
TRAFFIC IMPACT REPORT

TERRA MONTE CASTLE ROCK, COLORADO

November 6, 2024

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EXECUTIVE SUMMARY

Urban Moment Development is proposing to develop a property containing approximately 32.3 acres of undeveloped land situated along the west side of N. Ridge Rd. and Plum Creek Pkwy. in Castle Rock, Colorado. More specifically, the subject property is bound by N. Ridge Rd. and Plum Creek Pkwy. to the east, private residences to the west, Faith Lutheran Church to the north, and Plum Creek Pkwy. as well as a private driveway to the south. Upon build-out, the development, to be known as Terra Monte, will consist of 165 single family attached housing units along with 5,400 SF of retail that is anticipated to be a brewery tap room. 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 Terra Monte development.

The purpose of this study is to evaluate the impact of the vehicular trips projected to be generated by phase one of the proposed Park Meadows development on the study area intersections and roadway system.

The study area encompassed the following roadway segments and intersections that were selected, in collaboration with Town of Castle Rock staff, as those that would have the greatest potential to be impacted by the proposed Terra Monte development. They include the following:

- Study Area Roadways:
 - N. Ridge Rd.
 - Plum Creek Pkwy.
- Study Area Intersections:
 1. Plum Creek Pkwy./N. Ridge Rd.
 2. Enderud Blvd./N. Ridge Rd.
 3. Fifth St./N. Ridge Rd./Founder Pkwy.
 4. Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.
 5. Plum Creek Pkwy./South Site Access
 6. North Site Access/N. Ridge Rd.

The study area roadways and intersections were analyzed for the following analysis horizon scenarios:

- 2024 (Existing) Conditions
- 2026 (Buildout) Conditions
- 2050 (Long-Term) Conditions

At buildout, the proposed Terra Monte development is projected to generate a total of 1,540 daily vehicle trips of which 84 are projected to be generated during the weekday a.m. peak hour and 148 during the weekday p.m. peak hour.

Based on the data used in this study, Tables ES-1 and ES-2 show a comparison of analysis results for the study area intersections with and without the proposed Terra Monte development and the traffic projected along with it.

**TABLE ES-1
2026 BACKGROUND & TOTAL TRAFFIC
OPERATIONAL ANALYSIS COMPARISON**

INTERSECTION	CONTROL	2026 (BUILD-OUT)							
		BACKGROUND		TOTAL		BACKGROUND		TOTAL	
		AM PEAK LOS	AM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
1. Plum Creek Pkwy./N. Ridge Rd.	Roundabout								
a. EB L	Yield	A	4.2	A	4.4	A	5.7	A	6.1
b. EB LTR	Yield	A	3.8	A	4.0	A	5.5	A	5.7
c. WB LTR	Yield	A	5.6	A	5.8	A	4.5	A	4.7
d. NB LTR	Yield	B	10.8	B	11.6	A	6.9	A	7.3
e. SB LTR	Yield	A	5.3	A	5.5	A	5.5	A	5.7
f. SB R	Yield	A	5.0	A	5.2	A	5.3	A	5.6
g. INTERSECTION		A	7.9	A	8.4	A	5.9	A	6.2
2. Enderud Blvd./N. Ridge Rd.	Roundabout								
a. EB LTR	Yield	A	5.6	A	5.7	A	9.2	A	9.5
b. WB LT	Yield	A	6.2	A	6.4	A	5.3	A	5.4
c. WB R	Yield	C	18.8	C	20.2	A	7.2	A	7.4
d. NB LT	Yield	A	6.0	A	6.1	A	8.4	A	8.6
e. NB TR	Yield	A	5.8	A	6.0	A	7.9	A	8.1
f. SB LT	Yield	A	4.2	A	4.3	A	7.8	A	8.1
g. SB TR	Yield	A	4.1	A	4.1	A	7.8	A	8.0
h. INTERSECTION		A	10.0	B	10.4	A	7.8	A	8.0
3. Fifth St./N. Ridge Rd./Founders Pkwy.	Signal								
a. EB L (Prot + Perm)		B	11.0	B	11.3	B	16.7	B	16.7
b. EB T		B	13.1	B	13.3	C	21.7	C	21.6
c. EB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
d. WB L (Prot + Perm)		B	10.8	B	11.0	B	17.2	B	17.0
e. WB T		B	13.7	B	14.0	C	20.4	C	19.9
f. WB R (Channelized Free)		A	0.0	A	0.0	A	0.0	A	0.0
g. NB L (Prot + Perm)		D	36.2	D	35.8	D	36.7	D	36.4
h. NB T		D	38.8	D	39.0	D	39.6	D	39.4
i. NB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
j. SB L (Prot + Perm)		D	41.9	D	41.9	D	38.9	D	40.2
k. SB T		D	39.3	D	39.4	C	33.5	C	34.6
l. SB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
m. INTERSECTION		C	28.2	C	28.5	C	30.9	C	31.3
4. Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.	Roundabout								
a. EB LT	Yield	A	5.0	A	5.1	B	12.3	B	12.9
b. EB TR	Yield	A	4.9	A	4.9	B	12.1	B	12.6
c. WB LT	Yield	C	24.0	D	25.9	A	8.4	A	8.6
d. WB TR	Yield	C	21.7	C	23.3	A	8.0	A	8.2
e. NB LTR	Yield	D	33.6	D	35.0	C	19.4	C	20.9
f. SB LTR	Yield	C	16.6	C	17.3	C	17.5	C	18.6
g. INTERSECTION		C	23.1	C	24.2	B	13.8	B	14.5
5. Plum Creek Pkwy./South Site Access	TWSC								
a. SB R	Stop	A	0.0	B	10.4	A	0.0	B	10.1
b. INTERSECTION		A	0.0	A	0.3	A	0.0	A	0.2
6. North Site Access/N. Ridge Rd.	TWSC								
a. EB R	Stop	A	0.0	A	9.2	A	0.0	B	10.2
b. INTERSECTION		A	0.0	A	0.4	A	0.0	A	0.2

**TABLE ES-2
2050 BACKGROUND & TOTAL TRAFFIC
OPERATIONAL ANALYSIS COMPARISON**

INTERSECTION	CONTROL	2050 (LONG-TERM)							
		BACKGROUND		TOTAL		BACKGROUND		TOTAL	
		AM PEAK LOS	AM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
1. Plum Creek Pkwy./N. Ridge Rd.	Roundabout								
a. EB L	Yield	A	4.7	A	5.0	A	7.0	A	7.6
b. EB LTR	Yield	A	4.2	A	4.4	A	6.8	A	7.0
c. WB LTR	Yield	A	6.9	A	7.2	A	5.3	A	5.5
d. NB LTR	Yield	C	19.4	C	22.3	A	9.1	A	9.8
e. SB LTR	Yield	A	6.4	A	6.7	A	6.6	A	7.0
f. SB R	Yield	A	6.0	A	6.3	A	6.5	A	6.8
g. INTERSECTION		B	12.9	B	14.4	A	7.4	A	7.8
2. Enderud Blvd./N. Ridge Rd.	Roundabout								
a. EB LTR	Yield	A	6.3	A	6.4	B	12.6	B	13.0
b. WB LT	Yield	A	7.6	A	7.8	A	6.1	A	6.3
c. WB R	Yield	F	65.8	F	74.5	A	9.3	A	9.6
d. NB LT	Yield	A	7.1	A	7.3	B	11.5	B	11.8
e. NB TR	Yield	A	6.9	A	7.1	B	10.8	B	11.1
f. SB LT	Yield	A	4.7	A	4.8	B	10.2	B	10.5
g. SB TR	Yield	A	4.6	A	4.6	B	10.3	B	10.7
h. INTERSECTION		D	27.3	D	30.1	B	10.2	B	10.5
3. Fifth St./N. Ridge Rd./Founders Pkwy.	Signal								
a. EB L (Prot + Perm)		B	15.4	B	15.7	C	25.4	C	25.7
b. EB T		B	18.1	B	18.4	C	33.2	C	33.6
c. EB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
d. WB L (Prot + Perm)		B	14.9	B	15.1	C	33.1	C	34.5
e. WB T		B	19.2	B	19.5	C	28.2	C	28.4
f. WB R (Channelized Free)		A	0.0	A	0.0	A	0.0	A	0.0
g. NB L (Prot + Perm)		C	33.4	C	33.1	C	33.9	C	33.7
h. NB T		D	41.8	D	42.5	D	41.4	D	41.8
i. NB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
j. SB L (Prot + Perm)		D	40.3	D	40.2	D	48.3	D	48.3
k. SB T		D	36.8	D	36.9	C	31.5	C	32.0
l. SB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
m. INTERSECTION		C	30.5	C	30.9	D	37.0	D	37.3
4. Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.	Roundabout								
a. EB LT	Yield	A	5.8	A	5.8	D	25.9	D	27.9
b. EB TR	Yield	A	5.6	A	5.7	D	26.1	D	28.1
c. WB LT	Yield	F	67.5	F	75.2	B	12.6	B	13.0
d. WB TR	Yield	F	59.4	F	67.3	B	11.8	B	12.2
e. NB LTR	Yield	F	97.1	F	101.0	F	88.1	F	99.0
f. SB LTR	Yield	E	35.5	E	38.2	F	64.6	F	72.4
g. INTERSECTION		F	62.1	F	66.2	E	43.1	E	47.5
5. Plum Creek Pkwy./South Site Access	TWSC								
a. SB R	Stop	A	0.0	B	11.1	A	0.0	B	10.7
b. INTERSECTION		A	0.0	A	0.3	A	0.0	A	0.2
6. North Site Access/N. Ridge Rd.	TWSC								
a. EB R	Stop	A	0.0	A	9.5	A	0.0	B	10.8
b. INTERSECTION		A	0.0	A	0.3	A	0.0	A	0.2

As shown in Tables ES-1 and ES-2, the only intersection with projected Level of Service (LOS) results lower than the minimum acceptable LOS “D” is the Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd. intersection. This intersection has the following issues:

- The overall intersection is projected to experience a failing level of service (LOS “F”) during the a.m. peak hour and a poor level of service (LOS “E”) during the p.m. peak hour by the 2050 (long-term) analysis horizon background traffic scenario.
- The westbound left turn/through movement is projected to experience a failing level of service (LOS “F”) during the a.m. peak hour by the 2050 (long-term) analysis horizon background traffic scenario.
- The westbound through/right turn movement is projected to experience a failing level of service (LOS “F”) during the a.m. peak hour by the 2050 (long-term) analysis horizon background traffic scenario.
- The northbound left turn/through/right turn movement is projected to experience a failing level of service (LOS “F”) during both the a.m. and p.m. peak hour by the 2050 (long-term) analysis horizon background traffic scenario.
- The southbound left turn/through/right turn movement is projected to experience a poor level of service (LOS “E”) during the a.m. peak hour and a failing level of service (LOS “F”) during the p.m. peak hour by the 2050 (long-term) analysis horizon background traffic scenario.

