583
Flt Permitted	0.085			0.093			0.462			0.637		
Satd. Flow (perm)	158	3539	1583	173	5009	0	1670	1863	1583	1187	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			227		18				100			100
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			907			521			491	
Travel Time (s)		16.1			20.6			11.8			11.2	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	343	1549	169	83	1221	665	176	74	221	132	328
Future Volume (vph)	343	1549	169	83	1221	665	176	74	221	132	328
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	2	3	1	6	7
Permitted Phases	4		Free	8		2		2	6		6
Detector Phase	7	4		3	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0		9.5	31.0	9.5	36.0	9.5	9.5	34.0	9.5
Total Split (s)	24.0	63.1		9.7	48.8	23.0	36.2	9.7	11.0	24.2	24.0
Total Split (%)	20.0%	52.6%		8.1%	40.7%	19.2%	30.2%	8.1%	9.2%	20.2%	20.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	3.0	4.0	3.0	3.0	4.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0	1.0	2.0	1.0	1.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0		4.0	6.0	4.0	6.0	4.0	4.0	6.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	68.8	57.1	120.0	50.5	42.8	43.2	30.2	41.9	27.2	18.2	44.2
Actuated g/C Ratio	0.57	0.48	1.00	0.42	0.36	0.36	0.25	0.35	0.23	0.15	0.37
v/c Ratio	1.04	1.00	0.12	0.61	0.82	0.82	0.41	0.13	0.79	0.51	0.55
Control Delay (s/veh)	92.6	53.8	0.1	35.8	39.4	40.6	40.6	3.6	55.7	53.8	24.9
Queue Delay	0.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.6	72.6	0.1	35.8	39.4	40.6	40.6	3.6	55.7	53.8	24.9
LOS	F	E	A	D	D	D	D	A	E	D	C
Approach Delay (s/veh)		70.0			39.2		37.6			40.5	
Approach LOS		E			D		D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay (s/veh): 51.5	Intersection LOS: D
Intersection Capacity Utilization 90.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 9: Wilcox St. & Plum Creek Pkwy.

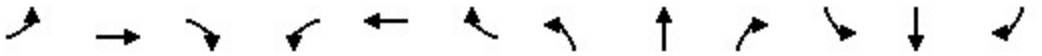


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	373	1684	184	90	1478	723	191	80	240	143	357
v/c Ratio	1.04	1.00	0.12	0.61	0.82	0.82	0.41	0.13	0.79	0.51	0.55
Control Delay (s/veh)	92.6	53.8	0.1	35.8	39.4	40.6	40.6	3.6	55.7	53.8	24.9
Queue Delay	0.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.6	72.6	0.1	35.8	39.4	40.6	40.6	3.6	55.7	53.8	24.9
Queue Length 50th (ft)	~259	~668	0	30	374	232	124	0	137	103	155
Queue Length 95th (ft)	#454	#854	0	#80	437	294	195	23	#246	171	253
Internal Link Dist (ft)		629			827		441			411	
Turn Bay Length (ft)	325			225		225		250	175		200
Base Capacity (vph)	359	1683	1583	148	1798	880	468	617	303	282	646
Starvation Cap Reductn	0	90	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	1.04	1.06	0.12	0.61	0.82	0.82	0.41	0.13	0.79	0.51	0.55

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)	343	1549	169	83	1221	139	665	176	74	221	132	328
Future Volume (veh/h)	343	1549	169	83	1221	139	665	176	74	221	132	328
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	373	1684	0	90	1327	151	723	191	80	240	143	357
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	1691		143	1652	188	812	473	474	334	286	507
Arrive On Green	0.17	0.48	0.00	0.05	0.36	0.36	0.16	0.25	0.25	0.06	0.15	0.15
Sat Flow, veh/h	1781	3554	1585	1781	4650	529	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	373	1684	0	90	971	507	723	191	80	240	143	357
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1702	1775	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	18.4	56.7	0.0	3.8	30.9	30.9	19.0	10.2	4.5	7.0	8.4	18.4
Cycle Q Clear(g_c), s	18.4	56.7	0.0	3.8	30.9	30.9	19.0	10.2	4.5	7.0	8.4	18.4
Prop In Lane	1.00		1.00	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	1691		143	1209	631	812	473	474	334	286	507
V/C Ratio(X)	0.95	1.00		0.63	0.80	0.80	0.89	0.40	0.17	0.72	0.50	0.70
Avail Cap(c_a), veh/h	392	1691		146	1214	633	812	473	474	334	286	507
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)	0.29	0.29	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	31.3	0.0	30.2	34.9	34.9	36.4	37.3	31.0	44.4	46.6	35.8
Incr Delay (d2), s/veh	14.6	10.8	0.0	8.1	4.0	7.4	12.0	2.5	0.8	7.3	6.1	8.0
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	12.5	25.9	0.0	1.9	13.3	14.5	10.3	5.0	1.8	4.0	4.4	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.9	42.2	0.0	38.3	38.9	42.3	48.4	39.8	31.8	51.7	52.7	43.8
LnGrp LOS	D	D		D	D	D	D	D	C	D	D	D
Approach Vol, veh/h		2057			1568			994			740	
Approach Delay, s/veh		43.0			40.0			45.4			48.1	
Approach LOS		D			D			D			D	

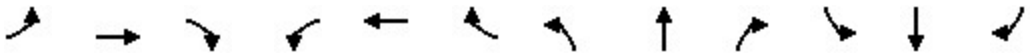
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	36.4	9.5	63.1	23.0	24.4	24.0	48.6
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	7.0	30.2	5.7	57.1	19.0	18.2	20.0	42.8
Max Q Clear Time (g_c+I1), s	9.0	12.2	5.8	58.7	21.0	20.4	20.4	32.9
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.0	0.0	0.0	6.5

Intersection Summary	
HCM 7th Control Delay, s/veh	43.3
HCM 7th LOS	D

Notes

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

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



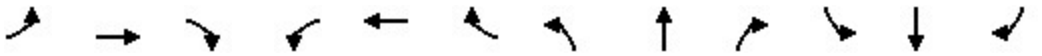
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.943									0.933	
Flt Protected		0.972						0.984				
Satd. Flow (prot)	0	1707	0	0	1863	0	0	3483	0	0	3302	0
Flt Permitted		0.972						0.984				
Satd. Flow (perm)	0	1707	0	0	1863	0	0	3483	0	0	3302	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		632			891			763			760	
Travel Time (s)		14.4			20.3			17.3			17.3	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	3.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	117	0	227	145
Demand Flow Rate, veh/h	119	0	232	148
Vehicles Circulating, veh/h	82	301	69	78
Vehicles Exiting, veh/h	144	0	132	223
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.5	0.0	3.5	3.3
Approach LOS	A	-	A	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.473	0.527
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	119	0	109	123	70	78
Cap Entry Lane, veh/h	1324	1099	1267	1339	1256	1329
Entry HV Adj Factor	0.983	1.000	0.979	0.978	0.976	0.988
Flow Entry, veh/h	117	0	107	120	68	77
Cap Entry, veh/h	1302	1099	1240	1310	1226	1313
V/C Ratio	0.090	0.000	0.086	0.092	0.056	0.059
Control Delay, s/veh	3.5	3.3	3.6	3.5	3.4	3.2
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0	0



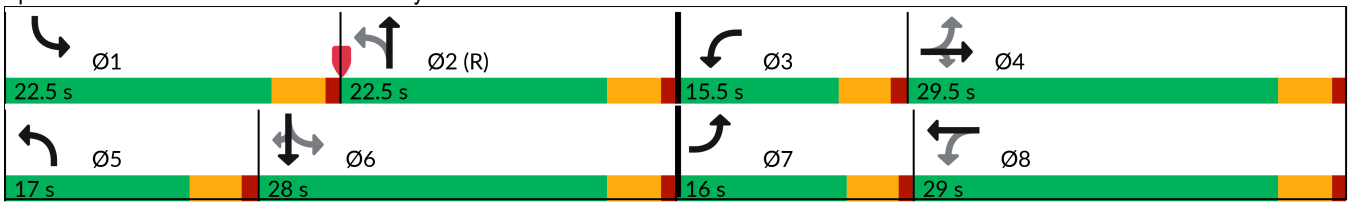
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		250	250		0	250		150	250		150
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.261			0.143			0.692			0.558		
Satd. Flow (perm)	486	3539	1583	517	3539	1583	1289	3539	1583	2016	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182			329			356			127
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		881			659			431			594	
Travel Time (s)		20.0			15.0			9.8			13.5	

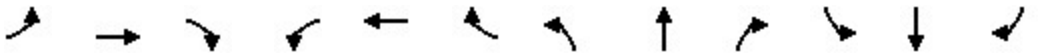
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	728	89	312	637	303	82	70	437	373	88	114
Future Volume (vph)	93	728	89	312	637	303	82	70	437	373	88	114
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		Free	2		Free	6		6
Detector Phase	7	4	4	3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		22.5	22.5		22.5	22.5	22.5
Total Split (s)	16.0	29.5	29.5	15.5	29.0		17.0	22.5		22.5	28.0	28.0
Total Split (%)	17.8%	32.8%	32.8%	17.2%	32.2%		18.9%	25.0%		25.0%	31.1%	31.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		Max	C-Max		Max	Max	Max
Act Effct Green (s)	32.5	24.0	24.0	36.5	28.0	90.0	32.1	18.0	90.0	42.1	23.5	23.5
Actuated g/C Ratio	0.36	0.27	0.27	0.41	0.31	1.00	0.36	0.20	1.00	0.47	0.26	0.26
v/c Ratio	0.34	0.84	0.17	0.62	0.63	0.21	0.17	0.11	0.30	0.32	0.10	0.24
Control Delay (s/veh)	18.3	40.2	0.7	22.2	30.3	0.3	15.7	30.0	0.5	15.7	25.7	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.3	40.2	0.7	22.2	30.3	0.3	15.7	30.0	0.5	15.7	25.7	6.2
LOS	B	D	A	C	C	A	B	C	A	B	C	A
Approach Delay (s/veh)		34.1			21.0			6.1			15.3	
Approach LOS		C			C			A			B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 21.0	Intersection LOS: C
Intersection Capacity Utilization 57.6%	ICU Level of Service B
Analysis Period (min) 15	

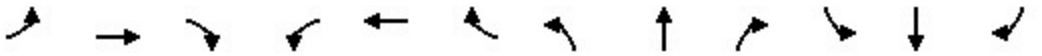
Splits and Phases: 11: Plum Creek Pkwy. & Prairie Hawk Dr.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	101	791	97	339	692	329	89	76	475	405	96	124
v/c Ratio	0.34	0.84	0.17	0.62	0.63	0.21	0.17	0.11	0.30	0.32	0.10	0.24
Control Delay (s/veh)	18.3	40.2	0.7	22.2	30.3	0.3	15.7	30.0	0.5	15.7	25.7	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.3	40.2	0.7	22.2	30.3	0.3	15.7	30.0	0.5	15.7	25.7	6.2
Queue Length 50th (ft)	32	219	0	58	177	0	28	18	0	71	21	0
Queue Length 95th (ft)	62	290	0	91	248	0	56	37	0	103	41	40
Internal Link Dist (ft)		801			579			351			514	
Turn Bay Length (ft)	250		250	250			250		150	250		150
Base Capacity (vph)	355	984	571	567	1099	1583	535	707	1583	1253	924	507
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.80	0.17	0.60	0.63	0.21	0.17	0.11	0.30	0.32	0.10	0.24

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	728	89	312	637	303	82	70	437	373	88	114
Future Volume (veh/h)	93	728	89	312	637	303	82	70	437	373	88	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	791	97	339	692	0	89	76	0	405	96	124
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	913	407	544	1042		615	879		1444	1096	489
Arrive On Green	0.06	0.26	0.26	0.10	0.29	0.00	0.14	0.25	0.00	0.20	0.31	0.31
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	101	791	97	339	692	0	89	76	0	405	96	124
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	3.7	19.1	4.4	6.3	15.4	0.0	2.9	1.5	0.0	6.3	1.7	5.3
Cycle Q Clear(g_c), s	3.7	19.1	4.4	6.3	15.4	0.0	2.9	1.5	0.0	6.3	1.7	5.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	278	913	407	544	1042		615	879		1444	1096	489
V/C Ratio(X)	0.36	0.87	0.24	0.62	0.66		0.14	0.09		0.28	0.09	0.25
Avail Cap(c_a), veh/h	400	987	440	636	1042		615	879		1444	1096	489
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.2	32.0	26.5	23.2	27.9	0.0	17.8	26.0	0.0	14.4	22.1	23.3
Incr Delay (d2), s/veh	0.8	7.8	0.3	1.5	1.6	0.0	0.5	0.2	0.0	0.5	0.2	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	9.0	1.7	2.6	6.6	0.0	1.2	0.6	0.0	2.5	0.7	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.0	39.7	26.8	24.7	29.5	0.0	18.3	26.2	0.0	14.9	22.3	24.6
LnGrp LOS	C	D	C	C	C		B	C		B	C	C
Approach Vol, veh/h		989			1031			165			625	
Approach Delay, s/veh		36.8			27.9			22.0			18.0	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	26.8	13.1	27.6	17.0	32.3	9.8	30.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	11.0	25.0	12.5	23.5	11.5	24.5
Max Q Clear Time (g_c+I1), s	8.3	3.5	8.3	21.1	4.9	7.3	5.7	17.4
Green Ext Time (p_c), s	1.1	0.3	0.3	2.0	0.1	0.8	0.1	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	28.5
HCM 7th LOS	C

Notes

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

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor						
Frt		0.865		0.850		
Flt Protected					0.950	
Satd. Flow (prot)	0	1611	3539	1583	1770	3539
Flt Permitted					0.950	
Satd. Flow (perm)	0	1611	3539	1583	1770	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	1217		594			763
Travel Time (s)	27.7		13.5			17.3

Intersection Summary	
Area Type:	Other

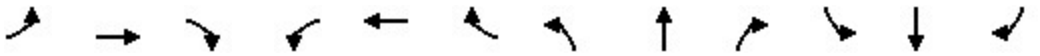
Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	58	397	69	23	574
Future Vol, veh/h	0	58	397	69	23	574
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	63	432	75	25	624

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	216	0	-	432	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	789	-	0	1124	-
Stage 1	0	-	-	0	-	-
Stage 2	0	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	789	-	-	1124	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.96	0	0.32
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBL	SBT
Capacity (veh/h)	-	789	1124	-
HCM Lane V/C Ratio	-	0.08	0.022	-
HCM Control Delay (s/veh)	-	10	8.3	-
HCM Lane LOS	-	A	A	-
HCM 95th %tile Q(veh)	-	0.3	0.1	-



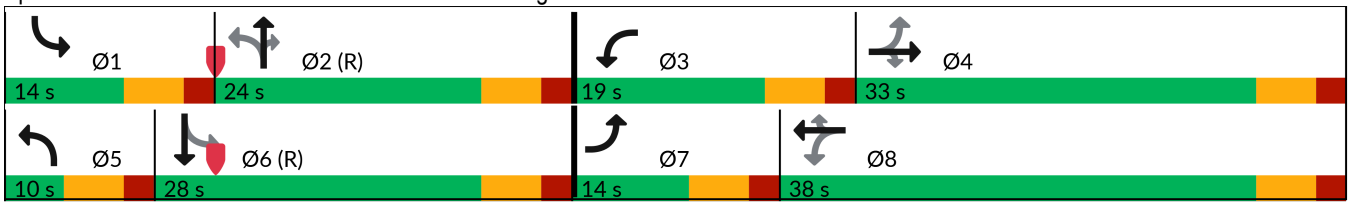
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		150	125		100	225		150	350		0
Storage Lanes	1		1	1		1	1		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	3440	0
Flt Permitted	0.585			0.228			0.575			0.502		
Satd. Flow (perm)	1090	3539	1583	425	3539	1583	1071	3539	1583	1814	3440	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182			228			306		29	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		574			591			422			635	
Travel Time (s)		13.0			13.4			9.6			14.4	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	106	517	58	288	248	210	21	166	308	270	216
Future Volume (vph)	106	517	58	288	248	210	21	166	308	270	216
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases	4		4	8		8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0
Minimum Split (s)	11.0	33.0	33.0	11.0	37.0	37.0	10.0	29.0	29.0	10.0	29.0
Total Split (s)	14.0	33.0	33.0	19.0	38.0	38.0	10.0	24.0	24.0	14.0	28.0
Total Split (%)	15.6%	36.7%	36.7%	21.1%	42.2%	42.2%	11.1%	26.7%	26.7%	15.6%	31.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
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	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	28.3	20.6	20.6	38.6	28.2	28.2	28.9	23.2	23.2	38.0	33.9
Actuated g/C Ratio	0.31	0.23	0.23	0.43	0.31	0.31	0.32	0.26	0.26	0.42	0.38
v/c Ratio	0.29	0.69	0.13	0.84	0.24	0.35	0.06	0.20	0.53	0.31	0.22
Control Delay (s/veh)	16.8	36.1	0.5	37.8	23.7	4.7	18.1	28.6	8.8	18.2	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)	16.8	36.1	0.5	37.8	23.7	4.7	18.1	28.6	8.8	18.2	20.2
LOS	B	D	A	D	C	A	B	C	A	B	C
Approach Delay (s/veh)		30.1			23.8			15.8			19.2
Approach LOS		C			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 22.9	Intersection LOS: C
Intersection Capacity Utilization 62.5%	ICU Level of Service B
Analysis Period (min) 15	

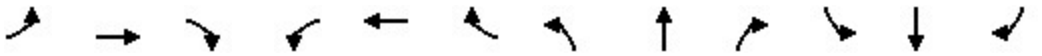
Splits and Phases: 1: Prairie Hawk Dr. & Wolfensberger Rd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	115	562	63	313	270	228	23	180	335	293	289
v/c Ratio	0.29	0.69	0.13	0.84	0.24	0.35	0.06	0.20	0.53	0.31	0.22
Control Delay (s/veh)	16.8	36.1	0.5	37.8	23.7	4.7	18.1	28.6	8.8	18.2	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)	16.8	36.1	0.5	37.8	23.7	4.7	18.1	28.6	8.8	18.2	20.2
Queue Length 50th (ft)	38	155	0	118	62	0	7	42	13	52	46
Queue Length 95th (ft)	62	193	0	#201	86	47	25	75	91	89	100
Internal Link Dist (ft)		494			511			342			555
Turn Bay Length (ft)	325		150	125		100	225		150	350	
Base Capacity (vph)	407	1061	602	376	1264	711	387	910	634	936	1314
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	0.28	0.53	0.10	0.83	0.21	0.32	0.06	0.20	0.53	0.31	0.22

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)	106	517	58	288	248	210	21	166	308	270	216	50
Future Volume (veh/h)	106	517	58	288	248	210	21	166	308	270	216	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	562	63	313	270	228	23	180	335	293	235	54
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	387	731	326	383	1001	446	446	1080	482	892	1048	236
Arrive On Green	0.07	0.21	0.21	0.14	0.28	0.28	0.02	0.30	0.30	0.08	0.36	0.36
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	3456	2881	649
Grp Volume(v), veh/h	115	562	63	313	270	228	23	180	335	293	143	146
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1728	1777	1753
Q Serve(g_s), s	4.5	13.4	3.0	12.0	5.3	10.9	0.8	3.3	16.8	5.0	5.0	5.2
Cycle Q Clear(g_c), s	4.5	13.4	3.0	12.0	5.3	10.9	0.8	3.3	16.8	5.0	5.0	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	387	731	326	383	1001	446	446	1080	482	892	646	638
V/C Ratio(X)	0.30	0.77	0.19	0.82	0.27	0.51	0.05	0.17	0.70	0.33	0.22	0.23
Avail Cap(c_a), veh/h	423	1066	476	383	1264	564	491	1080	482	926	646	638
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	1.00	1.00
Uniform Delay (d), s/veh	25.3	33.7	29.6	23.5	25.1	27.1	20.9	23.0	27.6	17.9	19.8	19.9
Incr Delay (d2), s/veh	0.4	2.1	0.3	13.1	0.1	0.9	0.0	0.3	8.1	0.2	0.8	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.9	1.1	6.2	2.2	4.1	0.3	1.4	7.2	2.0	2.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.8	35.8	29.8	36.5	25.3	28.0	20.9	23.3	35.7	18.2	20.6	20.7
LnGrp LOS	C	D	C	D	C	C	C	C	D	B	C	C
Approach Vol, veh/h		740			811			538			582	
Approach Delay, s/veh		33.7			30.4			30.9			19.4	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	33.4	19.0	24.5	7.7	38.7	12.2	31.3
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	8.0	18.0	13.0	27.0	4.0	22.0	8.0	32.0
Max Q Clear Time (g_c+I1), s	7.0	18.8	14.0	15.4	2.8	7.2	6.5	12.9
Green Ext Time (p_c), s	0.1	0.0	0.0	3.1	0.0	1.4	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	29.0
HCM 7th LOS	C

Notes

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

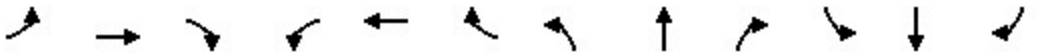
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						0.850
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	0	1863	1863	1583
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	0	1863	1863	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	412			603	542	
Travel Time (s)	9.4			13.7	12.3	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	3.8
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	245	277	591
Demand Flow Rate, veh/h	250	283	602
Vehicles Circulating, veh/h	272	250	1
Vehicles Exiting, veh/h	1	272	532
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.8	6.0	1.9
Approach LOS	A	A	A

Lane	Left	Left	Left	Bypass
Designated Moves	LR	LT	T	R
Assumed Moves	LR	LT	T	
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	
A (Intercept)	1380	1380	1380	
B (Slope)	1.02e-3	1.02e-3	1.02e-3	
Entry Flow, veh/h	250	283	272	330
Cap Entry Lane, veh/h	1046	1069	1378	1938
Entry HV Adj Factor	0.980	0.980	0.980	0.980
Flow Entry, veh/h	245	277	267	324
Cap Entry, veh/h	1025	1048	1351	1900
V/C Ratio	0.239	0.265	0.197	0.171
Control Delay, s/veh	5.8	6.0	4.3	0.0
LOS	A	A	A	A
95th %tile Queue, veh	1	1	1	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.850			0.850						0.941	
Flt Protected	0.950							0.999			0.998	
Satd. Flow (prot)	1770	1583	0	1863	1583	0	0	1861	0	0	1749	0
Flt Permitted	0.950							0.999			0.998	
Satd. Flow (perm)	1770	1583	0	1863	1583	0	0	1861	0	0	1749	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		603			909			1975			245	
Travel Time (s)		13.7			20.7			44.9			5.6	

Intersection Summary	
Area Type:	Other

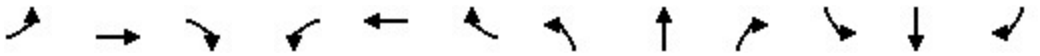
Intersection	
Int Delay, s/veh	10.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	0	1	0	0	11	3	191	0	11	120	101
Future Vol, veh/h	54	0	1	0	0	11	3	191	0	11	120	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	0	1	0	0	12	3	208	0	12	130	110

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	12	0	0	1	0	0	183	130	1	227	124	6
Stage 1	-	-	-	-	-	-	118	118	-	6	6	-
Stage 2	-	-	-	-	-	-	65	12	-	221	118	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1607	-	-	1622	-	-	778	761	1084	728	766	1077
Stage 1	-	-	-	-	-	-	887	798	-	1016	891	-
Stage 2	-	-	-	-	-	-	945	886	-	781	798	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1607	-	-	1622	-	-	558	733	1084	508	738	1077
Mov Cap-2 Maneuver	-	-	-	-	-	-	558	733	-	508	738	-
Stage 1	-	-	-	-	-	-	854	769	-	1016	891	-
Stage 2	-	-	-	-	-	-	725	886	-	549	768	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	7.19	0	11.93	11.17
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	729	1607	-	-	1622	-	-	834
HCM Lane V/C Ratio	0.289	0.037	-	-	-	-	-	0.302
HCM Control Delay (s/veh)	11.9	7.3	-	-	0	-	-	11.2
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.2	0.1	-	-	0	-	-	1.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt					0.996			0.993			0.995	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1863	0	1770	1855	0	1863	1850	0	1863	1853	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	1863	0	1770	1855	0	1863	1850	0	1863	1853	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		340			1975			760			832	
Travel Time (s)		7.7			44.9			17.3			18.9	

Intersection Summary	
Area Type:	Other

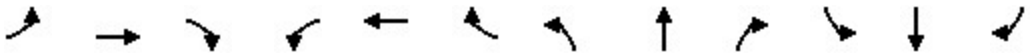
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	15	0	3	32	1	0	175	8	0	223	7
Future Vol, veh/h	3	15	0	3	32	1	0	175	8	0	223	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	0	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	16	0	3	35	1	0	190	9	0	242	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	454	445	246	445	445	195	250	0	0	199	0	0
Stage 1	246	246	-	195	195	-	-	-	-	-	-	-
Stage 2	208	199	-	251	250	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	516	508	793	523	508	847	1316	-	-	1373	-	-
Stage 1	758	703	-	807	740	-	-	-	-	-	-	-
Stage 2	794	736	-	754	700	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	480	508	793	506	508	847	1316	-	-	1373	-	-
Mov Cap-2 Maneuver	480	508	-	506	508	-	-	-	-	-	-	-
Stage 1	758	703	-	807	740	-	-	-	-	-	-	-
Stage 2	756	736	-	736	700	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.36	12.49	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1316	-	-	480	508	506	514	1373	-	-
HCM Lane V/C Ratio	-	-	-	0.007	0.032	0.006	0.07	-	-	-
HCM Control Delay (s/veh)	0	-	-	12.5	12.3	12.2	12.5	0	-	-
HCM Lane LOS	A	-	-	B	B	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	0.2	0	-	-



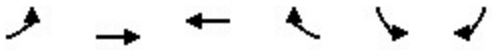
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	250		0	125		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.987			0.977			0.943			0.993	
Flt Protected		0.998			0.993			0.993			0.981	
Satd. Flow (prot)	0	3486	0	0	3434	0	0	3314	0	0	3448	0
Flt Permitted		0.998			0.993			0.993			0.981	
Satd. Flow (perm)	0	3486	0	0	3434	0	0	3314	0	0	3448	0
Link Speed (mph)		40			35			45			45	
Link Distance (ft)		631			610			567			842	
Travel Time (s)		10.8			11.9			8.6			12.8	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	694	532	270	497
Demand Flow Rate, veh/h	707	543	276	507
Vehicles Circulating, veh/h	558	195	841	501
Vehicles Exiting, veh/h	450	922	424	237
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.5	5.3	8.1	7.2
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	0.471	0.529	0.469	0.531
Follow-Up Headway, s	2.667	2.535	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	4.645	4.328
A (Intercept)	1350	1420	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	9.199e-4	8.501e-4
Entry Flow, veh/h	332	375	255	288	130	146	238	269
Cap Entry Lane, veh/h	808	884	1128	1203	623	695	851	928
Entry HV Adj Factor	0.982	0.981	0.981	0.980	0.978	0.982	0.982	0.980
Flow Entry, veh/h	326	368	250	282	127	143	234	264
Cap Entry, veh/h	794	867	1107	1179	609	682	836	909
V/C Ratio	0.411	0.424	0.226	0.239	0.209	0.210	0.280	0.290
Control Delay, s/veh	9.7	9.3	5.3	5.2	8.5	7.7	7.4	7.0
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	2	2	1	1	1	1	1	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			150	0	0
Storage Lanes	1			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor						
Frt				0.850	0.996	
Flt Protected	0.950				0.954	
Satd. Flow (prot)	1770	3539	3539	1583	1770	0
Flt Permitted	0.950				0.954	
Satd. Flow (perm)	1770	3539	3539	1583	1770	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		350	935		1177	
Travel Time (s)		8.0	21.3		26.8	

Intersection Summary	
Area Type:	Other

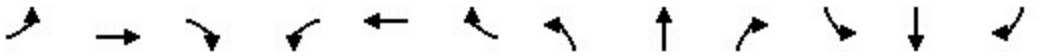
Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	760	448	83	141	5
Future Vol, veh/h	8	760	448	83	141	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	826	487	90	153	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	577	0	-	0	917	243
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	430	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	992	-	-	-	271	757
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	623	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	992	-	-	-	269	757
Mov Cap-2 Maneuver	-	-	-	-	269	-
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	623	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.09	0	34.59
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	992	-	-	-	275
HCM Lane V/C Ratio	0.009	-	-	-	0.578
HCM Control Delay (s/veh)	8.7	-	-	-	34.6
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	3.3



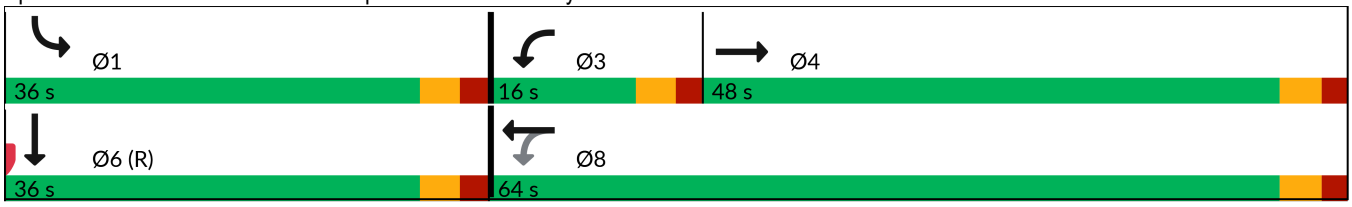
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		0	375		175	0		0
Storage Lanes	1		1	1		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor												
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.953	
Satd. Flow (prot)	0	5085	1583	1770	3539	0	0	0	0	3221	1615	1583
Flt Permitted				0.089						0.950	0.953	
Satd. Flow (perm)	0	5085	1583	166	3539	0	0	0	0	3221	1615	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			307									461
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		848			253			493			625	
Travel Time (s)		19.3			5.8			11.2			14.2	

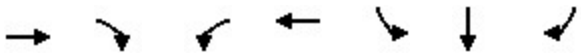
Intersection Summary	
Area Type:	Other

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1347	382	206	979	611	5	502
Future Volume (vph)	1347	382	206	979	611	5	502
Turn Type	NA	Free	pm+pt	NA	Prot	NA	Free
Protected Phases	4		3	8	1	6	
Permitted Phases		Free	8				Free
Detector Phase	4		3	8	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5		10.0	22.5	10.0	22.5	
Total Split (s)	48.0		16.0	64.0	36.0	36.0	
Total Split (%)	48.0%		16.0%	64.0%	36.0%	36.0%	
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	None		None	None	None	C-Max	
Act Effct Green (s)	40.0	100.0	55.9	55.9	34.1	34.1	100.0
Actuated g/C Ratio	0.40	1.00	0.56	0.56	0.34	0.34	1.00
v/c Ratio	0.72	0.26	0.84	0.54	0.41	0.41	0.34
Control Delay (s/veh)	27.3	0.4	48.2	14.8	27.4	29.1	0.6
Queue Delay	0.0	0.0	0.0	38.6	0.0	0.0	0.0
Total Delay (s/veh)	27.3	0.4	48.2	53.4	27.4	29.1	0.6
LOS	C	A	D	D	C	C	A
Approach Delay (s/veh)	21.4			52.5		15.7	
Approach LOS	C			D		B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay (s/veh): 29.0	Intersection LOS: C
Intersection Capacity Utilization 112.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 7: I-25 SB Ramp & Plum Creek Pkwy.