While there are issues projected on various intersection movements, these issues are primarily caused by background traffic in the 2050 (long-term) analysis horizon. These issues are not significantly worsened by the addition of proposed site traffic. It is also important to note that while considered with the lower growth rate along Lake Gulch Rd., the anticipated Crystal Valley Interchange is expected to divert some existing traffic that has to use the Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd. intersection to get to I-25. Based on these factors, there are no geometric or operational modifications are being recommended for the Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd. intersection as a result of the proposed Terra Monte development. However, if traffic dictates in the future, it may be necessary to expand this intersection to include two lanes on all approaches and throughout the circulatory area.

Based on the analysis shown in this study, a summary of recommendations and associated responsibilities for the construction of roadway and intersection improvements to adequately address any traffic projected traffic concerns and serve the proposed Terra Monte development within the study area are provided in Table ES-3, below.

**TABLE ES-3
SUMMARY OF RECOMMENDATIONS**

Roadway	Recommendations	Responsibility	Timing
N. Ridge Rd.	No geometric or operational modifications are recommended as a result of the proposed Terra Monte development.	N/A	N/A
Plum Creek Pkwy.	No geometric or operational modifications are recommended as a result of the proposed Terra Monte development.	N/A	N/A
Intersection	Recommendations	Responsibility	Timing
Plum Creek Pkwy./ N. Ridge Rd.	No geometric or operational modifications are recommended as a result of the proposed Terra Monte development.	N/A	N/A
Enderud Blvd./ N. Ridge Rd.	The lane configuration on the westbound approach of the intersection should be updated to have a shared left turn/through/right turn lane and a right turn only lane. Providing two lanes from which right turn movements can be made will help mitigate against the high volumes that are anticipated to utilize this movement.	City of Castle Rock	2050/ As Needed
	It is anticipated that a west leg will be added to this intersection with one yield-controlled approach lane and one departure lane along with the Founders Vista development.	Founders Vista Developer	2026
Fifth St./ N. Ridge Rd./ Founders Pkwy.	It is anticipated that the intersection will expand to include two through lanes on all approaches as well as dual left turn lanes on the northbound and southbound approaches based on plans provided by the Town of Castle Rock	City of Castle Rock	By 2026
	No geometric or operational modifications are recommended as a result of the proposed Terra Monte development.	N/A	N/A
Plum Creek Pkwy./ S. Gilbert St./ Lake Gulch Rd.	No geometric or operational modifications are recommended as a result of the proposed Terra Monte development. While there are projected issues at the intersection in the 2050 (long-term) analysis horizon, it is anticipated that the proposed Crystal Valley Interchange may divert a considerable amount of traffic away from this intersection by that time.	N/A	N/A
	However, if traffic conditions dictate in the future, it may be necessary to expand this intersection to include two lanes on all approaches as well as throughout the entire circulatory area of the intersection.	Town of Castle Rock	2050/ As Needed
Plum Creek Pkwy./ South Site Access	A newly constructed right-in right-out (RIRO) north leg will tie into this intersection in the same location as the existing residential driveway. The intersection movements should be restricted by extending the center median across the intersection.	Developer	Concurrent with Project
North Site Access/ N. Ridge Rd.	A newly constructed right-in right-out (RIRO) west leg will tie into this intersection in the same location as the existing residential driveway.	Developer	Concurrent with Project

I. INTRODUCTION

A. Project Overview

Urban Moment Development is proposing to develop a property containing approximately 32.3 acres of undeveloped land situated along the west side of N. Ridge Rd. and Plum Creek Pkwy. in Castle Rock, Colorado. More specifically, the subject property is bound by N. Ridge Rd. and Plum Creek Pkwy. to the east, private residences to the west, Faith Lutheran Church to the north, and Plum Creek Pkwy. as well as a private driveway to the south. Upon build-out, the development, to be known as Terra Monte, will consist of 165 single family attached housing units along with 5,400 SF of retail that is anticipated to be a brewery tap room.

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

- A right-in right-out driveway intersecting Plum Creek Pkwy. approximately 500 feet northwest of Plum Creek Pkwy. where there is an existing driveway, forming a “T” intersection and providing access to the northern end of the site.
- A right-in right-out driveway intersecting N. Ridge Rd. approximately 400 feet southwest of N. Ridge Rd. where there is an existing driveway, forming a “T” intersection and providing access to the southern end of the 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 Terra Monte development.

B. Purpose of Study

The purpose of this study is to evaluate the impact of the vehicular trips projected to be generated by the proposed Terra Monte development on the study area intersections and roadway system. The study includes 2024 (existing), 2026 (year of anticipated project build-out), and 2050 (long-term) analysis horizons.

C. Study Area

The study area encompasses the existing roadway system in the vicinity of the project site. Specifically, the following existing intersections are included in the study:

- Plum Creek Pkwy./N. Ridge Rd.
- Enderud Blvd./N. Ridge Rd.
- Fifth St./N. Ridge Rd./Founder Pkwy.
- Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.
- Plum Creek Pkwy./South Site Access
- North Site Access/N. Ridge Rd.

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, April 11, 2024:

- Plum Creek Pkwy./N. Ridge Rd.
- Enderud Blvd./N. Ridge Rd.
- Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.
- Plum Creek Pkwy./South Site Access
- North Site Access/N. Ridge Rd.

24-hour directional traffic volume counts were collected for this study at the following locations on Thursday, April 11, 2024:

- N. Ridge Rd. north of Plum Creek Pkwy.
- Plum Creek Pkwy. west of N. Ridge Rd.

Due to the Fifth St./N. Ridge Rd./Founder Pkwy. intersection currently being under construction, traffic count data and growth rates for this intersection were provided by the Town of Castle Rock. A summary of the 2024 (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 Terra Monte development is graphically illustrated in Figure 1. The following narrative provides a description of the study area roadways and associated intersections:

Study Area Roadways:

- **N. Ridge Rd.** – Within the study area (Plum Creek Pkwy. to Fifth St.) N. Ridge Rd. is classified as a Major Arterial roadway under the jurisdiction of the Town of Castle Rock. The roadway section consists of two travel lanes in each direction along with a raised center median. There is curb and gutter and detached sidewalks along both sides of the roadway. The posted speed limit is 45 mph.
- **Plum Creek Pkwy.** – Within the study area (S. Gilbert St. to N. Ridge Rd.) Plum Creek Pkwy. is classified as a Major Arterial roadway under the jurisdiction of Town of Castle Rock. The roadway section consists of two travel lanes in each direction along with a raised center median. There is curb and gutter and a mix of attached and detached sidewalks along both sides of the roadway. The posted speed limit is 40 mph.

Study Area Intersections:

- **Plum Creek Pkwy./N. Ridge Rd.** – The Plum Creek Pkwy./N. Ridge Rd. intersection is a four-legged intersection operating as a roundabout with yield control on all approaches. The east leg of the intersection serves as a residential driveway and has one approach lane on the westbound approach, and one eastbound departure lane along with one added eastbound acceleration lane. The west leg of the intersection has two approach lanes on the eastbound approach, and one westbound departure lane

along with one added southbound to westbound bypass lane. The north leg of the intersection has one approach lane and one right turn bypass lane on the southbound approach and two northbound departure lanes. The south leg of the intersection has one approach lane on the northbound approach and one southbound departure lane. The roundabout has a mix of either one or two circulating lanes in coordination with the various approach lanes.

- **Enderud Blvd./N. Ridge Rd.** - The Enderud Blvd./N. Ridge Rd. intersection is a three-legged "T" intersection operating as a roundabout with yield control on all approaches. The east leg of the intersection has one shared left turn/right turn lane and one right turn lane on the westbound approach, and one eastbound departure lane. The north leg of the intersection has one shared left turn/through lane and one through lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection has one through lane and one shared through/right turn lane on the northbound approach, and one southbound departure lane. It is anticipated that a west leg will be added to this intersection along with the Founders Vista development. This leg will include one shared left turn/through/right turn on the eastbound approach, and one westbound departure lane.
- **Fifth St./N. Ridge Rd./Founders Pkwy.** - The Fifth St./N. Ridge Rd./Founders Pkwy. intersection is a four-legged intersection operating under actuated-coordinated signal control with protected/permitted left turn movements on the eastbound and westbound approaches, and split phasing on the northbound and southbound approaches. The east leg of the intersection has one left turn lane with approximately 600 feet of storage, one through lane, and one right turn lane with approximately 800 feet of storage on the westbound approach, and one eastbound departure lane along with a northbound to eastbound acceleration lane. The west 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 400 feet of storage on the eastbound approach, and one westbound departure lane along with a southbound to westbound acceleration lane. The north leg of the intersection has one left turn lane with approximately 650 feet of storage, one through lane, and one right turn lane on the southbound approach, and one northbound departure lane along with a westbound to northbound add lane. The south leg of the intersection has one left turn lane with approximately 400 feet of storage, one through lane, and one right turn lane on the northbound approach, and one southbound departure lane along with an eastbound to southbound add lane. While these parameters were used for the existing scenario analysis, the intersection is currently under construction, and it is anticipated that the intersection improvements will be finished by the Fall of 2024 based on information from the Town of Castle Rock. These improvements will expand the intersection to provide two through lanes on all four approaches as well as dual left turn lanes on the northbound and southbound approaches.
- **Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.** – The Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd. intersection is a four-legged intersection operating as a roundabout with yield control on all approaches. The east leg of the intersection has two approach lane on the westbound approach, and two eastbound departure lanes. The west leg of the intersection has two approach lanes on the eastbound approach, and two westbound departure lanes. The north leg of the intersection has one approach lane on the southbound approach and one northbound departure lane. The south leg of the intersection has one approach lane on the northbound approach and one southbound

departure lane. The roundabout has a mix of either one or two circulating lanes in coordination with the various approach lanes.

- **Plum Creek Pkwy./South Site Access** - The Plum Creek Pkwy./South Site Access intersection is an existing 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 through lane and one shared through/right turn lane on the westbound approach, and two eastbound departure lanes. The west leg of the intersection has two through lanes on the eastbound approach and two westbound departure lanes. The north leg of the intersection currently serves as a private driveway but will also be the south access point for the proposed Terra Monte development. It will be a right-in right-out (RIRO) access point with one right turn lane on the southbound approach, and one northbound departure lane.
- **North Site Access/N. Ridge Rd.** - The North Site Access/N. Ridge Rd. intersection is an existing 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 currently serves as a private driveway but will also be the north access point for the proposed Terra Monte development. It will be a right-in right-out (RIRO) access point with one right turn lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection has 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 has two through lanes on the northbound approach, and two southbound departure lanes.

C. 2024 (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 Terra Monte development on the study area intersections, peak hour capacity analyses were performed for the 2024 (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 2024 (existing) conditions analysis are as follows:

- Plum Creek Pkwy./N. Ridge Rd.
- Enderud Blvd./N. Ridge Rd.
- Fifth St./N. Ridge Rd./Founder Pkwy.
- Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.
- Plum Creek Pkwy./South Site Access
- North Site Access/N. Ridge Rd.

The results of the 2024 (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, with the exception the following:

- Fifth St./N. Ridge Rd./Founder Pkwy.
 - The northbound through lane group is projected to experience a poor level of service (LOS “E”) during both the a.m. and p.m. peak hour.
 - The southbound left turn lane group is projected to experience a poor level of service (LOS “E”) during the a.m. peak hour and a failing level of service (LOS “F”) during the p.m. peak hour.
 - The southbound through lane group is projected to experience a poor level of service (LOS “E”) during the p.m. peak hour.

It should be noted once again that the Fifth St./N. Ridge Rd./Founder Pkwy. intersection is currently under construction while improvements are being made. However, since these improvements are not yet complete, the existing scenario analysis utilized the intersection under the previous lane configuration before this construction began.

D. 2024 (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, there are no study area intersections that are experiencing queue related issues based on the reported queues in the 2024 (existing) conditions analysis scenario with the exception of the following:

- Fifth St./N. Ridge Rd./Founder Pkwy.
 - The southbound left turn lane group is projected to exceed its storage capacity during the p.m. peak hour.

TABLE 1
2024 (EXISTING) CONDITIONS
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2024 EXISTING TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
1. Plum Creek Pkwy./N. Ridge Rd.	Roundabout				
a. EB L	Yield	A	4.2	A	5.6
b. EB LTR	Yield	A	3.8	A	5.5
c. WB LTR	Yield	A	5.5	A	4.5
d. NB LTR	Yield	B	10.4	A	6.7
e. SB LTR	Yield	A	5.2	A	5.4
f. SB R	Yield	A	4.9	A	5.2
g. INTERSECTION		A	7.7	A	5.8
2. Enderud Blvd./N. Ridge Rd.	Roundabout				
a. WB L	Yield	A	5.1	A	4.3
b. WB R	Yield	B	12.7	A	5.8
c. NB T	Yield	A	4.9	A	6.7
d. NB TR	Yield	A	4.8	A	6.3
e. SB LT	Yield	A	4.0	A	6.9
f. SB T	Yield	A	3.9	A	6.0
g. INTERSECTION		A	7.8	A	6.2
3. Fifth St./N. Ridge Rd./Founders Pkwy.	Signal				
a. EB L (Prot + Perm)		B	19.2	C	29.2
b. EB T		C	22.1	D	50.1
c. EB R (Channelized Yield)		A	0.0	A	0.0
d. WB L (Prot + Perm)		B	18.2	C	32.5
e. WB T		C	25.8	D	38.5
f. WB R (Channelized Free)		A	0.0	A	0.0
g. NB L (Prot + Perm)		D	46.1	D	46.7
h. NB T		E	61.8	E	59.4
i. NB R (Channelized Yield)		A	0.0	A	0.0
j. SB L (Prot + Perm)		E	61.1	F	127.2
k. SB T		D	51.9	E	58.3
l. SB R (Channelized Yield)		A	0.0	A	0.0
m. INTERSECTION		D	42.5	E	67.6
4. Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.	Roundabout				
a. EB LT	Yield	A	4.9	B	11.9
b. EB TR	Yield	A	4.8	B	11.7
c. WB LT	Yield	C	19.2	A	8.3
d. WB TR	Yield	C	17.4	A	7.9
e. NB LTR	Yield	D	31.5	C	18.5
f. SB LTR	Yield	B	14.1	C	16.5
g. INTERSECTION		C	20.7	B	13.2
5. Plum Creek Pkwy./South Site Access	TWSC				
a. SB R	Stop	A	0.0	A	0.0
b. INTERSECTION		A	0.0	A	0.0
6. North Site Access/N. Ridge Rd.	TWSC				
a. EB R	Stop	A	0.0	A	0.0
b. INTERSECTION		A	0.0	A	0.0

TABLE 2
2024 (EXISTING) CONDITIONS
SUMMARY OF QUEUING ANALYSIS

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING STORAGE (FT)	2024 EXISTING TRAFFIC	
		QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK
1. Plum Creek Pkwy./N. Ridge Rd.			
a. EB L (1)	*	25	25
b. EB LTR (1)	*	0	25
c. WB LTR (1)	*	0	0
d. NB LTR (1)	*	100	50
e. SB LTR (1)	*	0	25
f. SB R (1)	*	0	25
2. Enderud Blvd./N. Ridge Rd.			
a. WB L (1)	*	0	0
b. WB R (1)	*	100	25
c. NB T (1)	*	25	25
d. NB TR (1)	*	25	25
e. SB LT (1)	*	0	50
f. SB T (1)	*	0	50
3. Fifth St./N. Ridge Rd./Founders Pkwy.			
a. EB L (1)	350	53	126
b. EB T (1)	*	176	640
c. EB R (1)	400	40	91
d. WB L (1)	600	71	107
e. WB T (1)	*	395	268
f. WB R (1)	800	102	84
g. NB L (1)	400	266	190
h. NB T (1)	*	386	319
i. NB R (1)	*	0	4
j. SB L (1)	650	215	757
k. SB T (1)	*	129	542
l. SB R (1)	*	37	43
4. Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.			
a. EB LT (1)	*	25	75
b. EB TR (1)	*	25	100
c. WB LT (1)	*	100	25
d. WB TR (1)	*	100	25
e. NB LTR (1)	*	350	150
f. SB LTR (1)	*	50	100
5. Plum Creek Pkwy./South Site Access			
a. SB R (1)	*	9	9
6. North Site Access/N. Ridge Rd.			
a. EB R (1)	*	0	0

* = Extension of approach laneage.

III. BACKGROUND TRAFFIC

A. Background Traffic Volumes

The background traffic models for the 2026 (build-out) and 2050 (long-term) analysis horizons were developed for this study employing the following strategy:

- The Town of Castle Rock provided roadway traffic counts and future traffic projections to establish the average annual traffic volume growth rates to be used in this study.
 - Based on these provided volumes on Plum Creek Pkwy. and N. Ridge Rd. in the vicinity of the study area, the average annual traffic volume growth rates were forecast to be just under 1.0%. Therefore, to be slightly conservative, a 1.0% average annual growth rate was used for all roadways within the study area. This equates to a 2-year (2024 to 2026) growth factor of 1.02 and a 26-year (2024 to 2050) growth factor of 1.30. However, growth rates along Lake Gulch Rd. are expected to be lower based on traffic being diverted when the anticipated Crystal Valley Interchange is completed. Therefore, based on information provided by the Town of Castle Rock a growth rate of 0.54% was used for Lake Gulch Rd. as well as eastbound right turn movements at the Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd. intersection. This equates to a 2-year (2024 to 2026) growth factor of 1.01 and a 26-year (2024 to 2050) growth factor of 1.15.
 - While there are other local background parcels expected to be developed within the study area, such as *Founders Villa*, the background growth rate used is meant to capture that additional traffic according to the Town of Castle Rock. However, the *Founders Villa TIS, 2019* was utilized to generate volumes for the access point that connects into the Enderud Blvd./N. Ridge Rd. intersection.
 - Additional volumes were also allocated to the westbound through movement of the Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd. intersection during the AM peak hour at the request of the Town of Castle Rock to account for other projected development along Plum Creek Pkwy.
- These factors were applied to the 2024 (existing) traffic volumes collected for this study to forecast the 2026 (build-out) and 2050 (long-term) background traffic volumes.
- For the purposes of this study it was assumed that the distribution of intersection approach traffic (left turn, through, right turn) will remain static through the 2050 (long-term) analysis horizon.

Figures 5 and 6 graphically illustrate the forecast 2026 (build-out) and 2050 (long-term) analysis horizons background traffic volumes on the study area roadways and intersections, respectively.

B. Background Traffic Operational Analysis

The following study area intersections were analyzed for the 2026 (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 Terra Monte development:

- Plum Creek Pkwy./N. Ridge Rd.
- Enderud Blvd./N. Ridge Rd.
- Fifth St./N. Ridge Rd./Founder Pkwy.
- Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.
- Plum Creek Pkwy./South Site Access
- North Site Access/N. Ridge Rd.

The results of the background traffic operational analyses are summarized graphically for the 2026 (build-out) and 2050 (long-term) background traffic analysis horizons in Figures 7, and 8, respectively. A summary of the results of the intersection capacity analyses are 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 2026 (build-out) and 2050 (long-term) analysis horizon background traffic scenario with the exception of the following:

- Enderud Blvd./N. Ridge Rd.
 - The westbound right turn lane group is projected to experience a failing level of service (LOS “F”) during the a.m. peak hour by the 2050 (long-term) analysis horizon.
- Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.
 - The overall intersection is projected to experience a failing level of service (LOS “F”) during the a.m. peak hour and a poor level of service (LOS “E”) during the p.m. peak hour by the 2050 (long-term) analysis horizon.
 - The westbound left turn/through lane group is projected to experience a failing level of service (LOS “F”) during the a.m. peak hour by the 2050 (long-term) analysis horizon.
 - The westbound through/right turn lane group is projected to experience a failing level of service during (LOS “F”) the a.m. peak hour by the 2050 (long-term) analysis horizon.
 - The northbound left turn/through/right turn lane group is projected to experience a failing level of service (LOS “F”) during both the a.m. and p.m. peak hour by the 2050 (long-term) analysis horizon.
 - The southbound left turn/through/right turn lane group is projected to experience a poor level of service (LOS “E”) during the a.m. peak hour and a failing level of service (LOS “F”) during the p.m. peak hour by the 2050 (long-term) analysis horizon.

C. 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 2026 (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 2026 (build-out) and 2050 (long-term) analysis horizon background traffic analysis scenarios.