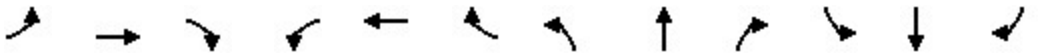




Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1464	415	224	1064	445	224	546
v/c Ratio	0.72	0.26	0.84	0.54	0.41	0.41	0.34
Control Delay (s/veh)	27.3	0.4	48.2	14.8	27.4	29.1	0.6
Queue Delay	0.0	0.0	0.0	38.6	0.0	0.0	0.0
Total Delay (s/veh)	27.3	0.4	48.2	53.4	27.4	29.1	0.6
Queue Length 50th (ft)	274	0	86	203	121	121	0
Queue Length 95th (ft)	319	0	#210	246	173	203	0
Internal Link Dist (ft)	768			173		545	
Turn Bay Length (ft)							
Base Capacity (vph)	2186	1583	269	2088	1098	550	1583
Starvation Cap Reductn	0	0	0	1095	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.26	0.83	1.07	0.41	0.41	0.34

Intersection Summary

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



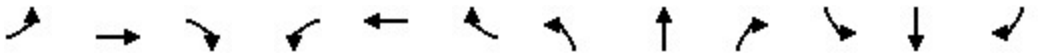
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1347	382	206	979	0	0	0	0	611	5	502
Future Volume (veh/h)	0	1347	382	206	979	0	0	0	0	611	5	502
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1464	0	224	1064	0				668	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1875		283	1821	0				2070	0	
Arrive On Green	0.00	0.37	0.00	0.10	0.51	0.00				0.39	0.00	0.00
Sat Flow, veh/h	0	5274	1585	1781	3647	0				5344	0	1585
Grp Volume(v), veh/h	0	1464	0	224	1064	0				668	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1585	1781	1777	0				1781	0	1585
Q Serve(g_s), s	0.0	25.4	0.0	7.4	20.8	0.0				8.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	25.4	0.0	7.4	20.8	0.0				8.8	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1875		283	1821	0				2070	0	
V/C Ratio(X)	0.00	0.78		0.79	0.58	0.00				0.32	0.00	
Avail Cap(c_a), veh/h	0	2196		309	2097	0				2070	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.26	0.26	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	28.1	0.0	21.8	17.0	0.0				21.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	0.0	3.5	0.1	0.0				0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.3	0.0	3.2	8.1	0.0				3.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	29.7	0.0	25.3	17.0	0.0				21.5	0.0	0.0
LnGrp LOS		C		C	B					C		
Approach Vol, veh/h		1464			1288						668	
Approach Delay, s/veh		29.7			18.5						21.5	
Approach LOS		C			B						C	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		14.5	41.7		43.7		56.3					
Change Period (Y+Rc), s		5.0	5.0		5.0		5.0					
Max Green Setting (Gmax), s		11.0	43.0		31.0		59.0					
Max Q Clear Time (g_c+I1), s		9.4	27.4		10.8		22.8					
Green Ext Time (p_c), s		0.1	9.3		2.6		9.7					

Intersection Summary	
HCM 7th Control Delay, s/veh	23.9
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



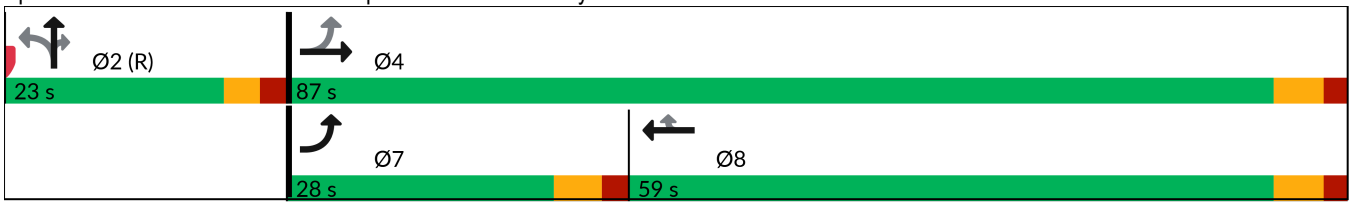
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.930	0.850		0.990	0.850			
Flt Protected	0.950						0.950	0.956				
Satd. Flow (prot)	3433	5085	0	0	3153	1441	1681	1604	1504	0	0	0
Flt Permitted	0.068						0.950	0.956				
Satd. Flow (perm)	246	5085	0	0	3153	1441	1681	1604	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					275	489		3	89			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		469			593			352			368	
Travel Time (s)		10.7			13.5			8.0			8.4	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	679	1324	798	1387	386	3	142
Future Volume (vph)	679	1324	798	1387	386	3	142
Turn Type	pm+pt	NA	NA	Perm	Perm	NA	Perm
Protected Phases	7	4	8			2	
Permitted Phases	4			8	2		2
Detector Phase	7	4	8	8	2	2	2
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	28.0	87.0	59.0	59.0	23.0	23.0	23.0
Total Split (%)	25.5%	79.1%	53.6%	53.6%	20.9%	20.9%	20.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	81.0	81.0	53.0	53.0	18.0	18.0	18.0
Actuated g/C Ratio	0.74	0.74	0.48	0.48	0.16	0.16	0.16
v/c Ratio	0.90	0.38	0.98	0.80	0.79	0.83	0.43
Control Delay (s/veh)	46.2	5.7	40.8	15.2	65.7	70.4	21.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.2	5.7	40.8	15.2	65.7	70.4	21.3
LOS	D	A	D	B	E	E	C
Approach Delay (s/veh)		19.4	32.7			56.8	
Approach LOS		B	C			E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay (s/veh): 29.8	Intersection LOS: C
Intersection Capacity Utilization 103.0%	ICU Level of Service G
Analysis Period (min) 15	

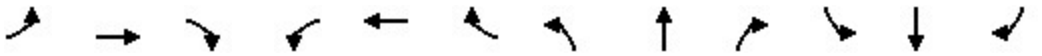
Splits and Phases: 8: I-25 NB Ramps & Plum Creek Pkwy.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	738	1439	1621	754	218	220	139
v/c Ratio	0.90	0.38	0.98	0.80	0.79	0.83	0.43
Control Delay (s/veh)	46.2	5.7	40.8	15.2	65.7	70.4	21.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.2	5.7	40.8	15.2	65.7	70.4	21.3
Queue Length 50th (ft)	209	117	526	169	157	164	32
Queue Length 95th (ft)	#318	138	#726	385	#284	#309	95
Internal Link Dist (ft)		389	513			272	
Turn Bay Length (ft)							
Base Capacity (vph)	818	3744	1661	947	275	264	320
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.38	0.98	0.80	0.79	0.83	0.43

Intersection Summary

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



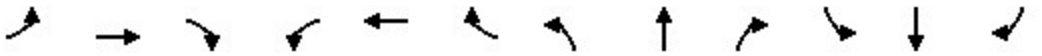
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	679	1324	0	0	798	1387	386	3	142	0	0	0
Future Volume (veh/h)	679	1324	0	0	798	1387	386	3	142	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	738	1439	0	0	867	1508	469	0	104			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	801	3714	0	0	901	1527	615	0	274			
Arrive On Green	0.19	0.73	0.00	0.00	0.48	0.48	0.17	0.00	0.17			
Sat Flow, veh/h	3456	5274	0	0	1870	3170	3563	0	1585			
Grp Volume(v), veh/h	738	1439	0	0	867	1508	469	0	104			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	18.5	11.8	0.0	0.0	49.3	51.7	13.8	0.0	6.4			
Cycle Q Clear(g_c), s	18.5	11.8	0.0	0.0	49.3	51.7	13.8	0.0	6.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	801	3714	0	0	901	1527	615	0	274			
V/C Ratio(X)	0.92	0.39	0.00	0.00	0.96	0.99	0.76	0.00	0.38			
Avail Cap(c_a), veh/h	832	3760	0	0	901	1527	615	0	274			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	35.2	5.7	0.0	0.0	27.5	28.2	43.4	0.0	40.3			
Incr Delay (d2), s/veh	15.2	0.1	0.0	0.0	21.2	20.0	8.7	0.0	4.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	11.3	3.6	0.0	0.0	26.2	22.8	6.8	0.0	2.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.4	5.8	0.0	0.0	48.8	48.1	52.0	0.0	44.3			
LnGrp LOS	D	A			D	D	D		D			
Approach Vol, veh/h		2177			2375			573				
Approach Delay, s/veh		20.9			48.4			50.6				
Approach LOS		C			D			D				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		24.0		86.0			27.0	59.0				
Change Period (Y+Rc), s		5.0		6.0			6.0	6.0				
Max Green Setting (Gmax), s		18.0		81.0			22.0	53.0				
Max Q Clear Time (g_c+I1), s		15.8		13.8			20.5	53.7				
Green Ext Time (p_c), s		0.5		16.7			0.5	0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	37.0
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



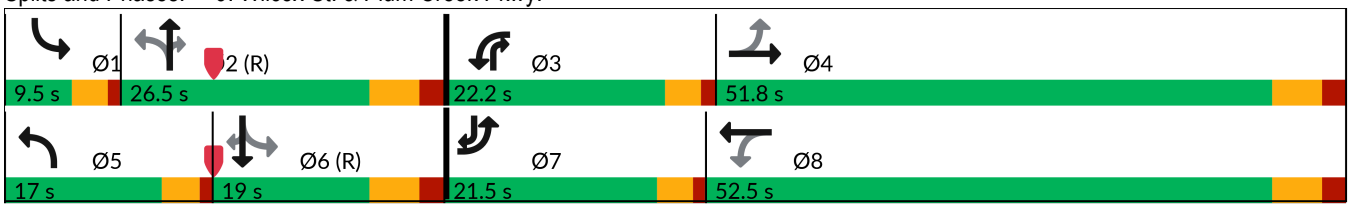
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	225		0	225		250	175		200
Storage Lanes	1		1	1		0	2		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.985				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	5009	0	3433	1863	1583	1770	1863	1583
Flt Permitted	0.080			0.245			0.524			0.665		
Satd. Flow (perm)	149	3539	1583	456	5009	0	1894	1863	1583	1239	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			208		21				69			109
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			907			521			491	
Travel Time (s)		16.1			20.6			11.8			11.2	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	296	956	200	61	1365	573	133	42	78	91	207
Future Volume (vph)	296	956	200	61	1365	573	133	42	78	91	207
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	2	3	1	6	7
Permitted Phases	4		Free	8		2		2	6		6
Detector Phase	7	4		3	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0		9.5	31.0	9.5	36.0	9.5	9.5	34.0	9.5
Total Split (s)	21.5	51.8		22.2	52.5	17.0	26.5	22.2	9.5	19.0	21.5
Total Split (%)	19.5%	47.1%		20.2%	47.7%	15.5%	24.1%	20.2%	8.6%	17.3%	19.5%
Yellow Time (s)	3.0	4.0		3.0	4.0	3.0	4.0	3.0	3.0	4.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0	1.0	2.0	1.0	1.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0		4.0	6.0	4.0	6.0	4.0	4.0	6.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	69.0	57.9	110.0	54.5	45.5	33.0	23.4	36.4	20.9	13.3	36.8
Actuated g/C Ratio	0.63	0.53	1.00	0.50	0.41	0.30	0.21	0.33	0.19	0.12	0.33
v/c Ratio	0.92	0.56	0.14	0.21	0.79	0.82	0.37	0.08	0.32	0.44	0.37
Control Delay (s/veh)	69.3	13.9	0.1	10.4	31.0	44.2	41.8	3.3	34.2	52.0	16.0
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)	69.3	13.9	0.1	10.4	31.0	44.2	41.8	3.3	34.2	52.0	16.0
LOS	E	B	A	B	C	D	D	A	C	D	B
Approach Delay (s/veh)		23.3			30.2		41.5			28.5	
Approach LOS		C			C		D			C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 29.7	Intersection LOS: C
Intersection Capacity Utilization 83.9%	ICU Level of Service E
Analysis Period (min) 15	

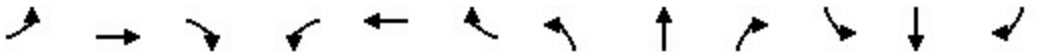
Splits and Phases: 9: Wilcox St. & Plum Creek Pkwy.