TABLE 3
2026 (BUILD-OUT) & 2050 (LONG-TERM) BACKGROUND TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2026 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. Plum Creek Pkwy./N. Ridge Rd.	Roundabout								
a. EB L	Yield	A	4.2	A	5.7	A	4.7	A	7.0
b. EB LTR	Yield	A	3.8	A	5.5	A	4.2	A	6.8
c. WB LTR	Yield	A	5.6	A	4.5	A	6.9	A	5.3
d. NB LTR	Yield	B	10.8	A	6.9	C	19.4	A	9.1
e. SB LTR	Yield	A	5.3	A	5.5	A	6.4	A	6.6
f. SB R	Yield	A	5.0	A	5.3	A	6.0	A	6.5
g. INTERSECTION		A	7.9	A	5.9	B	12.9	A	7.4
2. Enderud Blvd./N. Ridge Rd.	Roundabout								
a. EB LTR	Yield	A	5.6	A	9.2	A	6.3	B	12.6
b. WB LT	Yield	A	6.2	A	5.3	A	7.6	A	6.1
c. WB R	Yield	C	18.8	A	7.2	F	65.8	A	9.3
d. NB LT	Yield	A	6.0	A	8.4	A	7.1	B	11.5
e. NB TR	Yield	A	5.8	A	7.9	A	6.9	B	10.8
f. SB LT	Yield	A	4.2	A	7.8	A	4.7	B	10.2
g. SB TR	Yield	A	4.1	A	7.8	A	4.6	B	10.3
h. INTERSECTION		A	10.0	A	7.8	D	27.3	B	10.2
3. Fifth St./N. Ridge Rd./Founders Pkwy.	Signal								
a. EB L (Prot + Perm)		B	11.0	B	16.7	B	15.4	C	25.4
b. EB T		B	13.1	C	21.7	B	18.1	C	33.2
c. EB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
d. WB L (Prot + Perm)		B	10.8	B	17.2	B	14.9	C	33.1
e. WB T		B	13.7	C	20.4	B	19.2	C	28.2
f. WB R (Channelized Free)		A	0.0	A	0.0	A	0.0	A	0.0
g. NB L (Prot + Perm)		D	36.2	D	36.7	C	33.4	C	33.9
h. NB T		D	38.8	D	39.6	D	41.8	D	41.4
i. NB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
j. SB L (Prot + Perm)		D	41.9	D	38.9	D	40.3	D	48.3
k. SB T		D	39.3	C	33.5	D	36.8	C	31.5
l. SB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
m. INTERSECTION		C	28.2	C	30.9	C	30.5	D	37.0
4. Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.	Roundabout								
a. EB LT	Yield	A	5.0	B	12.3	A	5.8	D	25.9
b. EB TR	Yield	A	4.9	B	12.1	A	5.6	D	26.1
c. WB LT	Yield	C	24.0	A	8.4	F	67.5	B	12.6
d. WB TR	Yield	C	21.7	A	8.0	F	59.4	B	11.8
e. NB LTR	Yield	D	33.6	C	19.4	F	97.1	F	88.1
f. SB LTR	Yield	C	16.6	C	17.5	E	35.5	F	64.6
g. INTERSECTION		C	23.1	B	13.8	F	62.1	E	43.1
5. Plum Creek Pkwy./South Site Access	TWSC								
a. SB R	Stop	A	0.0	A	0.0	A	0.0	A	0.0
b. INTERSECTION		A	0.0	A	0.0	A	0.0	A	0.0
6. North Site Access/N. Ridge Rd.	TWSC								
a. EB R	Stop	A	0.0	A	0.0	A	0.0	A	0.0
b. INTERSECTION		A	0.0	A	0.0	A	0.0	A	0.0

TABLE 4
2026 (BUILD-OUT) & 2050 (LONG-TERM) BACKGROUND TRAFFIC
SUMMARY OF QUEUING ANALYSIS

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING STORAGE (FT)	2026 BACKGROUND TRAFFIC		2050 BACKGROUND TRAFFIC	
		QUEUE LENGTH (FT) 95TH%		QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK	AM PEAK	PM PEAK
1. Plum Creek Pkwy./N. Ridge Rd.					
a. EB L (1)	*	25	25	25	25
b. EB LTR (1)	*	0	25	25	50
c. WB LTR (1)	*	0	0	0	0
d. NB LTR (1)	*	100	50	250	75
e. SB LTR (1)	*	0	25	25	25
f. SB R (1)	*	0	25	25	25
2. Enderud Blvd./N. Ridge Rd.					
a. EB LTR (1)	*	25	25	25	25
b. WB LT (1)	*	0	0	25	25
c. WB R (1)	*	175	25	475	50
d. NB LT (1)	*	25	25	25	50
e. NB TR (1)	*	25	25	50	50
f. SB LT (1)	*	0	50	25	75
g. SB TR (1)	*	0	50	25	100
3. Fifth St./N. Ridge Rd./Founders Pkwy.					
a. EB L (1)	350	36	88	47	113
b. EB T (2)	*	120	314	158	431
c. EB R (1)	400	16	72	32	131
d. WB L (1)	600	49	78	77	164
e. WB T (2)	*	243	173	334	230
f. WB R (1)	800	85	68	540	91
g. NB L (2)	800	198	147	248	182
h. NB T (2)	*	281	241	407	353
i. NB R (1)	*	0	0	0	15
j. SB L (2)	1300	165	417	227	735
k. SB T (2)	*	103	331	129	475
l. SB R (1)	*	13	19	28	35
4. Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.					
a. EB LT (1)	*	25	100	25	225
b. EB TR (1)	*	25	100	25	250
c. WB LT (1)	*	125	25	300	75
d. WB TR (1)	*	125	50	300	75
e. NB LTR (1)	*	375	150	775	525
f. SB LTR (1)	*	75	125	150	375
5. Plum Creek Pkwy./South Site Access					
a. SB R (1)	*	0	0	0	0
6. North Site Access/N. Ridge Rd.					
a. EB R (1)	*	0	0	0	0

* = Extension of approach laneage.

IV. PROJECT DEVELOPMENT

A. Trip Generation

The trip generation projections for the proposed Terra Monte development were forecast using 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. Trip generation reductions as a result of internal trip capture, transportation demand management or transit use were not considered.

For the purposes of this study, it was assumed that the proposed Terra Monte development will be fully built out by 2026 and consist of 165 attached single family housing units and 5,400 SF of retail space that is anticipated to be a Brewery Tap Room. Based on these parameters, at buildout, the proposed Terra Monte development is projected to generate 1540 daily vehicle trips of which 84 are projected to be generated during the a.m. peak hour and 148 are projected to be generated during the p.m. peak hour. A summary of the trip generation projections is provided in Table 5.

TABLE 5
TERRA MONTE – TRIP GENERATION SUMMARY

Land Use	Intensity	ITE Code	Daily (vpd)	AM Peak Hour (vph)			PM Peak Hour (vph)		
				Total	In	Out	Total	In	Out
Brewery Tap Room	5.4 TSF	971	333	4	3	1	53	31	22
Single-Family Attached Housing	165 DU	215	1207	80	20	60	95	56	39
Total		-	1,540	84	23	61	148	87	61

B. Trip Distribution

The distribution of the projected vehicular trips generated by the proposed Terra Monte 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 Plum Creek Pkwy., Founders Pkwy., I-25, etc.
- Potential trip origins/destinations for the proposed land uses such as surrounding shopping centers, schools and employment centers.

Figure 9 graphically illustrates the projected trip distribution patterns for the proposed Terra Monte development.

C. Trip Assignment

The vehicular traffic volumes projected to be generated by the proposed Terra Monte development, shown in Table 5, were assigned to the study area roadways and intersections utilizing the trip distribution methodology described above. Figure 10 graphically illustrates the site generated trip assignment for the proposed Terra Monte development.

V. TOTAL TRAFFIC

Total traffic forecasts for the 2026 (build-out) and 2050 (long-term) analysis horizons were computed by combining the associated 2026 (build-out) and 2050 (long-term) background traffic volumes with the projected site generated traffic volumes. Figures 11 & 12 graphically illustrate the total traffic projections for the study area intersections for the 2026 (build-out) and 2050 (long-term) analysis horizons, respectively.

VI. PROJECT ANALYSIS

A. Operational Analysis

In order to evaluate the impact of the proposed Terra Monte development on the study area roadway system, peak hour intersection capacity analyses for the total traffic conditions were performed for the 2026 (build-out) and 2050 (long-term) analysis horizon total traffic scenarios at each of the study area intersections listed below:

- Plum Creek Pkwy./N. Ridge Rd.
- Enderud Blvd./N. Ridge Rd.
- Fifth St./N. Ridge Rd./Founder Pkwy.
- Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.
- Plum Creek Pkwy./South Site Access
- North Site Access/N. Ridge Rd.

The results of the total traffic operational analyses are summarized in Table 6, below. Figures 13 and 14 graphically illustrate the 2026 (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”.

Tables 7 and 8 provides a side-by-side comparative summary of the 2026 (build-out) and 2050 (long-term) analysis horizons background and total traffic operational analyses. A comparison of the 2026 (build-out) and 2050 (long-term) analysis horizons background and total traffic operational analyses indicates that the addition of the projected site generated vehicle trips from the proposed Terra Monte development will have a minimal impact on the operational characteristics of the study area intersections, based on level of service. In fact, no intersections or individual movements are projected to deteriorate from an acceptable level of service (LOS “D” or better) to a poor or failing (LOS “E” or “F”) level of service with the addition of site traffic from the proposed Terra Monte development.

B. Queuing Analysis

Queue lengths and associated storage requirements for auxiliary lanes (turn bays) at the study area intersections were computed for the 2026 (build-out) and 2050 (long-term) analysis horizon total traffic scenarios. Table 9 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 addition of the projected site generated vehicle trips from the proposed Terra Monte development do not create any queuing issues.