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	322	1039	217	66	1648	623	145	46	85	99	225
v/c Ratio	0.92	0.56	0.14	0.21	0.79	0.82	0.37	0.08	0.32	0.44	0.37
Control Delay (s/veh)	69.3	13.9	0.1	10.4	31.0	44.2	41.8	3.3	34.2	52.0	16.0
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)	69.3	13.9	0.1	10.4	31.0	44.2	41.8	3.3	34.2	52.0	16.0
Queue Length 50th (ft)	194	148	0	16	354	196	91	0	45	66	59
Queue Length 95th (ft)	m#349	176	m0	33	415	#275	154	15	85	121	125
Internal Link Dist (ft)		629			827		441			411	
Turn Bay Length (ft)	325			225		225		250	175		200
Base Capacity (vph)	351	1862	1583	489	2129	760	396	724	262	224	601
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	0.92	0.56	0.14	0.13	0.77	0.82	0.37	0.06	0.32	0.44	0.37

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	296	956	200	61	1365	151	573	133	42	78	91	207
Future Volume (veh/h)	296	956	200	61	1365	151	573	133	42	78	91	207
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	322	1039	0	66	1484	164	623	145	46	85	99	225
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	345	1727		345	1796	198	803	454	447	363	327	499
Arrive On Green	0.28	0.97	0.00	0.04	0.38	0.38	0.12	0.24	0.24	0.05	0.17	0.17
Sat Flow, veh/h	1781	3554	1585	1781	4666	515	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	322	1039	0	66	1082	566	623	145	46	85	99	225
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1702	1778	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	13.2	2.2	0.0	2.4	31.5	31.6	13.0	7.0	2.4	4.3	5.1	12.5
Cycle Q Clear(g_c), s	13.2	2.2	0.0	2.4	31.5	31.6	13.0	7.0	2.4	4.3	5.1	12.5
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	345	1727		345	1310	684	803	454	447	363	327	499
V/C Ratio(X)	0.93	0.60		0.19	0.83	0.83	0.78	0.32	0.10	0.23	0.30	0.45
Avail Cap(c_a), veh/h	379	1727		569	1439	751	803	454	447	363	327	499
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.8	0.0	18.9	30.5	30.5	34.0	34.2	29.2	34.7	39.6	30.1
Incr Delay (d2), s/veh	22.1	0.4	0.0	0.3	3.8	7.0	4.8	1.8	0.5	0.3	2.4	2.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.5	0.0	1.0	13.3	14.5	2.2	3.4	1.0	1.9	2.5	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.6	1.2	0.0	19.2	34.3	37.6	38.8	36.0	29.6	35.0	41.9	33.0
LnGrp LOS	D	A		B	C	D	D	D	C	D	D	C
Approach Vol, veh/h		1361			1714			814			409	
Approach Delay, s/veh		11.2			34.8			37.8			35.6	
Approach LOS		B			C			D			D	

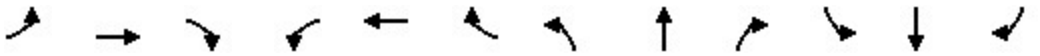
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	32.7	8.3	59.5	17.0	25.2	19.4	48.3
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.5	20.5	18.2	45.8	13.0	13.0	17.5	46.5
Max Q Clear Time (g_c+I1), s	6.3	9.0	4.4	4.2	15.0	14.5	15.2	33.6
Green Ext Time (p_c), s	0.0	0.6	0.1	9.7	0.0	0.0	0.2	8.8

Intersection Summary	
HCM 7th Control Delay, s/veh	28.0
HCM 7th LOS	C

Notes

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

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



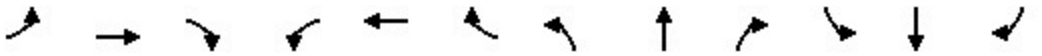
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.923			0.982			0.929			0.958	
Flt Protected		0.979			0.958			0.996			0.988	
Satd. Flow (prot)	0	1683	0	0	1752	0	0	3275	0	0	3350	0
Flt Permitted		0.979			0.958			0.996			0.988	
Satd. Flow (perm)	0	1683	0	0	1752	0	0	3275	0	0	3350	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		632			449			796			760	
Travel Time (s)		14.4			10.2			18.1			17.3	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	5.2
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	174	322	424	245
Demand Flow Rate, veh/h	178	329	433	249
Vehicles Circulating, veh/h	466	303	136	324
Vehicles Exiting, veh/h	107	266	507	309
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.7	6.3	4.5	4.6
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.471	0.529	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	178	329	204	229	117	132
Cap Entry Lane, veh/h	956	1098	1191	1265	1002	1078
Entry HV Adj Factor	0.978	0.979	0.978	0.982	0.983	0.982
Flow Entry, veh/h	174	322	199	225	115	130
Cap Entry, veh/h	934	1074	1164	1242	985	1059
V/C Ratio	0.186	0.300	0.171	0.181	0.117	0.122
Control Delay, s/veh	5.7	6.3	4.6	4.4	4.7	4.5
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	1	1	1	0	0



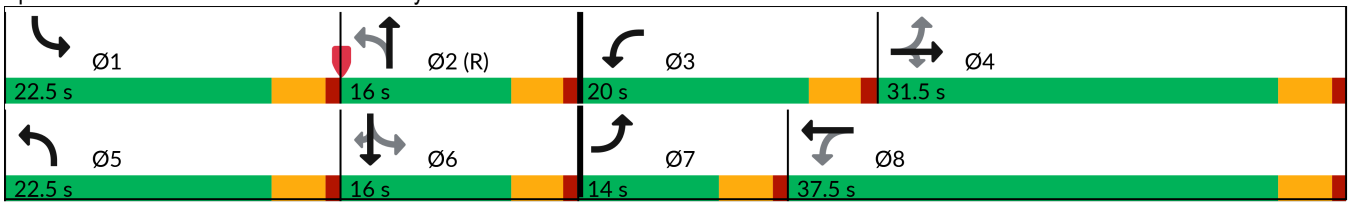
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		250	250		0	250		150	250		150
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.193			0.206			0.692			0.681		
Satd. Flow (perm)	360	3539	1583	744	3539	1583	1289	3539	1583	2461	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182			657			257			182
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		881			632			431			590	
Travel Time (s)		20.0			14.4			9.8			13.4	

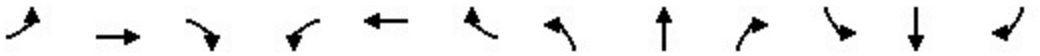
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	222	643	76	225	653	604	107	103	599	487	87	139
Future Volume (vph)	222	643	76	225	653	604	107	103	599	487	87	139
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		Free	2		Free	6		6
Detector Phase	7	4	4	3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.5	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.0	22.5	22.5	9.5	22.5		22.5	17.0		22.5	17.0	17.0
Total Split (s)	14.0	31.5	31.5	20.0	37.5		22.5	16.0		22.5	16.0	16.0
Total Split (%)	15.6%	35.0%	35.0%	22.2%	41.7%		25.0%	17.8%		25.0%	17.8%	17.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		Max	C-Max		Max	Max	Max
Act Effct Green (s)	35.1	25.6	25.6	34.7	25.4	90.0	37.1	11.5	90.0	37.1	11.5	11.5
Actuated g/C Ratio	0.39	0.28	0.28	0.39	0.28	1.00	0.41	0.13	1.00	0.41	0.13	0.13
v/c Ratio	0.83	0.69	0.14	0.43	0.71	0.42	0.17	0.25	0.41	0.41	0.21	0.42
Control Delay (s/veh)	42.2	32.3	0.5	17.1	32.7	0.8	16.6	37.0	0.8	17.7	36.5	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.2	32.3	0.5	17.1	32.7	0.8	16.6	37.0	0.8	17.7	36.5	7.3
LOS	D	C	A	B	C	A	B	D	A	B	D	A
Approach Delay (s/veh)		32.0			17.3			7.5			18.0	
Approach LOS		C			B			A			B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 18.9	Intersection LOS: B
Intersection Capacity Utilization 62.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 11: Plum Creek Pkwy. & Prairie Hawk Dr.

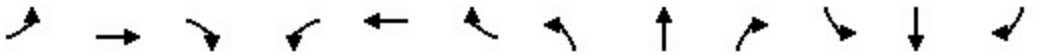




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	241	699	83	245	710	657	116	112	651	529	95	151
v/c Ratio	0.83	0.69	0.14	0.43	0.71	0.42	0.17	0.25	0.41	0.41	0.21	0.42
Control Delay (s/veh)	42.2	32.3	0.5	17.1	32.7	0.8	16.6	37.0	0.8	17.7	36.5	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.2	32.3	0.5	17.1	32.7	0.8	16.6	37.0	0.8	17.7	36.5	7.3
Queue Length 50th (ft)	87	187	0	42	191	0	36	30	0	94	25	0
Queue Length 95th (ft)	#169	223	0	54	222	0	80	56	0	154	48	36
Internal Link Dist (ft)		801			552			351			510	
Turn Bay Length (ft)	250		250	250			250		150	250		150
Base Capacity (vph)	289	1104	619	788	1297	1583	667	452	1583	1290	452	361
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.63	0.13	0.31	0.55	0.42	0.17	0.25	0.41	0.41	0.21	0.42

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)	222	643	76	225	653	604	107	103	599	487	87	139
Future Volume (veh/h)	222	643	76	225	653	604	107	103	599	487	87	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	241	699	83	245	710	0	116	112	0	529	95	151
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	1001	447	575	906		684	851		1384	851	379
Arrive On Green	0.11	0.28	0.28	0.08	0.26	0.00	0.20	0.24	0.00	0.20	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	241	699	83	245	710	0	116	112	0	529	95	151
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.0	15.8	3.6	4.6	16.7	0.0	3.5	2.2	0.0	9.1	1.9	7.2
Cycle Q Clear(g_c), s	9.0	15.8	3.6	4.6	16.7	0.0	3.5	2.2	0.0	9.1	1.9	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	1001	447	575	906		684	851		1384	851	379
V/C Ratio(X)	0.76	0.70	0.19	0.43	0.78		0.17	0.13		0.38	0.11	0.40
Avail Cap(c_a), veh/h	319	1066	476	897	1303		684	851		1384	851	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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	28.9	24.5	22.7	31.2	0.0	15.2	26.9	0.0	16.7	26.7	28.8
Incr Delay (d2), s/veh	9.8	1.9	0.2	0.5	2.0	0.0	0.5	0.3	0.0	0.8	0.3	3.1
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	4.5	6.8	1.3	1.9	7.2	0.0	1.5	1.0	0.0	3.6	0.8	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.4	30.8	24.7	23.2	33.2	0.0	15.7	27.2	0.0	17.5	27.0	31.9
LnGrp LOS	C	C	C	C	C		B	C		B	C	C
Approach Vol, veh/h		1023			955			228			775	
Approach Delay, s/veh		30.9			30.7			21.3			21.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	26.0	11.6	29.9	22.5	26.0	14.0	27.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	11.5	15.5	27.0	18.0	11.5	9.5	33.0
Max Q Clear Time (g_c+I1), s	11.1	4.2	6.6	17.8	5.5	9.2	11.0	18.7
Green Ext Time (p_c), s	1.2	0.3	0.5	3.4	0.2	0.2	0.0	4.2

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.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor						
Frt		0.865		0.850		
Flt Protected					0.950	
Satd. Flow (prot)	0	1611	3539	1583	1770	3539
Flt Permitted					0.950	
Satd. Flow (perm)	0	1611	3539	1583	1770	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	1182		590			796
Travel Time (s)	26.9		13.4			18.1

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	126	823	173	10	757
Future Vol, veh/h	0	126	823	173	10	757
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	137	895	188	11	823

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	447	0	-	895	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	559	-	0	754	-
Stage 1	0	-	-	0	-	-
Stage 2	0	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	559	-	-	754	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.52	0	0.13
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	SBL	SBT
Capacity (veh/h)	-	559	754	-
HCM Lane V/C Ratio	-	0.245	0.014	-
HCM Control Delay (s/veh)	-	13.5	9.8	-
HCM Lane LOS	-	B	A	-
HCM 95th %tile Q(veh)	-	1	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	100	100			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.954	
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1863	1863	1777	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1863	1863	1777	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	459			949	714	
Travel Time (s)	10.4			21.6	16.2	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	0	0	144	80	41
Future Vol, veh/h	50	0	0	144	80	41
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	100	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	0	0	157	87	45

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	266	109	132	0	-	0
Stage 1	109	-	-	-	-	-
Stage 2	157	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	723	944	1454	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	872	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	723	944	1454	-	-	-
Mov Cap-2 Maneuver	723	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	872	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.38	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1454	-	723	-	-	-
HCM Lane V/C Ratio	-	-	0.075	-	-	-
HCM Control Delay (s/veh)	0	-	10.4	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.922	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1863	1770	1863	1717	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1863	1770	1863	1717	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	466			465	949	
Travel Time (s)	10.6			10.6	21.6	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	42	0	144	102	34	46
Future Vol, veh/h	42	0	144	102	34	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	0	157	111	37	50

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	486	62	87	0	-	0
Stage 1	62	-	-	-	-	-
Stage 2	424	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	540	1003	1509	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	660	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	484	1003	1509	-	-	-
Mov Cap-2 Maneuver	484	-	-	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	660	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	13.2	4.48	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1509	-	484	-	-	-
HCM Lane V/C Ratio	0.104	-	0.094	-	-	-
HCM Control Delay (s/veh)	7.7	-	13.2	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.3	-	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	100	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.865	
Flt Protected	0.950			0.950		
Satd. Flow (prot)	1770	1583	0	1770	1611	0
Flt Permitted	0.950			0.950		
Satd. Flow (perm)	1770	1583	0	1770	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	449			351	193	
Travel Time (s)	10.2			8.0	4.4	

Intersection Summary	
Area Type:	Other

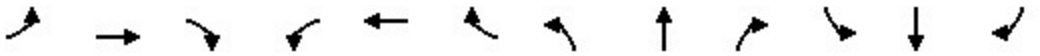
Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	208	211	0	0	85
Future Vol, veh/h	32	208	211	0	0	85
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	100	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	226	229	0	0	92

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	505	46	92	0	-	0
Stage 1	46	-	-	-	-	-
Stage 2	459	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	527	1023	1502	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	446	1023	1502	-	-	-
Mov Cap-2 Maneuver	446	-	-	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	636	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.08	7.83	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1502	-	446	1023	-	-
HCM Lane V/C Ratio	0.153	-	0.078	0.221	-	-
HCM Control Delay (s/veh)	7.8	0	13.7	9.5	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.5	-	0.3	0.8	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt					0.991			0.865			0.910	
Flt Protected		0.981			0.961						0.984	
Satd. Flow (prot)	0	1827	0	0	1774	0	0	1611	0	0	1668	0
Flt Permitted		0.981			0.961						0.984	
Satd. Flow (perm)	0	1827	0	0	1774	0	0	1611	0	0	1668	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		527			459			945			208	
Travel Time (s)		12.0			10.4			21.5			4.7	

Intersection Summary	
Area Type:	Other

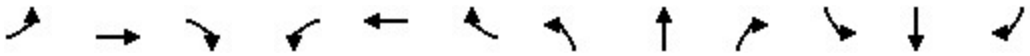
Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	10	0	33	5	3	0	0	32	8	0	17
Future Vol, veh/h	6	10	0	33	5	3	0	0	32	8	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	11	0	36	5	3	0	0	35	9	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	9	0	0	11	0	0	101	104	11	103	103	7
Stage 1	-	-	-	-	-	-	24	24	-	79	79	-
Stage 2	-	-	-	-	-	-	77	80	-	24	24	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1611	-	-	1608	-	-	880	786	1070	878	787	1075
Stage 1	-	-	-	-	-	-	994	875	-	930	829	-
Stage 2	-	-	-	-	-	-	932	828	-	994	875	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1611	-	-	1608	-	-	842	765	1070	827	767	1075
Mov Cap-2 Maneuver	-	-	-	-	-	-	842	765	-	827	767	-
Stage 1	-	-	-	-	-	-	990	872	-	909	811	-
Stage 2	-	-	-	-	-	-	895	810	-	958	872	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.72	5.87	8.48	8.77
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1070	675	-	-	1348	-	-	981
HCM Lane V/C Ratio	0.033	0.004	-	-	0.022	-	-	0.028
HCM Control Delay (s/veh)	8.5	7.2	0	-	7.3	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.867			0.898			0.972			0.888	
Flt Protected	0.950			0.950				0.964			0.995	
Satd. Flow (prot)	1770	1615	0	1770	1673	0	0	1745	0	0	1646	0
Flt Permitted	0.950			0.950				0.964			0.995	
Satd. Flow (perm)	1770	1615	0	1770	1673	0	0	1745	0	0	1646	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		456			466			280			945	
Travel Time (s)		10.4			10.6			6.4			21.5	

Intersection Summary	
Area Type:	Other

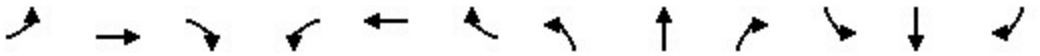
Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	90	12	92	82	41	87	71	5	19	11	9	100
Future Vol, veh/h	90	12	92	82	41	87	71	5	19	11	9	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	98	13	100	89	45	95	77	5	21	12	10	109

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	139	0	0	113	0	0	486	576	63	482	579	92
Stage 1	-	-	-	-	-	-	259	259	-	270	270	-
Stage 2	-	-	-	-	-	-	228	317	-	211	309	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1444	-	-	1476	-	-	491	428	1002	495	426	966
Stage 1	-	-	-	-	-	-	746	694	-	736	686	-
Stage 2	-	-	-	-	-	-	775	654	-	791	660	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1444	-	-	1476	-	-	373	375	1002	419	373	966
Mov Cap-2 Maneuver	-	-	-	-	-	-	373	375	-	419	373	-
Stage 1	-	-	-	-	-	-	695	647	-	691	644	-
Stage 2	-	-	-	-	-	-	636	615	-	716	615	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	3.56	2.97	16.11	10.54
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	427	1444	-	-	1476	-	-	780
HCM Lane V/C Ratio	0.242	0.068	-	-	0.06	-	-	0.167
HCM Control Delay (s/veh)	16.1	7.7	-	-	7.6	-	-	10.5
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.9	0.2	-	-	0.2	-	-	0.6



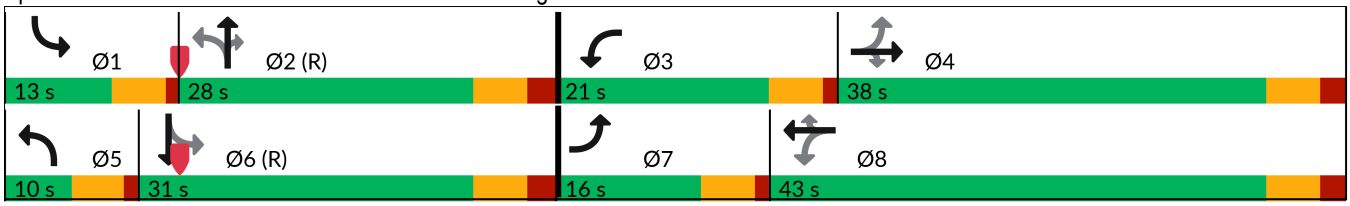
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		100	125		100	225		150	350		0
Storage Lanes	1		1	1		1	1		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor												
Frt			0.850			0.850			0.850		0.938	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	3320	0
Flt Permitted	0.477			0.262			0.550			0.535		
Satd. Flow (perm)	889	3539	1583	488	3539	1583	1025	3539	1583	1933	3320	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			142			264			378		139	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		640			556			458			666	
Travel Time (s)		14.5			12.6			10.4			15.1	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	63	427	45	298	443	243	66	224	397	277	179
Future Volume (vph)	63	427	45	298	443	243	66	224	397	277	179
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases	4		4	8		8	2		2	6	
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	38.0	38.0	10.0	40.0	40.0	10.0	33.0	33.0	10.0	32.0
Total Split (s)	16.0	38.0	38.0	21.0	43.0	43.0	10.0	28.0	28.0	13.0	31.0
Total Split (%)	16.0%	38.0%	38.0%	21.0%	43.0%	43.0%	10.0%	28.0%	28.0%	13.0%	31.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	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	6.0	6.0	5.0	6.0
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	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	27.8	19.1	19.1	40.7	29.1	29.1	41.5	32.8	32.8	47.7	37.7
Actuated g/C Ratio	0.28	0.19	0.19	0.41	0.29	0.29	0.42	0.33	0.33	0.48	0.38
v/c Ratio	0.22	0.69	0.12	0.82	0.47	0.41	0.15	0.21	0.56	0.28	0.25
Control Delay (s/veh)	19.3	42.7	0.6	38.4	31.0	5.4	16.2	26.8	8.6	15.8	14.8
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)	19.3	42.7	0.6	38.4	31.0	5.4	16.2	26.8	8.6	15.8	14.8
LOS	B	D	A	D	C	A	B	C	A	B	B
Approach Delay (s/veh)		36.4			26.9			15.2			15.2
Approach LOS		D			C			B			B

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay (s/veh): 23.4	Intersection LOS: C
Intersection Capacity Utilization 60.7%	ICU Level of Service B
Analysis Period (min) 15	

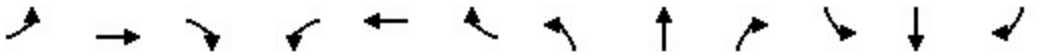
Splits and Phases: 1: Prairie Hawk Dr. & Wolfensberger Rd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	68	464	49	324	482	264	72	243	432	301	334
v/c Ratio	0.22	0.69	0.12	0.82	0.47	0.41	0.15	0.21	0.56	0.28	0.25
Control Delay (s/veh)	19.3	42.7	0.6	38.4	31.0	5.4	16.2	26.8	8.6	15.8	14.8
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)	19.3	42.7	0.6	38.4	31.0	5.4	16.2	26.8	8.6	15.8	14.8
Queue Length 50th (ft)	26	145	0	145	135	0	24	58	24	53	44
Queue Length 95th (ft)	48	186	0	#210	176	56	54	102	125	88	88
Internal Link Dist (ft)		560			476			378			586
Turn Bay Length (ft)	325		100	125		100	225		150	350	
Base Capacity (vph)	373	1132	603	403	1309	752	483	1161	773	1080	1338
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	0.18	0.41	0.08	0.80	0.37	0.35	0.15	0.21	0.56	0.28	0.25

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)	63	427	45	298	443	243	66	224	397	277	179	128
Future Volume (veh/h)	63	427	45	298	443	243	66	224	397	277	179	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	464	49	324	482	264	72	243	432	301	195	139
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	619	276	402	1032	460	500	1322	590	882	816	553
Arrive On Green	0.04	0.17	0.17	0.16	0.29	0.29	0.04	0.37	0.37	0.07	0.40	0.40
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	3456	2027	1373
Grp Volume(v), veh/h	68	464	49	324	482	264	72	243	432	301	170	164
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1728	1777	1623
Q Serve(g_s), s	3.1	12.4	2.6	14.4	11.1	14.2	2.5	4.6	23.5	5.3	6.3	6.7
Cycle Q Clear(g_c), s	3.1	12.4	2.6	14.4	11.1	14.2	2.5	4.6	23.5	5.3	6.3	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.85
Lane Grp Cap(c), veh/h	275	619	276	402	1032	460	500	1322	590	882	715	653
V/C Ratio(X)	0.25	0.75	0.18	0.81	0.47	0.57	0.14	0.18	0.73	0.34	0.24	0.25
Avail Cap(c_a), veh/h	393	1137	507	402	1315	586	512	1322	590	903	715	653
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	1.00	1.00
Uniform Delay (d), s/veh	31.8	39.2	35.2	27.0	29.1	30.2	17.9	21.2	27.1	16.9	19.7	19.9
Incr Delay (d2), s/veh	0.5	1.8	0.3	11.5	0.3	1.1	0.1	0.3	7.8	0.2	0.8	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	5.5	1.0	7.2	4.7	5.5	1.0	2.0	9.9	2.1	2.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.3	41.1	35.5	38.5	29.4	31.3	18.0	21.5	35.0	17.2	20.5	20.8
LnGrp LOS	C	D	D	D	C	C	B	C	C	B	C	C
Approach Vol, veh/h		581			1070			747			635	
Approach Delay, s/veh		39.6			32.7			28.9			19.0	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	43.2	21.0	23.4	9.3	46.2	9.4	35.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	8.0	22.0	16.0	32.0	5.0	25.0	11.0	37.0
Max Q Clear Time (g_c+I1), s	7.3	25.5	16.4	14.4	4.5	8.7	5.1	16.2
Green Ext Time (p_c), s	0.1	0.0	0.0	3.0	0.0	1.8	0.1	4.2

Intersection Summary	
HCM 7th Control Delay, s/veh	30.2
HCM 7th LOS	C

Notes

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

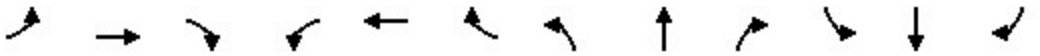
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						0.850
Flt Protected	0.952			0.999		
Satd. Flow (prot)	1773	0	0	1861	1863	1583
Flt Permitted	0.952			0.999		
Satd. Flow (perm)	1773	0	0	1861	1863	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	418			616	519	
Travel Time (s)	9.5			14.0	11.8	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	4.9
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	393	317	590
Demand Flow Rate, veh/h	401	323	602
Vehicles Circulating, veh/h	245	400	4
Vehicles Exiting, veh/h	4	246	719
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.3	7.9	1.7
Approach LOS	A	A	A

Lane	Left	Left	Left	Bypass
Designated Moves	LR	LT	T	R
Assumed Moves	LR	LT	T	
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	
A (Intercept)	1380	1380	1380	
B (Slope)	1.02e-3	1.02e-3	1.02e-3	
Entry Flow, veh/h	401	323	245	357
Cap Entry Lane, veh/h	1075	918	1374	1938
Entry HV Adj Factor	0.980	0.981	0.980	0.980
Flow Entry, veh/h	393	317	240	350
Cap Entry, veh/h	1053	900	1347	1900
V/C Ratio	0.373	0.352	0.178	0.184
Control Delay, s/veh	7.3	7.9	4.1	0.0
LOS	A	A	A	A
95th %tile Queue, veh	2	2	1	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.850			0.850						0.966	
Flt Protected	0.950										0.998	
Satd. Flow (prot)	1770	1583	0	1863	1583	0	0	1863	0	0	1796	0
Flt Permitted	0.950										0.998	
Satd. Flow (perm)	1770	1583	0	1863	1583	0	0	1863	0	0	1796	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		616			909			1975			245	
Travel Time (s)		14.0			20.7			44.9			5.6	

Intersection Summary	
Area Type:	Other

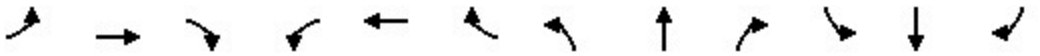
Intersection	
Int Delay, s/veh	11.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	100	0	1	0	0	18	1	165	0	7	169	60
Future Vol, veh/h	100	0	1	0	0	18	1	165	0	7	169	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	109	0	1	0	0	20	1	179	0	8	184	65

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	20	0	0	1	0	0	310	237	1	317	228	10
Stage 1	-	-	-	-	-	-	218	218	-	10	10	-
Stage 2	-	-	-	-	-	-	92	20	-	307	218	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1597	-	-	1622	-	-	643	663	1084	636	671	1072
Stage 1	-	-	-	-	-	-	784	723	-	1011	887	-
Stage 2	-	-	-	-	-	-	915	879	-	703	722	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1597	-	-	1622	-	-	405	618	1084	429	626	1072
Mov Cap-2 Maneuver	-	-	-	-	-	-	405	618	-	429	626	-
Stage 1	-	-	-	-	-	-	731	673	-	1011	887	-
Stage 2	-	-	-	-	-	-	682	879	-	481	673	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	7.35	0	13.24	13.29
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	616	1597	-	-	1622	-	-	689
HCM Lane V/C Ratio	0.293	0.068	-	-	-	-	-	0.372
HCM Control Delay (s/veh)	13.2	7.4	-	-	0	-	-	13.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.2	0.2	-	-	0	-	-	1.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt					0.973			0.997			0.993	
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1770	1863	0	1770	1812	0	1863	1857	0	1770	1850	0
Flt Permitted	0.950			0.950						0.950		
Satd. Flow (perm)	1770	1863	0	1770	1812	0	1863	1857	0	1770	1850	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		340			1975			760			832	
Travel Time (s)		7.7			44.9			17.3			18.9	

Intersection Summary	
Area Type:	Other

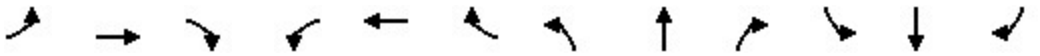
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	38	0	7	21	5	0	191	4	4	190	9
Future Vol, veh/h	11	38	0	7	21	5	0	191	4	4	190	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	0	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	41	0	8	23	5	0	208	4	4	207	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	439	432	211	446	435	210	216	0	0	212	0	0
Stage 1	220	220	-	210	210	-	-	-	-	-	-	-
Stage 2	219	212	-	236	225	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	528	516	829	523	515	830	1353	-	-	1358	-	-
Stage 1	782	721	-	792	729	-	-	-	-	-	-	-
Stage 2	783	727	-	767	718	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	500	515	829	479	513	830	1353	-	-	1358	-	-
Mov Cap-2 Maneuver	500	515	-	479	513	-	-	-	-	-	-	-
Stage 1	780	719	-	792	729	-	-	-	-	-	-	-
Stage 2	754	727	-	721	715	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.55	12.02	0	0.15
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1353	-	-	500	515	479	554	1358	-	-
HCM Lane V/C Ratio	-	-	-	0.024	0.08	0.016	0.051	0.003	-	-
HCM Control Delay (s/veh)	0	-	-	12.4	12.6	12.6	11.9	7.7	-	-
HCM Lane LOS	A	-	-	B	B	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	0.2	0	-	-