TABLE 6
2026 (BUILD-OUT) & 2050 (LONG-TERM) TOTAL TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2026 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. Plum Creek Pkwy./N. Ridge Rd.	Roundabout								
a. EB L	Yield	A	4.4	A	6.1	A	5.0	A	7.6
b. EB LTR	Yield	A	4.0	A	5.7	A	4.4	A	7.0
c. WB LTR	Yield	A	5.8	A	4.7	A	7.2	A	5.5
d. NB LTR	Yield	B	11.6	A	7.3	C	22.3	A	9.8
e. SB LTR	Yield	A	5.5	A	5.7	A	6.7	A	7.0
f. SB R	Yield	A	5.2	A	5.6	A	6.3	A	6.8
g. INTERSECTION		A	8.4	A	6.2	B	14.4	A	7.8
2. Enderud Blvd./N. Ridge Rd.	Roundabout								
a. EB LTR	Yield	A	5.7	A	9.5	A	6.4	B	13.0
b. WB LT	Yield	A	6.4	A	5.4	A	7.8	A	6.3
c. WB R	Yield	C	20.2	A	7.4	F	74.5	A	9.6
d. NB LT	Yield	A	6.1	A	8.6	A	7.3	B	11.8
e. NB TR	Yield	A	6.0	A	8.1	A	7.1	B	11.1
f. SB LT	Yield	A	4.3	A	8.1	A	4.8	B	10.5
g. SB TR	Yield	A	4.1	A	8.0	A	4.6	B	10.7
h. INTERSECTION		B	10.4	A	8.0	D	30.1	B	10.5
3. Fifth St./N. Ridge Rd./Founders Pkwy.	Signal								
a. EB L (Prot + Perm)		B	11.3	B	16.7	B	15.7	C	25.7
b. EB T		B	13.3	C	21.6	B	18.4	C	33.6
c. EB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
d. WB L (Prot + Perm)		B	11.0	B	17.0	B	15.1	C	34.5
e. WB T		B	14.0	C	19.9	B	19.5	C	28.4
f. WB R (Channelized Free)		A	0.0	A	0.0	A	0.0	A	0.0
g. NB L (Prot + Perm)		D	35.8	D	36.4	C	33.1	C	33.7
h. NB T		D	39.0	D	39.4	D	42.5	D	41.8
i. NB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
j. SB L (Prot + Perm)		D	41.9	D	40.2	D	40.2	D	48.3
k. SB T		D	39.4	C	34.6	D	36.9	C	32.0
l. SB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
m. INTERSECTION		C	28.5	C	31.3	C	30.9	D	37.3
4. Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.	Roundabout								
a. EB LT	Yield	A	5.1	B	12.9	A	5.8	D	27.9
b. EB TR	Yield	A	4.9	B	12.6	A	5.7	D	28.1
c. WB LT	Yield	D	25.9	A	8.6	F	75.2	B	13.0
d. WB TR	Yield	C	23.3	A	8.2	F	67.3	B	12.2
e. NB LTR	Yield	D	35.0	C	20.9	F	101.0	F	99.0
f. SB LTR	Yield	C	17.3	C	18.6	E	38.2	F	72.4
g. INTERSECTION		C	24.2	B	14.5	F	66.2	E	47.5
5. Plum Creek Pkwy./South Site Access	TWSC								
a. SB R	Stop	B	10.4	B	10.1	B	11.1	B	10.7
b. INTERSECTION		A	0.3	A	0.2	A	0.3	A	0.2
6. North Site Access/N. Ridge Rd.	TWSC								
a. EB R	Stop	A	9.2	B	10.2	A	9.5	B	10.8
b. INTERSECTION		A	0.4	A	0.2	A	0.3	A	0.2

**TABLE 7
2026 BACKGROUND & TOTAL TRAFFIC
OPERATIONAL ANALYSIS COMPARISON**

INTERSECTION	CONTROL	2026 (BUILD-OUT)							
		BACKGROUND		TOTAL		BACKGROUND		TOTAL	
		AM PEAK LOS	AM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
1. Plum Creek Pkwy./N. Ridge Rd.	Roundabout								
a. EB L	Yield	A	4.2	A	4.4	A	5.7	A	6.1
b. EB LTR	Yield	A	3.8	A	4.0	A	5.5	A	5.7
c. WB LTR	Yield	A	5.6	A	5.8	A	4.5	A	4.7
d. NB LTR	Yield	B	10.8	B	11.6	A	6.9	A	7.3
e. SB LTR	Yield	A	5.3	A	5.5	A	5.5	A	5.7
f. SB R	Yield	A	5.0	A	5.2	A	5.3	A	5.6
g. INTERSECTION		A	7.9	A	8.4	A	5.9	A	6.2
2. Enderud Blvd./N. Ridge Rd.	Roundabout								
a. EB LTR	Yield	A	5.6	A	5.7	A	9.2	A	9.5
b. WB LT	Yield	A	6.2	A	6.4	A	5.3	A	5.4
c. WB R	Yield	C	18.8	C	20.2	A	7.2	A	7.4
d. NB LT	Yield	A	6.0	A	6.1	A	8.4	A	8.6
e. NB TR	Yield	A	5.8	A	6.0	A	7.9	A	8.1
f. SB LT	Yield	A	4.2	A	4.3	A	7.8	A	8.1
g. SB TR	Yield	A	4.1	A	4.1	A	7.8	A	8.0
h. INTERSECTION		A	10.0	B	10.4	A	7.8	A	8.0
3. Fifth St./N. Ridge Rd./Founders Pkwy.	Signal								
a. EB L (Prot + Perm)		B	11.0	B	11.3	B	16.7	B	16.7
b. EB T		B	13.1	B	13.3	C	21.7	C	21.6
c. EB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
d. WB L (Prot + Perm)		B	10.8	B	11.0	B	17.2	B	17.0
e. WB T		B	13.7	B	14.0	C	20.4	C	19.9
f. WB R (Channelized Free)		A	0.0	A	0.0	A	0.0	A	0.0
g. NB L (Prot + Perm)		D	36.2	D	35.8	D	36.7	D	36.4
h. NB T		D	38.8	D	39.0	D	39.6	D	39.4
i. NB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
j. SB L (Prot + Perm)		D	41.9	D	41.9	D	38.9	D	40.2
k. SB T		D	39.3	D	39.4	C	33.5	C	34.6
l. SB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
m. INTERSECTION		C	28.2	C	28.5	C	30.9	C	31.3
4. Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.	Roundabout								
a. EB LT	Yield	A	5.0	A	5.1	B	12.3	B	12.9
b. EB TR	Yield	A	4.9	A	4.9	B	12.1	B	12.6
c. WB LT	Yield	C	24.0	D	25.9	A	8.4	A	8.6
d. WB TR	Yield	C	21.7	C	23.3	A	8.0	A	8.2
e. NB LTR	Yield	D	33.6	D	35.0	C	19.4	C	20.9
f. SB LTR	Yield	C	16.6	C	17.3	C	17.5	C	18.6
g. INTERSECTION		C	23.1	C	24.2	B	13.8	B	14.5
5. Plum Creek Pkwy./South Site Access	TWSC								
a. SB R	Stop	A	0.0	B	10.4	A	0.0	B	10.1
b. INTERSECTION		A	0.0	A	0.3	A	0.0	A	0.2
6. North Site Access/N. Ridge Rd.	TWSC								
a. EB R	Stop	A	0.0	A	9.2	A	0.0	B	10.2
b. INTERSECTION		A	0.0	A	0.4	A	0.0	A	0.2

**TABLE 8
2050 BACKGROUND & TOTAL TRAFFIC
OPERATIONAL ANALYSIS COMPARISON**

INTERSECTION	CONTROL	2050 (LONG-TERM)							
		BACKGROUND		TOTAL		BACKGROUND		TOTAL	
		AM PEAK LOS	AM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
1. Plum Creek Pkwy./N. Ridge Rd.	Roundabout								
a. EB L	Yield	A	4.7	A	5.0	A	7.0	A	7.6
b. EB LTR	Yield	A	4.2	A	4.4	A	6.8	A	7.0
c. WB LTR	Yield	A	6.9	A	7.2	A	5.3	A	5.5
d. NB LTR	Yield	C	19.4	C	22.3	A	9.1	A	9.8
e. SB LTR	Yield	A	6.4	A	6.7	A	6.6	A	7.0
f. SB R	Yield	A	6.0	A	6.3	A	6.5	A	6.8
g. INTERSECTION		B	12.9	B	14.4	A	7.4	A	7.8
2. Enderud Blvd./N. Ridge Rd.	Roundabout								
a. EB LTR	Yield	A	6.3	A	6.4	B	12.6	B	13.0
b. WB LT	Yield	A	7.6	A	7.8	A	6.1	A	6.3
c. WB R	Yield	F	65.8	F	74.5	A	9.3	A	9.6
d. NB LT	Yield	A	7.1	A	7.3	B	11.5	B	11.8
e. NB TR	Yield	A	6.9	A	7.1	B	10.8	B	11.1
f. SB LT	Yield	A	4.7	A	4.8	B	10.2	B	10.5
g. SB TR	Yield	A	4.6	A	4.6	B	10.3	B	10.7
h. INTERSECTION		D	27.3	D	30.1	B	10.2	B	10.5
3. Fifth St./N. Ridge Rd./Founders Pkwy.	Signal								
a. EB L (Prot + Perm)		B	15.4	B	15.7	C	25.4	C	25.7
b. EB T		B	18.1	B	18.4	C	33.2	C	33.6
c. EB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
d. WB L (Prot + Perm)		B	14.9	B	15.1	C	33.1	C	34.5
e. WB T		B	19.2	B	19.5	C	28.2	C	28.4
f. WB R (Channelized Free)		A	0.0	A	0.0	A	0.0	A	0.0
g. NB L (Prot + Perm)		C	33.4	C	33.1	C	33.9	C	33.7
h. NB T		D	41.8	D	42.5	D	41.4	D	41.8
i. NB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
j. SB L (Prot + Perm)		D	40.3	D	40.2	D	48.3	D	48.3
k. SB T		D	36.8	D	36.9	C	31.5	C	32.0
l. SB R (Channelized Yield)		A	0.0	A	0.0	A	0.0	A	0.0
m. INTERSECTION		C	30.5	C	30.9	D	37.0	D	37.3
4. Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.	Roundabout								
a. EB LT	Yield	A	5.8	A	5.8	D	25.9	D	27.9
b. EB TR	Yield	A	5.6	A	5.7	D	26.1	D	28.1
c. WB LT	Yield	F	67.5	F	75.2	B	12.6	B	13.0
d. WB TR	Yield	F	59.4	F	67.3	B	11.8	B	12.2
e. NB LTR	Yield	F	97.1	F	101.0	F	88.1	F	99.0
f. SB LTR	Yield	E	35.5	E	38.2	F	64.6	F	72.4
g. INTERSECTION		F	62.1	F	66.2	E	43.1	E	47.5
5. Plum Creek Pkwy./South Site Access	TWSC								
a. SB R	Stop	A	0.0	B	11.1	A	0.0	B	10.7
b. INTERSECTION		A	0.0	A	0.3	A	0.0	A	0.2
6. North Site Access/N. Ridge Rd.	TWSC								
a. EB R	Stop	A	0.0	A	9.5	A	0.0	B	10.8
b. INTERSECTION		A	0.0	A	0.3	A	0.0	A	0.2

TABLE 9
2026 (BUILD-OUT) & 2050 (LONG-TERM) TOTAL TRAFFIC
SUMMARY OF QUEUING ANALYSIS

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING STORAGE (FT)	2026 TOTAL TRAFFIC		2050 TOTAL TRAFFIC	
		QUEUE LENGTH (FT) 95TH%		QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK	AM PEAK	PM PEAK
1. Plum Creek Pkwy./N. Ridge Rd.					
a. EB L (1)	*	25	25	25	50
b. EB LTR (1)	*	0	25	25	50
c. WB LTR (1)	*	0	0	0	0
d. NB LTR (1)	*	100	50	275	75
e. SB LTR (1)	*	25	25	25	25
f. SB R (1)	*	25	25	25	25
2. Enderud Blvd./N. Ridge Rd.					
a. EB LTR (1)	*	25	25	25	25
b. WB LT (1)	*	25	0	25	25
c. WB R (1)	*	175	25	500	50
d. NB LT (1)	*	25	25	50	50
e. NB TR (1)	*	25	50	50	50
f. SB LT (1)	*	0	50	25	100
g. SB TR (1)	*	25	50	25	100
3. Fifth St./N. Ridge Rd./Founders Pkwy.					
a. EB L (1)	350	36	86	47	113
b. EB T (2)	*	120	304	158	431
c. EB R (1)	400	17	69	33	139
d. WB L (1)	600	49	78	78	168
e. WB T (2)	*	243	167	334	230
f. WB R (1)	800	85	65	542	91
g. NB L (2)	800	204	149	252	186
h. NB T (2)	*	295	249	422	365
i. NB R (1)	*	0	0	0	16
j. SB L (2)	1300	165	427	227	735
k. SB T (2)	*	106	350	135	488
l. SB R (1)	*	13	19	28	35
4. Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.					
a. EB LT (1)	*	25	100	25	225
b. EB TR (1)	*	25	100	25	250
c. WB LT (1)	*	150	50	325	75
d. WB TR (1)	*	150	50	350	75
e. NB LTR (1)	*	375	175	800	550
f. SB LTR (1)	*	75	125	150	400
5. Plum Creek Pkwy./South Site Access					
a. SB R (1)	*	3	3	5	3
6. North Site Access/N. Ridge Rd.					
a. EB R (1)	*	3	3	3	3

* = Extension of approach laneage.

C. Multimodal Assessment

A potential option for the mitigation of the vehicular trips projected to be generated by the proposed Terra Monte development could be the incorporation of multimodal and travel demand management (TDM) strategies and amenities that encourage and promote multimodal travel options. Some of the options that will be explored and potentially incorporated to reduce the impact of site generated traffic on the study area intersections include an internal network of bicycle facilities and sidewalks as well as external bicycle and pedestrian facilities connecting to popular destinations such as schools, parks, and other local trails.

D. Summary of Operational Analysis & Recommended Improvements

Based on the analyses contained in this study, the following improvements are recommended for the study area roadways and intersections in order to mitigate the traffic impacts of the proposed Terra Monte development.

Study Area Roadways:

- **N. Ridge Rd.** – There are no geometric or operational modifications being recommended for N. Ridge Rd. within the study area (Plum Creek Pkwy. to Fifth St.) as a result of the of the proposed Terra Monte development.
- **Plum Creek Pkwy.** – There are no geometric or operational modifications being recommended for Plum Creek Pkwy. within the study area (S. Gilbert St. to N. Ridge Rd.) as a result of the of the proposed Terra Monte development.

Study Area Intersections:

- **Plum Creek Pkwy./N. Ridge Rd.** – The Plum Creek Pkwy./N. Ridge Rd. intersection is not anticipated to undergo any significant geometric or operational modifications through the 2050 (long-term) analysis horizon based on Castle Rock's *Transportation Master Plan, 2017*. Based on these parameters, it is projected that the intersection, overall, as well as all impeded lane groups, will operate at an acceptable level of service (LOS "D" or better) through the 2050 (long-term) analysis horizon total traffic scenario. Therefore, no geometric or operational modifications are being recommended for the Plum Creek Pkwy./N. Ridge Rd. intersection as a result of the proposed Terra Monte development.
- **Enderud Blvd./N. Ridge Rd.** – The Enderud Blvd./N. Ridge Rd. intersection is currently a three-legged roundabout with yield control on all three approaches. It is anticipated that by the 2026 (build-out) analysis horizon, a west leg will be added to this intersection with one yield-controlled approach lane and one departure lane along with the Founders Vista development. Based on these parameters, it is projected that the intersection, overall, as well as all impeded lane groups, will operate at an acceptable level of service (LOS "D" or better) through the 2050 (long-term) analysis horizon total traffic scenario with the exception of the following:
 - The westbound right turn movement is projected to experience a failing level of service (LOS "F") during the a.m. peak hour by the 2050 (long-term) analysis horizon background traffic scenario.

To mitigate this issue, one solution would be to change the lane configuration on the westbound approach to include one shared left turn/through/right turn lane and one right turn only lane. By providing a second lane from which right turns can be made, the

intersection, overall, as well as all impeded lane groups, will operate at an acceptable level of service (LOS “D” or better) through the 2050 (long-term) analysis horizon total traffic scenario.

- **Fifth St./N. Ridge Rd./Founders Pkwy.** – The Fifth St./N. Ridge Rd./Founders Pkwy. intersection is currently under construction to be expanded to include two through lanes on all approaches as well as dual left turn lanes on the northbound and southbound approaches by the 2026 (build-out) analysis horizon based on plans provided by the Town of Castle Rock. Based on these parameters, it is projected that the intersection, overall, as well as all impeded lane groups, will operate at an acceptable level of service (LOS “D” or better) through the 2050 (long-term) analysis horizon total traffic scenario. Therefore, no geometric or operational modifications are being recommended for the Plum Creek Pkwy./N. Ridge Rd. intersection as a result of the proposed Terra Monte development.
- **Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd.** – The Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd. intersection is not anticipated to undergo any significant geometric or operational modifications through the 2050 (long-term) analysis horizon based on Castle Rock’s *Transportation Master Plan, 2017*. Based on these parameters, it is projected that the following intersection scenarios and lane groups will operate below an acceptable level of service (LOS “D” or better) through the 2050 (long-term) analysis horizon total traffic scenario:
 - The overall intersection is projected to experience a failing level of service (LOS “F”) during the a.m. peak hour and a poor level of service (LOS “E”) during the p.m. peak hour by the 2050 (long-term) analysis horizon background traffic scenario.
 - The westbound left turn/through movement is projected to experience a failing level of service (LOS “F”) during the a.m. peak hour by the 2050 (long-term) analysis horizon background traffic scenario.
 - The westbound through/right turn movement is projected to experience a failing level of service (LOS “F”) during the a.m. peak hour by the 2050 (long-term) analysis horizon background traffic scenario.
 - The northbound left turn/through/right turn movement is projected to experience a failing level of service (LOS “F”) during both the a.m. and p.m. peak hour by the 2050 (long-term) analysis horizon background traffic scenario.
 - The southbound left turn/through/right turn movement is projected to experience a poor level of service (LOS “E”) during the a.m. peak hour and a failing level of service (LOS “F”) during the p.m. peak hour by the 2050 (long-term) analysis horizon background traffic scenario.

While there are issues projected on various intersection movements, these issues are primarily caused by background traffic in the 2050 (long-term) analysis horizon. These issues are not significantly worsened by the addition of proposed site traffic. It is also important to note that while considered with the lower growth rate along Lake Gulch Rd., the anticipated Crystal Valley Interchange is expected to divert some existing traffic that has to use the Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd. intersection to get to I-25. Based on these factors, there are no geometric or operational modifications are being recommended for the Plum Creek Pkwy./S. Gilbert St./Lake Gulch Rd. intersection as a result of the proposed Terra Monte development. However, if traffic dictates in the

future, it may be necessary to expand this intersection to include two lanes on all approaches and throughout the circulatory area.

- **Plum Creek Pkwy./South Site Access** – The Plum Creek Pkwy./South Site Access intersection is anticipated to remain relatively unchanged. The north leg of the intersection will change from a residential driveway to an actual roadway that functions as the south access point for the proposed Terra Monte development. The access point will also be restricted to a right-in right-out (RIRO), which is not an explicit restriction currently. Based on these parameters, it is projected that the intersection, overall, as well as all impeded lane groups, will operate at an acceptable level of service (LOS “D” or better) through the 2050 (long-term) analysis horizon total traffic scenario.
- **North Site Access/N. Ridge Rd.** – The North Site Access/N. Ridge Rd. intersection is also anticipated to remain relatively unchanged. The west leg of the intersection will change from a residential driveway to an actual roadway that functions as the north access point for the proposed Terra Monte development. The access point will also be restricted to a right-in right-out (RIRO), which is not an explicit restriction currently. Based on these parameters, it is projected that the intersection, overall, as well as all impeded lane groups, will operate at an acceptable level of service (LOS “D” or better) through the 2050 (long-term) analysis horizon total traffic scenario.

VII. CONCLUSIONS

Urban Moment Development is proposing to develop a property containing approximately 32.3 acres of undeveloped land situated along the west side of N. Ridge Rd. and Plum Creek Pkwy. in Castle Rock, Colorado. More specifically, the subject property is bound by N. Ridge Rd. and Plum Creek Pkwy. to the east, private residences to the west, Faith Lutheran Church to the north, and Plum Creek Pkwy. as well as a private driveway to the south. Upon build-out, the development, to be known as Terra Monte, will consist of 165 single family attached housing units along with 5,400 SF of retail that is anticipated to be a brewery tap room.