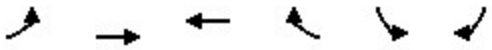
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	250		0	125		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.981			0.964			0.973			0.982	
Flt Protected		0.998			0.994			0.993			0.987	
Satd. Flow (prot)	0	3465	0	0	3391	0	0	3420	0	0	3430	0
Flt Permitted		0.998			0.994			0.993			0.987	
Satd. Flow (perm)	0	3465	0	0	3391	0	0	3420	0	0	3430	0
Link Speed (mph)		40			35			45			45	
Link Distance (ft)		631			610			567			842	
Travel Time (s)		10.8			11.9			8.6			12.8	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	522	704	424	417
Demand Flow Rate, veh/h	532	718	433	425
Vehicles Circulating, veh/h	459	373	580	606
Vehicles Exiting, veh/h	572	640	411	485
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.0	7.5	7.3	7.4
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR
RT Channelized								
Lane Util	0.470	0.530	0.469	0.531	0.471	0.529	0.471	0.529
Follow-Up Headway, s	2.667	2.535	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	4.645	4.328
A (Intercept)	1350	1420	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	9.199e-4	8.501e-4
Entry Flow, veh/h	250	282	337	381	204	229	200	225
Cap Entry Lane, veh/h	885	961	958	1034	792	867	773	848
Entry HV Adj Factor	0.982	0.982	0.982	0.979	0.977	0.982	0.980	0.982
Flow Entry, veh/h	245	277	331	373	199	225	196	221
Cap Entry, veh/h	869	944	940	1013	774	852	757	833
V/C Ratio	0.283	0.293	0.352	0.368	0.258	0.264	0.259	0.265
Control Delay, s/veh	7.2	6.9	7.7	7.5	7.5	7.1	7.7	7.2
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	1	1	2	2	1	1	1	1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			150	0	0
Storage Lanes	1			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor						
Frt				0.850	0.995	
Flt Protected	0.950				0.954	
Satd. Flow (prot)	1770	3539	3539	1583	1768	0
Flt Permitted	0.950				0.954	
Satd. Flow (perm)	1770	3539	3539	1583	1768	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		350	935		1177	
Travel Time (s)		8.0	21.3		26.8	

Intersection Summary	
Area Type:	Other

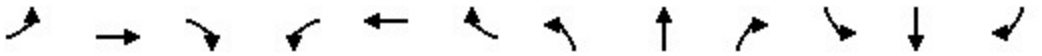
Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	641	678	131	114	5
Future Vol, veh/h	8	641	678	131	114	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	697	737	142	124	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	879	0	-	0	1103	368
Stage 1	-	-	-	-	737	-
Stage 2	-	-	-	-	366	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	764	-	-	-	206	629
Stage 1	-	-	-	-	434	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	764	-	-	-	203	629
Mov Cap-2 Maneuver	-	-	-	-	203	-
Stage 1	-	-	-	-	429	-
Stage 2	-	-	-	-	672	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.12	0	46.59
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	764	-	-	-	209
HCM Lane V/C Ratio	0.011	-	-	-	0.618
HCM Control Delay (s/veh)	9.8	-	-	-	46.6
HCM Lane LOS	A	-	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	3.6



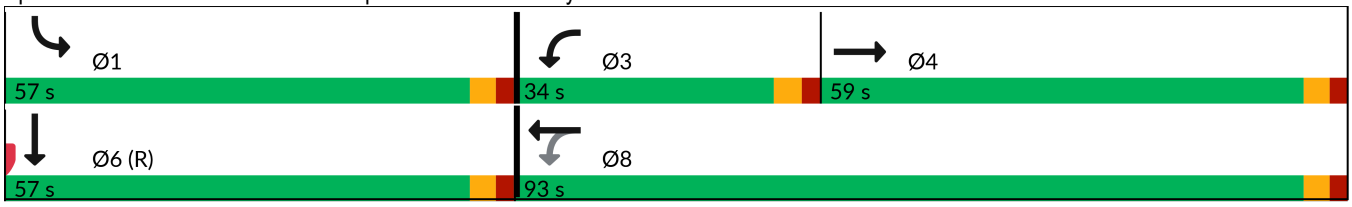
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		0	375		175	0		175
Storage Lanes	1		1	1		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor												
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.953	
Satd. Flow (prot)	0	5085	1583	1770	3539	0	0	0	0	3221	1615	1583
Flt Permitted				0.070						0.950	0.953	
Satd. Flow (perm)	0	5085	1583	130	3539	0	0	0	0	3221	1615	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191									230
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		795			334			493			625	
Travel Time (s)		18.1			7.6			11.2			14.2	

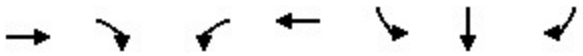
Intersection Summary	
Area Type:	Other

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1359	360	334	955	1181	5	473
Future Volume (vph)	1359	360	334	955	1181	5	473
Turn Type	NA	Free	pm+pt	NA	Prot	NA	Free
Protected Phases	4		3	8	1	6	
Permitted Phases		Free	8				Free
Detector Phase	4		3	8	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5		10.0	22.5	10.0	22.5	
Total Split (s)	59.0		34.0	93.0	57.0	57.0	
Total Split (%)	39.3%		22.7%	62.0%	38.0%	38.0%	
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0	
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	None		None	None	None	C-Max	
Act Effct Green (s)	52.4	150.0	85.7	85.7	54.3	54.3	150.0
Actuated g/C Ratio	0.35	1.00	0.57	0.57	0.36	0.36	1.00
v/c Ratio	0.83	0.25	0.95	0.51	0.74	0.74	0.32
Control Delay (s/veh)	49.5	0.4	69.4	17.9	46.9	51.3	0.5
Queue Delay	3.5	0.0	46.4	5.4	51.3	56.1	0.0
Total Delay (s/veh)	52.9	0.4	115.7	23.3	98.2	107.3	0.5
LOS	D	A	F	C	F	F	A
Approach Delay (s/veh)	41.9			47.3		72.5	
Approach LOS	D			D		E	

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 54.3	Intersection LOS: D
Intersection Capacity Utilization 119.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 7: I-25 SB Ramp & Plum Creek Pkwy.

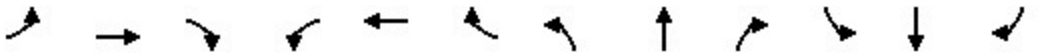




Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1477	391	363	1038	860	429	514
v/c Ratio	0.83	0.25	0.95	0.51	0.74	0.74	0.32
Control Delay (s/veh)	49.5	0.4	69.4	17.9	46.9	51.3	0.5
Queue Delay	3.5	0.0	46.4	5.4	51.3	56.1	0.0
Total Delay (s/veh)	52.9	0.4	115.7	23.3	98.2	107.3	0.5
Queue Length 50th (ft)	476	0	284	220	411	409	0
Queue Length 95th (ft)	538	0	m#345	m260	498	563	0
Internal Link Dist (ft)	715			254		545	
Turn Bay Length (ft)							175
Base Capacity (vph)	1830	1583	391	2076	1165	583	1583
Starvation Cap Reductn	0	0	72	963	0	0	0
Spillback Cap Reductn	261	0	0	0	495	247	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.25	1.14	0.93	1.28	1.28	0.32

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1359	360	334	955	0	0	0	0	1181	5	473
Future Volume (veh/h)	0	1359	360	334	955	0	0	0	0	1181	5	473
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1477	0	363	1038	0				1288	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1706		383	1930	0				2085	0	
Arrive On Green	0.00	0.33	0.00	0.23	0.72	0.00				0.39	0.00	0.00
Sat Flow, veh/h	0	5274	1585	1781	3647	0				5344	0	1585
Grp Volume(v), veh/h	0	1477	0	363	1038	0				1288	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1585	1781	1777	0				1781	0	1585
Q Serve(g_s), s	0.0	40.7	0.0	24.0	19.9	0.0				29.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	40.7	0.0	24.0	19.9	0.0				29.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1706		383	1930	0				2085	0	
V/C Ratio(X)	0.00	0.87		0.95	0.54	0.00				0.62	0.00	
Avail Cap(c_a), veh/h	0	1838		415	2085	0				2085	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.32	0.32	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	46.8	0.0	40.0	12.3	0.0				36.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.4	0.0	13.6	0.1	0.0				0.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	17.9	0.0	14.4	6.6	0.0				12.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	51.2	0.0	53.7	12.4	0.0				37.3	0.0	0.0
LnGrp LOS		D		D	B					D		
Approach Vol, veh/h		1477			1401						1288	
Approach Delay, s/veh		51.2			23.1						37.3	
Approach LOS		D			C						D	

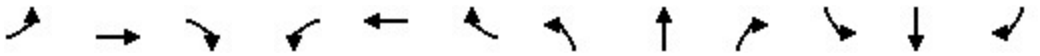
Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		31.4	55.1		63.5		86.5					
Change Period (Y+Rc), s		5.0	5.0		5.0		5.0					
Max Green Setting (Gmax), s		29.0	54.0		52.0		88.0					
Max Q Clear Time (g_c+I1), s		26.0	42.7		31.0		21.9					
Green Ext Time (p_c), s		0.4	7.5		5.6		10.2					

Intersection Summary	
HCM 7th Control Delay, s/veh	37.4
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



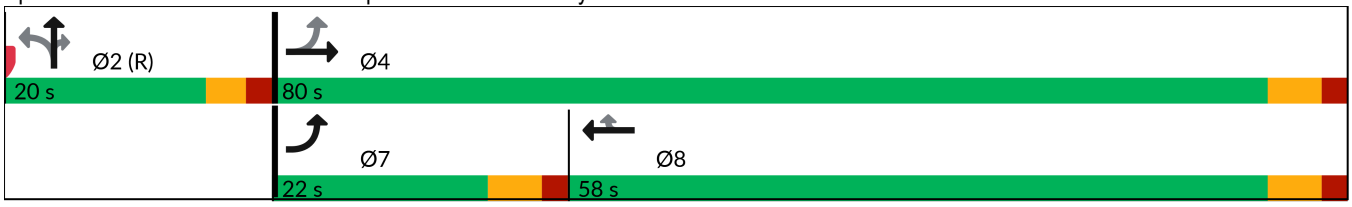
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.940	0.850		0.988	0.850			
Flt Protected	0.950						0.950	0.956				
Satd. Flow (prot)	3433	5085	0	0	3187	1441	1681	1601	1504	0	0	0
Flt Permitted	0.069						0.950	0.956				
Satd. Flow (perm)	249	5085	0	0	3187	1441	1681	1601	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					197	531		4	98			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		469			542			502			457	
Travel Time (s)		10.7			12.3			11.4			10.4	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	582	1918	959	1350	345	1	149
Future Volume (vph)	582	1918	959	1350	345	1	149
Turn Type	pm+pt	NA	NA	Perm	Perm	NA	Perm
Protected Phases	7	4	8			2	
Permitted Phases	4			8	2		2
Detector Phase	7	4	8	8	2	2	2
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.0	80.0	58.0	58.0	20.0	20.0	20.0
Total Split (%)	22.0%	80.0%	58.0%	58.0%	20.0%	20.0%	20.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	74.0	74.0	52.0	52.0	15.0	15.0	15.0
Actuated g/C Ratio	0.74	0.74	0.52	0.52	0.15	0.15	0.15
v/c Ratio	0.91	0.55	0.99	0.77	0.79	0.79	0.47
Control Delay (s/veh)	46.4	6.4	40.9	11.9	64.1	64.4	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.4	6.4	40.9	11.9	64.1	64.4	20.4
LOS	D	A	D	B	E	E	C
Approach Delay (s/veh)		15.7	31.9			52.3	
Approach LOS		B	C			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 26.2	Intersection LOS: C
Intersection Capacity Utilization 97.6%	ICU Level of Service F
Analysis Period (min) 15	

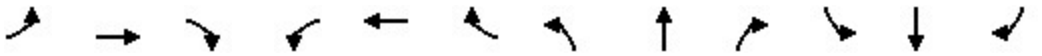
Splits and Phases: 8: I-25 NB Ramps & Plum Creek Pkwy.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	633	2085	1731	778	199	193	146
v/c Ratio	0.91	0.55	0.99	0.77	0.79	0.79	0.47
Control Delay (s/veh)	46.4	6.4	40.9	11.9	64.1	64.4	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.4	6.4	40.9	11.9	64.1	64.4	20.4
Queue Length 50th (ft)	153	180	529	119	130	129	28
Queue Length 95th (ft)	#256	210	#737	320	#249	#256	91
Internal Link Dist (ft)		389	462			422	
Turn Bay Length (ft)							150
Base Capacity (vph)	693	3762	1751	1004	252	243	308
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.55	0.99	0.77	0.79	0.79	0.47

Intersection Summary

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



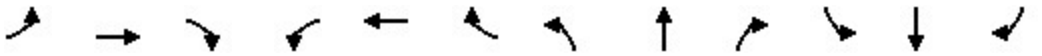
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	582	1918	0	0	959	1350	345	1	149	0	0	0
Future Volume (veh/h)	582	1918	0	0	959	1350	345	1	149	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	633	2085	0	0	1042	1467	426	0	108			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	692	3771	0	0	973	1648	540	0	240			
Arrive On Green	0.16	0.74	0.00	0.00	0.52	0.52	0.15	0.00	0.15			
Sat Flow, veh/h	3456	5274	0	0	1870	3170	3563	0	1585			
Grp Volume(v), veh/h	633	2085	0	0	1042	1467	426	0	108			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	13.8	18.1	0.0	0.0	52.0	41.3	11.5	0.0	6.2			
Cycle Q Clear(g_c), s	13.8	18.1	0.0	0.0	52.0	41.3	11.5	0.0	6.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	692	3771	0	0	973	1648	540	0	240			
V/C Ratio(X)	0.92	0.55	0.00	0.00	1.07	0.89	0.79	0.00	0.45			
Avail Cap(c_a), veh/h	697	3779	0	0	973	1648	540	0	240			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	32.8	5.8	0.0	0.0	24.0	21.4	40.9	0.0	38.6			
Incr Delay (d2), s/veh	16.7	0.2	0.0	0.0	50.0	6.5	11.2	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			
%ile BackOfQ(50%),veh/ln	5.5	5.2	0.0	0.0	34.7	15.7	5.8	0.0	2.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.5	6.0	0.0	0.0	74.0	27.9	52.0	0.0	44.6			
LnGrp LOS	D	A			F	C	D		D			
Approach Vol, veh/h		2718			2509			534				
Approach Delay, s/veh		16.1			47.0			50.5				
Approach LOS		B			D			D				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		20.2		79.8			21.8	58.0				
Change Period (Y+Rc), s		5.0		6.0			6.0	6.0				
Max Green Setting (Gmax), s		15.0		74.0			16.0	52.0				
Max Q Clear Time (g_c+I1), s		13.5		20.1			15.8	54.0				
Green Ext Time (p_c), s		0.3		30.0			0.1	0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			32.8									
HCM 7th LOS			C									