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

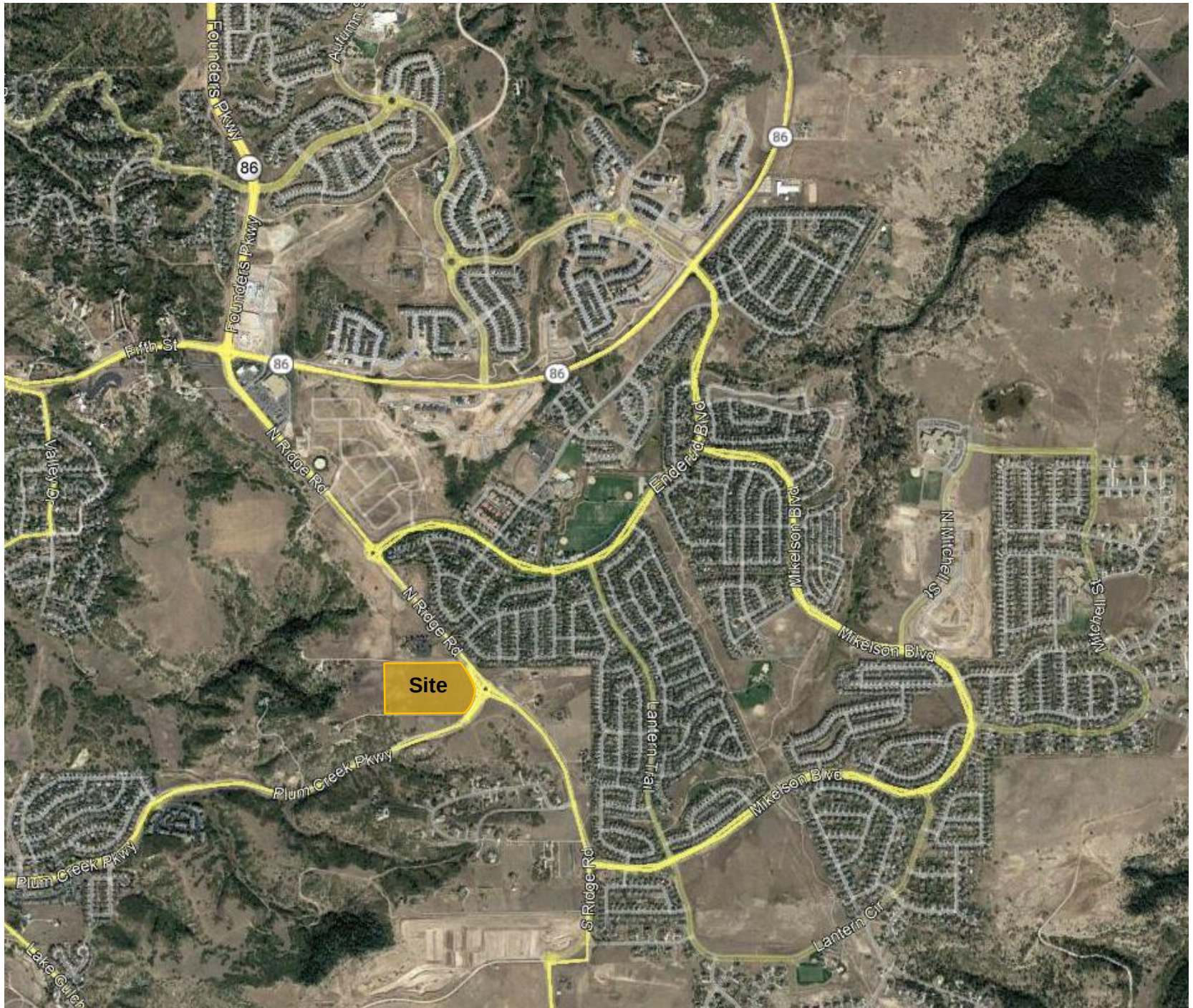
- A right-in right-out driveway intersecting Plum Creek Pkwy. approximately 500 feet northwest of Plum Creek Pkwy. where there is an existing driveway, forming a “T” intersection and providing access to the northern end of the site.
- A right-in right-out driveway intersecting N. Ridge Rd. approximately 400 feet southwest of N. Ridge Rd. where there is an existing driveway, forming a “T” intersection and providing access to the southern end of the site.

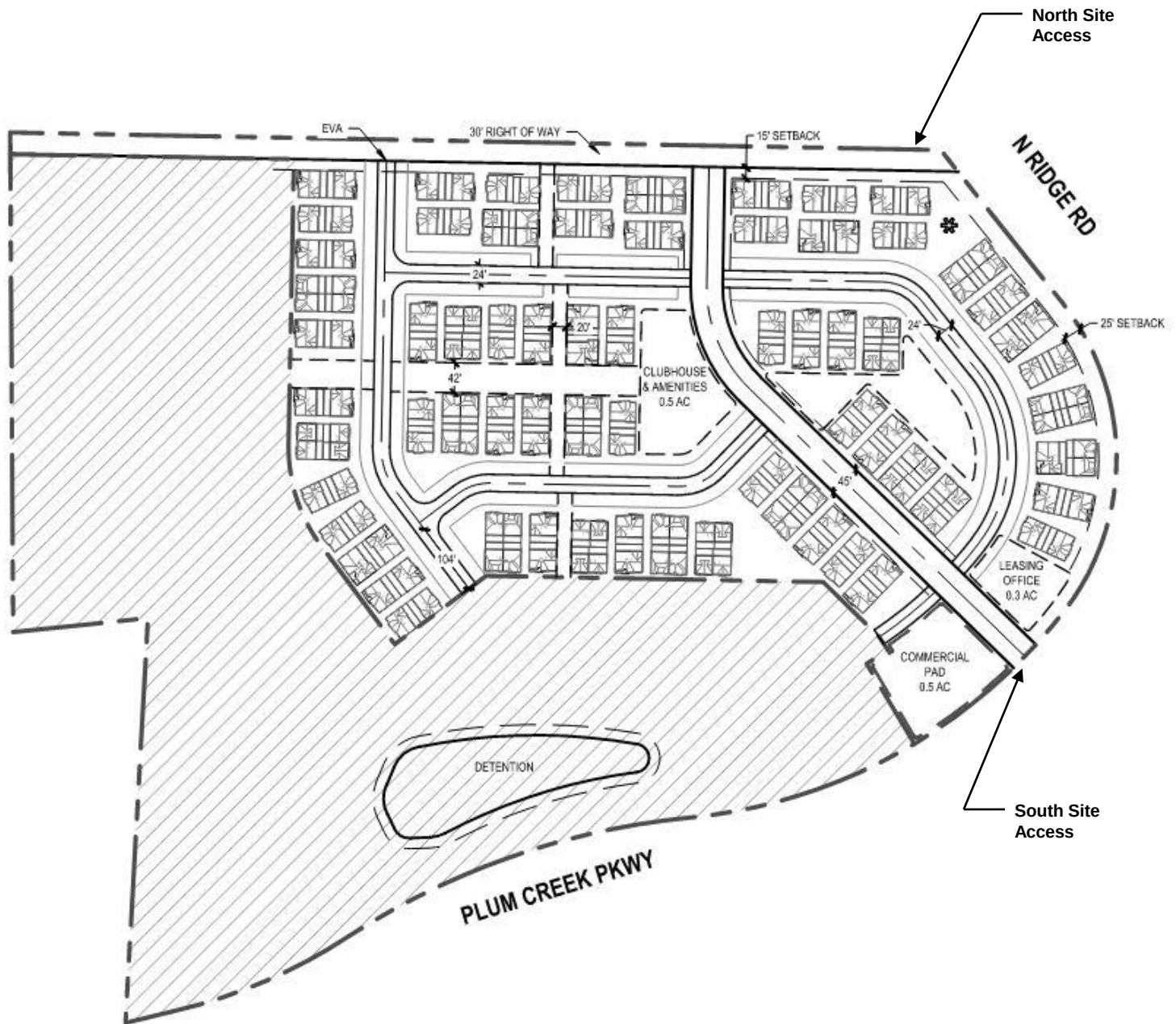
Based on these parameters, at buildout, the proposed Terra Monte development is projected to generate 1540 daily vehicle trips of which 84 are projected to be generated during the a.m. peak hour and 148 during the p.m. peak hour.

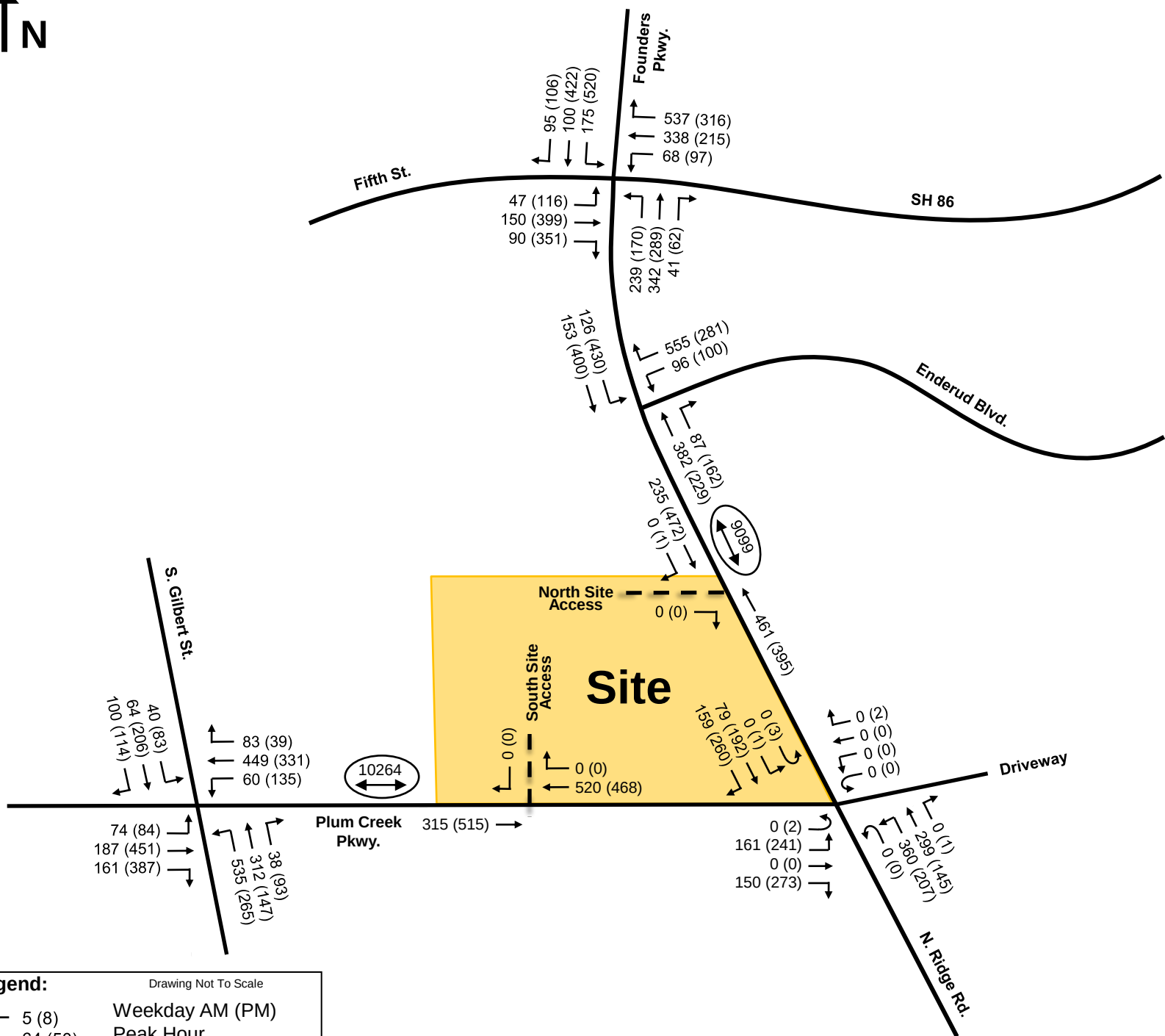
Based on the analyses contained herein Table 10 summarizes the recommendations for geometric and operational improvements/modifications to the study area roadways and intersections to sufficiently mitigate and/or off-set the impacts created by the traffic generated by the proposed Terra Monte development.