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



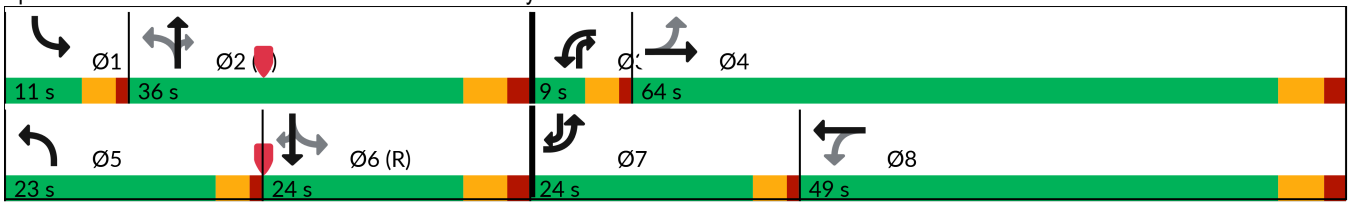
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	225		0	225		250	175		200
Storage Lanes	1		1	1		0	2		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.985				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	5009	0	3433	1863	1583	1770	1863	1583
Flt Permitted	0.085			0.093			0.460			0.638		
Satd. Flow (perm)	158	3539	1583	173	5009	0	1662	1863	1583	1188	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			227		18				100			100
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		629			907			941			491	
Travel Time (s)		14.3			20.6			21.4			11.2	

Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	352	1569	190	83	1240	686	175	74	221	132	336
Future Volume (vph)	352	1569	190	83	1240	686	175	74	221	132	336
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	5	2	3	1	6	7
Permitted Phases	4		Free	8		2		2	6		6
Detector Phase	7	4		3	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	31.0		9.5	31.0	9.5	36.0	9.5	9.5	34.0	9.5
Total Split (s)	24.0	64.0		9.0	49.0	23.0	36.0	9.0	11.0	24.0	24.0
Total Split (%)	20.0%	53.3%		7.5%	40.8%	19.2%	30.0%	7.5%	9.2%	20.0%	20.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	3.0	4.0	3.0	3.0	4.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0	1.0	2.0	1.0	1.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0		4.0	6.0	4.0	6.0	4.0	4.0	6.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	69.0	58.0	120.0	50.0	43.0	43.0	30.0	41.0	27.0	18.0	44.0
Actuated g/C Ratio	0.58	0.48	1.00	0.42	0.36	0.36	0.25	0.34	0.23	0.15	0.37
v/c Ratio	1.07	1.00	0.13	0.65	0.83	0.85	0.41	0.13	0.80	0.51	0.57
Control Delay (s/veh)	100.6	52.3	0.2	40.4	39.6	43.0	40.8	3.7	56.5	54.2	25.6
Queue Delay	0.0	37.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	100.6	89.7	0.2	40.4	39.6	43.0	40.8	3.7	56.5	54.2	25.6
LOS	F	F	A	D	D	D	D	A	E	D	C
Approach Delay (s/veh)		83.5			39.7		39.5			41.0	
Approach LOS		F			D		D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay (s/veh): 57.6	Intersection LOS: E
Intersection Capacity Utilization 91.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 9: Wilcox St. & Plum Creek Pkwy.

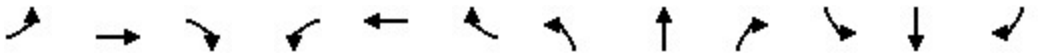


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	383	1705	207	90	1499	746	190	80	240	143	365
v/c Ratio	1.07	1.00	0.13	0.65	0.83	0.85	0.41	0.13	0.80	0.51	0.57
Control Delay (s/veh)	100.6	52.3	0.2	40.4	39.6	43.0	40.8	3.7	56.5	54.2	25.6
Queue Delay	0.0	37.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	100.6	89.7	0.2	40.4	39.6	43.0	40.8	3.7	56.5	54.2	25.6
Queue Length 50th (ft)	~274	674	0	30	380	242	123	0	137	103	162
Queue Length 95th (ft)	#471	#860	0	#87	444	#315	195	23	#248	172	262
Internal Link Dist (ft)		549			827		861			411	
Turn Bay Length (ft)	325			225		225		250	175		200
Base Capacity (vph)	359	1710	1583	138	1806	875	465	606	301	279	643
Starvation Cap Reductn	0	221	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	1.07	1.15	0.13	0.65	0.83	0.85	0.41	0.13	0.80	0.51	0.57

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)	352	1569	190	83	1240	139	686	175	74	221	132	336
Future Volume (veh/h)	352	1569	190	83	1240	139	686	175	74	221	132	336
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	383	1705	0	90	1348	151	746	190	80	240	143	365
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	391	1718		136	1669	187	805	468	462	330	281	502
Arrive On Green	0.17	0.48	0.00	0.04	0.36	0.36	0.16	0.25	0.25	0.06	0.15	0.15
Sat Flow, veh/h	1781	3554	1585	1781	4659	522	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	383	1705	0	90	985	514	746	190	80	240	143	365
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1702	1776	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	19.3	57.2	0.0	3.8	31.4	31.4	19.0	10.2	4.5	7.0	8.4	18.0
Cycle Q Clear(g_c), s	19.3	57.2	0.0	3.8	31.4	31.4	19.0	10.2	4.5	7.0	8.4	18.0
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	391	1718		136	1220	637	805	468	462	330	281	502
V/C Ratio(X)	0.98	0.99		0.66	0.81	0.81	0.93	0.41	0.17	0.73	0.51	0.73
Avail Cap(c_a), veh/h	391	1718		136	1220	637	805	468	462	330	281	502
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)	0.23	0.23	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	30.8	0.0	30.4	34.8	34.8	37.5	37.6	31.7	44.7	46.9	36.4
Incr Delay (d2), s/veh	17.2	8.8	0.0	11.2	4.1	7.6	16.7	2.6	0.8	7.8	6.5	8.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	25.6	0.0	2.0	13.5	14.7	4.1	5.0	1.8	4.1	4.4	10.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.5	39.6	0.0	41.7	38.9	42.4	54.1	40.2	32.5	52.5	53.4	45.3
LnGrp LOS	D	D		D	D	D	D	D	C	D	D	D
Approach Vol, veh/h		2088			1589			1016			748	
Approach Delay, s/veh		41.6			40.2			49.8			49.2	
Approach LOS		D			D			D			D	

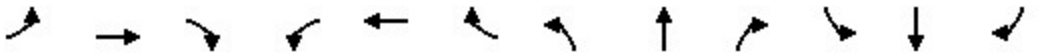
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	36.0	9.0	64.0	23.0	24.0	24.0	49.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	7.0	30.0	5.0	58.0	19.0	18.0	20.0	43.0
Max Q Clear Time (g_c+I1), s	9.0	12.2	5.8	59.2	21.0	20.0	21.3	33.4
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.0	0.0	0.0	6.5

Intersection Summary	
HCM 7th Control Delay, s/veh	43.8
HCM 7th LOS	D

Notes

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

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



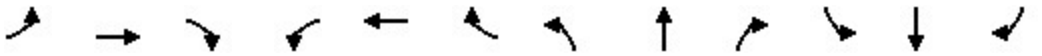
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.943			0.987			0.927			0.954	
Flt Protected		0.972			0.957			0.991			0.984	
Satd. Flow (prot)	0	1707	0	0	1759	0	0	3251	0	0	3322	0
Flt Permitted		0.972			0.957			0.991			0.984	
Satd. Flow (perm)	0	1707	0	0	1759	0	0	3251	0	0	3322	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		632			526			834			760	
Travel Time (s)		14.4			12.0			19.0			17.3	

Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	5.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	117	409	443	212
Demand Flow Rate, veh/h	119	417	452	216
Vehicles Circulating, veh/h	527	301	137	455
Vehicles Exiting, veh/h	144	288	509	263
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.3	7.3	4.6	5.1
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.469	0.531	0.472	0.528
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	119	417	212	240	102	114
Cap Entry Lane, veh/h	907	1099	1190	1264	888	965
Entry HV Adj Factor	0.983	0.981	0.982	0.978	0.979	0.987
Flow Entry, veh/h	117	409	208	235	100	113
Cap Entry, veh/h	892	1078	1169	1236	869	952
V/C Ratio	0.131	0.379	0.178	0.190	0.115	0.118
Control Delay, s/veh	5.3	7.3	4.6	4.5	5.3	4.9
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	2	1	1	0	0



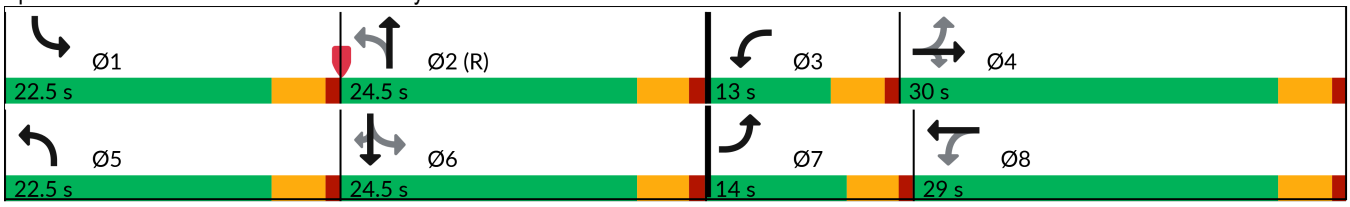
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		250	250		0	250		0	250		150
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.188			0.171			0.646			0.664		
Satd. Flow (perm)	350	3539	1583	618	3539	1583	1203	3539	1583	2400	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127			542			231			211
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		881			681			475			543	
Travel Time (s)		20.0			15.5			10.8			12.3	

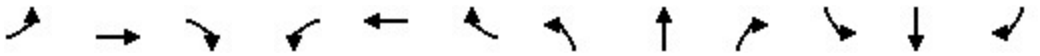
Intersection Summary	
Area Type:	Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	713	89	312	623	499	82	127	437	567	154	194
Future Volume (vph)	164	713	89	312	623	499	82	127	437	567	154	194
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		Free	2		Free	6		6
Detector Phase	7	4	4	3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		22.5	22.5		22.5	22.5	22.5
Total Split (s)	14.0	30.0	30.0	13.0	29.0		22.5	24.5		22.5	24.5	24.5
Total Split (%)	15.6%	33.3%	33.3%	14.4%	32.2%		25.0%	27.2%		25.0%	27.2%	27.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		Max	C-Max		Max	Max	Max
Act Effct Green (s)	33.3	24.1	24.1	31.9	23.4	90.0	39.4	20.0	90.0	39.4	20.0	20.0
Actuated g/C Ratio	0.37	0.27	0.27	0.35	0.26	1.00	0.44	0.22	1.00	0.44	0.22	0.22
v/c Ratio	0.65	0.82	0.19	0.70	0.74	0.34	0.14	0.18	0.30	0.48	0.21	0.41
Control Delay (s/veh)	28.9	38.7	3.4	25.7	35.7	0.6	13.8	29.1	0.5	16.4	29.4	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.9	38.7	3.4	25.7	35.7	0.6	13.8	29.1	0.5	16.4	29.4	7.0
LOS	C	D	A	C	D	A	B	C	A	B	C	A
Approach Delay (s/veh)		33.8			21.3			7.8			16.6	
Approach LOS		C			C			A			B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay (s/veh): 21.1	Intersection LOS: C
Intersection Capacity Utilization 64.0%	ICU Level of Service B
Analysis Period (min) 15	

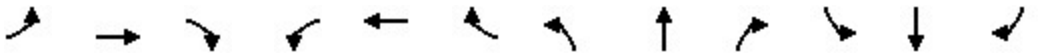
Splits and Phases: 11: Plum Creek Pkwy. & Prairie Hawk Dr.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	178	775	97	339	677	542	89	138	475	616	167	211
v/c Ratio	0.65	0.82	0.19	0.70	0.74	0.34	0.14	0.18	0.30	0.48	0.21	0.41
Control Delay (s/veh)	28.9	38.7	3.4	25.7	35.7	0.6	13.8	29.1	0.5	16.4	29.4	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.9	38.7	3.4	25.7	35.7	0.6	13.8	29.1	0.5	16.4	29.4	7.0
Queue Length 50th (ft)	63	212	0	61	182	0	27	33	0	111	41	0
Queue Length 95th (ft)	107	281	22	90	244	0	53	58	0	151	68	55
Internal Link Dist (ft)		801			601			395			463	
Turn Bay Length (ft)	250		250	250			250			250		150
Base Capacity (vph)	280	1002	539	485	963	1583	648	786	1583	1273	786	515
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.77	0.18	0.70	0.70	0.34	0.14	0.18	0.30	0.48	0.21	0.41

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	713	89	312	623	499	82	127	437	567	154	194
Future Volume (veh/h)	164	713	89	312	623	499	82	127	437	567	154	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	775	97	339	677	0	89	138	0	616	167	211
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	909	406	542	907		651	891		1386	891	398
Arrive On Green	0.09	0.26	0.26	0.09	0.26	0.00	0.20	0.25	0.00	0.20	0.25	0.25
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	178	775	97	339	677	0	89	138	0	616	167	211
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	6.5	18.7	4.4	6.4	15.8	0.0	2.6	2.7	0.0	10.7	3.3	10.4
Cycle Q Clear(g_c), s	6.5	18.7	4.4	6.4	15.8	0.0	2.6	2.7	0.0	10.7	3.3	10.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	909	406	542	907		651	891		1386	891	398
V/C Ratio(X)	0.58	0.85	0.24	0.63	0.75		0.14	0.15		0.44	0.19	0.53
Avail Cap(c_a), veh/h	329	1007	449	546	967		651	891		1386	891	398
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	31.9	26.5	23.7	30.8	0.0	14.4	26.3	0.0	16.6	26.5	29.1
Incr Delay (d2), s/veh	2.2	6.6	0.3	2.2	3.0	0.0	0.4	0.4	0.0	1.0	0.5	5.0
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	2.8	8.6	1.7	2.7	7.0	0.0	1.1	1.2	0.0	4.2	1.4	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.2	38.5	26.8	25.9	33.8	0.0	14.8	26.6	0.0	17.6	27.0	34.1
LnGrp LOS	C	D	C	C	C		B	C		B	C	C
Approach Vol, veh/h		1050			1016			227			994	
Approach Delay, s/veh		35.2			31.2			22.0			22.7	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	27.1	12.9	27.5	22.5	27.1	13.0	27.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	20.0	8.5	25.5	18.0	20.0	9.5	24.5
Max Q Clear Time (g_c+I1), s	12.7	4.7	8.4	20.7	4.6	12.4	8.5	17.8
Green Ext Time (p_c), s	1.2	0.6	0.0	2.4	0.1	1.1	0.0	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	29.3
HCM 7th LOS	C

Notes

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

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor						
Frt		0.865		0.850		
Flt Protected					0.950	
Satd. Flow (prot)	0	1611	3539	1583	1770	3539
Flt Permitted					0.950	
Satd. Flow (perm)	0	1611	3539	1583	1770	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	1179		543			834
Travel Time (s)	26.8		12.3			19.0

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	58	596	197	23	914
Future Vol, veh/h	0	58	596	197	23	914
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	63	648	214	25	993

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	324	0	-	648	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	672	-	0	934	-
Stage 1	0	-	-	0	-	-
Stage 2	0	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	672	-	-	934	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.91	0	0.22
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	SBL	SBT
Capacity (veh/h)	-	672	934	-
HCM Lane V/C Ratio	-	0.094	0.027	-
HCM Control Delay (s/veh)	-	10.9	9	-
HCM Lane LOS	-	B	A	-
HCM 95th %tile Q(veh)	-	0.3	0.1	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	100	100			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.964	
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1863	1863	1796	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1863	1863	1796	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	367			976	582	
Travel Time (s)	8.3			22.2	13.2	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	0	0	119	124	46
Future Vol, veh/h	46	0	0	119	124	46
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	100	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	0	0	129	135	50

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	289	160	185	0	-	0
Stage 1	160	-	-	-	-	-
Stage 2	129	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	701	885	1390	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	701	885	1390	-	-	-
Mov Cap-2 Maneuver	701	-	-	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.53	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1390	-	701	-	-	-
HCM Lane V/C Ratio	-	-	0.071	-	-	-
HCM Control Delay (s/veh)	0	-	10.5	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.952	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1863	1770	1863	1773	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1863	1770	1863	1773	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	369			602	976	
Travel Time (s)	8.4			13.7	22.2	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	67	0	128	52	80	44
Future Vol, veh/h	67	0	128	52	80	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	73	0	139	57	87	48

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	446	111	135	0	-	0
Stage 1	111	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	570	942	1450	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	515	942	1450	-	-	-
Mov Cap-2 Maneuver	515	-	-	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	13.13	5.51	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1450	-	515	-	-	-
HCM Lane V/C Ratio	0.096	-	0.141	-	-	-
HCM Control Delay (s/veh)	7.7	-	13.1	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.5	-	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	100	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.865	
Flt Protected	0.950			0.950		
Satd. Flow (prot)	1770	1583	0	1770	1611	0
Flt Permitted	0.950			0.950		
Satd. Flow (perm)	1770	1583	0	1770	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	526			315	249	
Travel Time (s)	12.0			7.2	5.7	

Intersection Summary	
Area Type:	Other

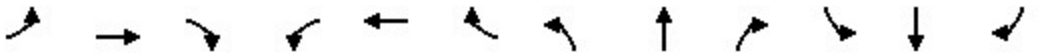
Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	74	187	334	0	0	42
Future Vol, veh/h	74	187	334	0	0	42
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	100	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	203	363	0	0	46

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	749	23	46	0	-	0
Stage 1	23	-	-	-	-	-
Stage 2	726	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	380	1054	1562	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	479	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	291	1054	1562	-	-	-
Mov Cap-2 Maneuver	291	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	479	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.85	8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1562	-	291	1054	-	-
HCM Lane V/C Ratio	0.232	-	0.276	0.193	-	-
HCM Control Delay (s/veh)	8	0	22	9.2	-	-
HCM Lane LOS	A	A	C	A	-	-
HCM 95th %tile Q(veh)	0.9	-	1.1	0.7	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt					0.979			0.865			0.907	
Flt Protected		0.969			0.968						0.985	
Satd. Flow (prot)	0	1805	0	0	1765	0	0	1611	0	0	1664	0
Flt Permitted		0.969			0.968						0.985	
Satd. Flow (perm)	0	1805	0	0	1765	0	0	1611	0	0	1664	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		513			367			973			210	
Travel Time (s)		11.7			8.3			22.1			4.8	

Intersection Summary	
Area Type:	Other

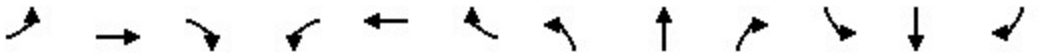
Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	7	0	31	9	7	0	0	36	4	0	8
Future Vol, veh/h	13	7	0	31	9	7	0	0	36	4	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	8	0	34	10	8	0	0	39	4	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	17	0	0	8	0	0	113	121	8	117	117	14
Stage 1	-	-	-	-	-	-	36	36	-	81	81	-
Stage 2	-	-	-	-	-	-	77	85	-	36	36	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1600	-	-	1613	-	-	864	770	1075	859	773	1066
Stage 1	-	-	-	-	-	-	980	865	-	927	828	-
Stage 2	-	-	-	-	-	-	932	825	-	980	865	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1600	-	-	1613	-	-	832	747	1075	803	750	1066
Mov Cap-2 Maneuver	-	-	-	-	-	-	832	747	-	803	750	-
Stage 1	-	-	-	-	-	-	971	857	-	908	810	-
Stage 2	-	-	-	-	-	-	905	807	-	936	857	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	4.73	4.8	8.48	8.8
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1075	1170	-	-	1092	-	-	962
HCM Lane V/C Ratio	0.036	0.009	-	-	0.021	-	-	0.014
HCM Control Delay (s/veh)	8.5	7.3	0	-	7.3	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor												
Frt		0.886			0.904			0.973			0.885	
Flt Protected	0.950			0.950				0.964			0.995	
Satd. Flow (prot)	1770	1650	0	1770	1684	0	0	1747	0	0	1640	0
Flt Permitted	0.950			0.950				0.964			0.995	
Satd. Flow (perm)	1770	1650	0	1770	1684	0	0	1747	0	0	1640	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		525			369			345			973	
Travel Time (s)		11.9			8.4			7.8			22.1	

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	9.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	26	81	73	37	65	137	9	37	19	8	156
Future Vol, veh/h	70	26	81	73	37	65	137	9	37	19	8	156
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	76	28	88	79	40	71	149	10	40	21	9	170

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	111	0	0	116	0	0	428	494	72	420	503	76
Stage 1	-	-	-	-	-	-	224	224	-	234	234	-
Stage 2	-	-	-	-	-	-	203	270	-	185	268	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1479	-	-	1472	-	-	537	476	990	544	471	986
Stage 1	-	-	-	-	-	-	778	718	-	769	711	-
Stage 2	-	-	-	-	-	-	799	686	-	816	687	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1479	-	-	1472	-	-	392	428	990	459	423	986
Mov Cap-2 Maneuver	-	-	-	-	-	-	392	428	-	459	423	-
Stage 1	-	-	-	-	-	-	738	681	-	727	673	-
Stage 2	-	-	-	-	-	-	618	649	-	732	652	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.99	3.16	19.27	10.64
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	448	1479	-	-	1472	-	-	837
HCM Lane V/C Ratio	0.444	0.051	-	-	0.054	-	-	0.238
HCM Control Delay (s/veh)	19.3	7.6	-	-	7.6	-	-	10.6
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	2.2	0.2	-	-	0.2	-	-	0.9

APPENDIX “D”

INTERNAL TRIP CAPTURE WORKSHEETS

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	The Brickyard (HKS Project No. 200726)	**Organization:**	HKS
Project Location:	Castle Rock, Colorado	**Performed By:**	MEK
Scenario Description:	Build-Out	**Date:**	10/14/2024
Analysis Year:	2027 & 2045	**Checked By:**	MEK
Analysis Period:	**AM Street Peak Hour**	**Date:**	10/14/2024

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	710, 720	59	KSF	128	109	19
Retail	822	9	KSF	27	16	11
Restaurant	932	24	KSF	230	127	103
Cinema/Entertainment				0	0	0
Residential	215, 220, 221	583	DU	259	60	199
Hotel	310	125	Rooms	55	31	24
All Other Land Uses[2]	495	145	KSF	277	183	94
				976	526	450

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		5	12	0	0	0
Retail	3		1	0	1	0
Restaurant	15	1		0	3	1
Cinema/Entertainment	0	0	0		0	0
Residential	3	2	25	0		0
Hotel	3	1	2	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	976	526	450
Internal Capture Percentage	16%	15%	17%
External Vehicle-Trips[5]	820	448	372
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	22%	89%
Retail	56%	45%
Restaurant	31%	19%
Cinema/Entertainment	N/A	N/A
Residential	7%	15%
Hotel	3%	25%

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	The Brickyard (HKS Project No. 200726)
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	109	109	1.00	19	19
Retail	1.00	16	16	1.00	11	11
Restaurant	1.00	127	127	1.00	103	103
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	60	60	1.00	199	199
Hotel	1.00	31	31	1.00	24	24

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		5	12	0	0	0
Retail	3		1	0	2	0
Restaurant	32	14		0	4	3
Cinema/Entertainment	0	0	0		0	0
Residential	4	2	40	0		0
Hotel	18	3	2	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		5	29	0	0	0
Retail	4		64	0	1	0
Restaurant	15	1		0	3	1
Cinema/Entertainment	0	0	0		0	0
Residential	3	3	25	0		0
Hotel	3	1	8	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	24	85	109	85	0	0
Retail	9	7	16	7	0	0
Restaurant	40	87	127	87	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	4	56	60	56	0	0
Hotel	1	30	31	30	0	0
All Other Land Uses[3]	0	183	183	183	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	17	2	19	2	0	0
Retail	5	6	11	6	0	0
Restaurant	20	83	103	83	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	30	169	199	169	0	0
Hotel	6	18	24	18	0	0
All Other Land Uses[3]	0	94	94	94	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	The Brickyard (HKS Project No. 200726)	**Organization:**	HKS
Project Location:	Castle Rock, Colorado	**Performed By:**	MEK
Scenario Description:	Build-Out	**Date:**	10/14/2024
Analysis Year:	2027 & 2045	**Checked By:**	MEK
Analysis Period:	**PM Street Peak Hour**	**Date:**	10/14/2024

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	710, 720	59	KSF	147	34	113
Retail	822	9	KSF	72	36	36
Restaurant	932	24	KSF	217	132	85
Cinema/Entertainment				0	0	0
Residential	215, 220, 221	583	DU	256	157	99
Hotel	310	125	Rooms	65	33	32
All Other Land Uses[2]	495	145	KSF	345	162	183
				1,102	554	548

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	3	0	2	0
Retail	1		10	0	9	2
Restaurant	3	18		0	15	6
Cinema/Entertainment	0	0	0		0	0
Residential	4	4	18	0		3
Hotel	0	1	7	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,102	554	548
Internal Capture Percentage	20%	20%	20%
External Vehicle-Trips[5]	884	445	439
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	24%	7%
Retail	72%	61%
Restaurant	29%	49%
Cinema/Entertainment	N/A	N/A
Residential	17%	29%
Hotel	33%	25%

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	The Brickyard (HKS Project No. 200726)
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	34	34	1.00	113	113
Retail	1.00	36	36	1.00	36	36
Restaurant	1.00	132	132	1.00	85	85
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	157	157	1.00	99	99
Hotel	1.00	33	33	1.00	32	32

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		23	5	0	2	0
Retail	1		10	1	9	2
Restaurant	3	35		7	15	6
Cinema/Entertainment	0	0	0		0	0
Residential	4	42	21	0		3
Hotel	0	5	22	0	1	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	3	0	6	0
Retail	11		38	0	72	6
Restaurant	10	18		0	25	23
Cinema/Entertainment	2	1	4		6	0
Residential	19	4	18	0		4
Hotel	0	1	7	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	8	26	34	26	0	0
Retail	26	10	36	10	0	0
Restaurant	38	94	132	94	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	26	131	157	131	0	0
Hotel	11	22	33	22	0	0
All Other Land Uses[3]	0	162	162	162	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	8	105	113	105	0	0
Retail	22	14	36	14	0	0
Restaurant	42	43	85	43	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	29	70	99	70	0	0
Hotel	8	24	32	24	0	0
All Other Land Uses[3]	0	183	183	183	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Table 7.1a Adjusted Internal Trip Capture Rates for Trip Origins within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Office	0.0%	0.0%
	To Retail	28.0%	20.0%
	To Restaurant	63.0%	4.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	1.0%	2.0%
	To Hotel	0.0%	0.0%
From RETAIL	To Office	29.0%	2.0%
	To Retail	0.0%	0.0%
	To Restaurant	13.0%	29.0%
	To Cinema/Entertainment	0.0%	4.0%
	To Residential	14.0%	26.0%
	To Hotel	0.0%	5.0%
From RESTAURANT	To Office	31.0%	3.0%
	To Retail	14.0%	41.0%
	To Restaurant	0.0%	0.0%
	To Cinema/Entertainment	0.0%	8.0%
	To Residential	4.0%	18.0%
	To Hotel	3.0%	7.0%
From CINEMA/ENTERTAINMENT	To Office	0.0%	2.0%
	To Retail	0.0%	21.0%
	To Restaurant	0.0%	31.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	8.0%
	To Hotel	0.0%	2.0%
From RESIDENTIAL	To Office	2.0%	4.0%
	To Retail	1.0%	42.0%
	To Restaurant	20.0%	21.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	0.0%
	To Hotel	0.0%	3.0%
From HOTEL	To Office	75.0%	0.0%
	To Retail	14.0%	16.0%
	To Restaurant	9.0%	68.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	2.0%
	To Hotel	0.0%	0.0%

Table 7.2a Adjusted Internal Trip Capture Rates for Trip Destinations within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Office	0.0%	0.0%
	From Retail	4.0%	31.0%
	From Restaurant	14.0%	30.0%
	From Cinema/Entertainment	0.0%	6.0%
	From Residential	3.0%	57.0%
	From Hotel	3.0%	0.0%
To RETAIL	From Office	32.0%	8.0%
	From Retail	0.0%	0.0%
	From Restaurant	8.0%	50.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	17.0%	10.0%
	From Hotel	4.0%	2.0%
To RESTAURANT	From Office	23.0%	2.0%
	From Retail	50.0%	29.0%
	From Restaurant	0.0%	0.0%
	From Cinema/Entertainment	0.0%	3.0%
	From Residential	20.0%	14.0%
	From Hotel	6.0%	5.0%
To CINEMA/ENTERTAINMENT	From Office	0.0%	1.0%
	From Retail	0.0%	26.0%
	From Restaurant	0.0%	32.0%
	From Cinema/Entertainment	0.0%	0.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To RESIDENTIAL	From Office	0.0%	4.0%
	From Retail	2.0%	46.0%
	From Restaurant	5.0%	16.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To HOTEL	From Office	0.0%	0.0%
	From Retail	0.0%	17.0%
	From Restaurant	4.0%	71.0%
	From Cinema/Entertainment	0.0%	1.0%
	From Residential	0.0%	12.0%
	From Hotel	0.0%	0.0%