**TABLE 10
SUMMARY OF RECOMMENDATIONS**

Roadway	Recommendations	Responsibility	Timing
N. Ridge Rd.	No geometric or operational modifications are recommended as a result of the proposed Terra Monte development.	N/A	N/A
Plum Creek Pkwy.	No geometric or operational modifications are recommended as a result of the proposed Terra Monte development.	N/A	N/A
Intersection	Recommendations	Responsibility	Timing
Plum Creek Pkwy./ N. Ridge Rd.	No geometric or operational modifications are recommended as a result of the proposed Terra Monte development.	N/A	N/A
Enderud Blvd./ N. Ridge Rd.	The lane configuration on the westbound approach of the intersection should be updated to have a shared left turn/through/right turn lane and a right turn only lane. Providing two lanes from which right turn movements can be made will help mitigate against the high volumes that are anticipated to utilize this movement.	City of Castle Rock	2050/ As Needed
	It is anticipated that a west leg will be added to this intersection with one yield-controlled approach lane and one departure lane along with the Founders Vista development.	Founders Vista Developer	2026
Fifth St./ N. Ridge Rd./ Founders Pkwy.	It is anticipated that the intersection will expand to include two through lanes on all approaches as well as dual left turn lanes on the northbound and southbound approaches based on plans provided by the Town of Castle Rock	City of Castle Rock	By 2026
	No geometric or operational modifications are recommended as a result of the proposed Terra Monte development.	N/A	N/A
Plum Creek Pkwy./ S. Gilbert St./ Lake Gulch Rd.	No geometric or operational modifications are recommended as a result of the proposed Terra Monte development. While there are projected issues at the intersection in the 2050 (long-term) analysis horizon, it is anticipated that the proposed Crystal Valley Interchange may divert a considerable amount of traffic away from this intersection by that time.	N/A	N/A
	However, if traffic conditions dictate in the future, it may be necessary to expand this intersection to include two lanes on all approaches as well as throughout the entire circulatory area of the intersection.	Town of Castle Rock	2050/ As Needed
Plum Creek Pkwy./ South Site Access	A newly constructed right-in right-out (RIRO) north leg will tie into this intersection in the same location as the existing residential driveway. The intersection movements should be restricted by extending the center median across the intersection.	Developer	Concurrent with Project
North Site Access/ N. Ridge Rd.	A newly constructed right-in right-out (RIRO) west leg will tie into this intersection in the same location as the existing residential driveway.	Developer	Concurrent with Project







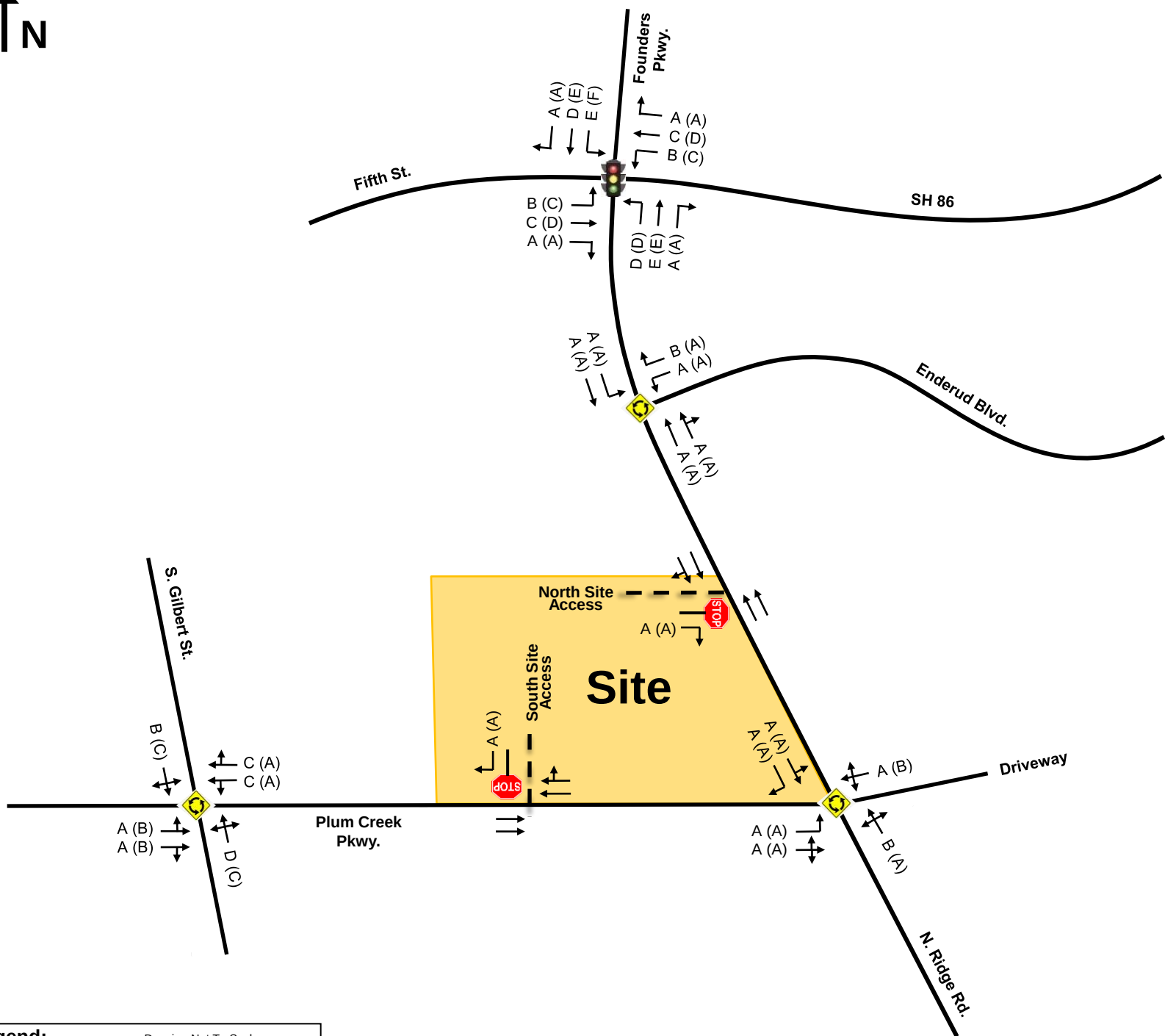
2024 Existing Traffic Volumes

Terra Morte

Urban Moment Development

HKS #231150

Figure 3



Legend:

↖

A (B)

↗

A (B)

↘

A (B)

Weekday AM (PM)

Peak Hour

Level of Service

Drawing Not To Scale

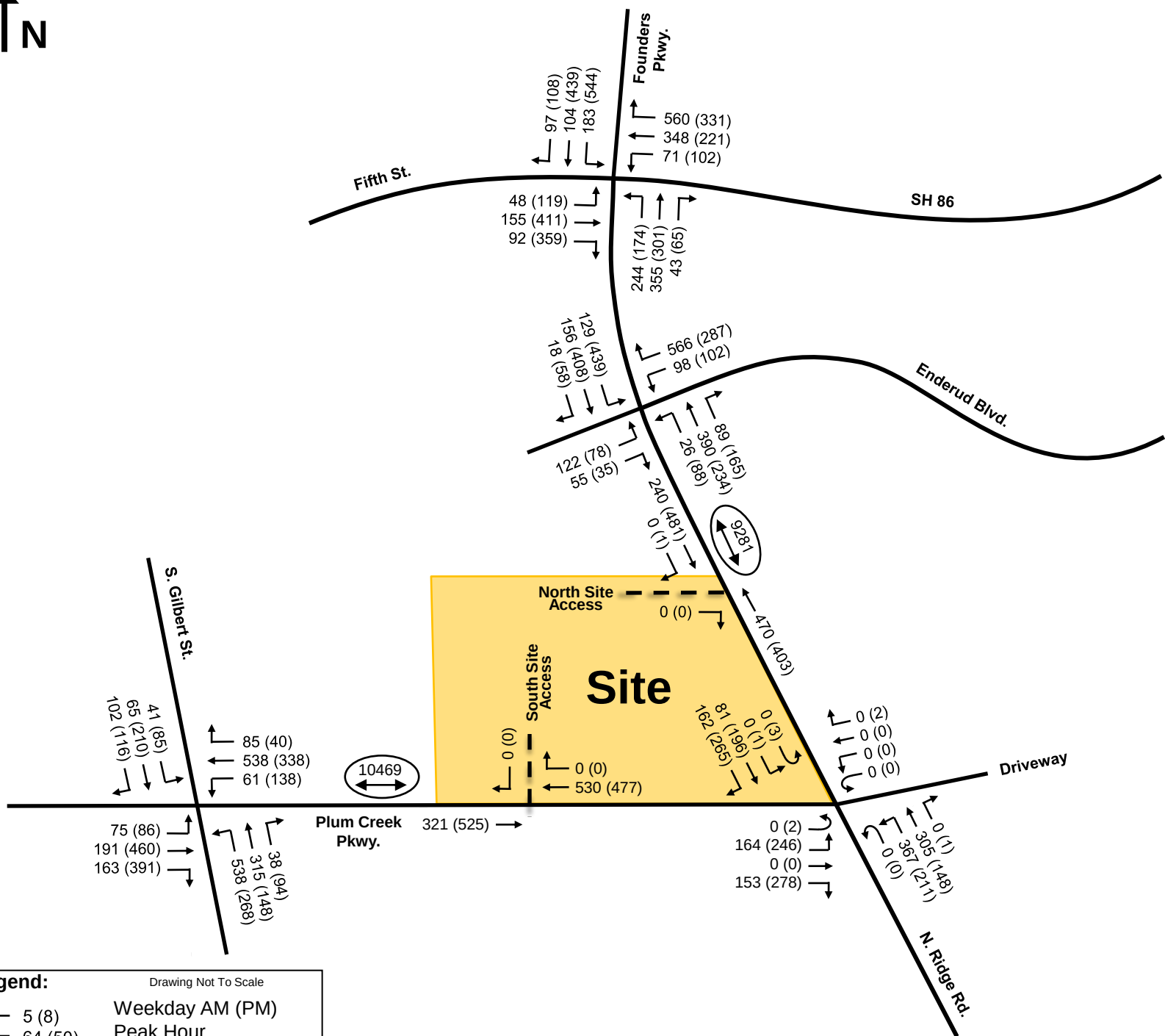
----- Proposed Roadway



Terra Morte
Urban Moment Development
HKS #231150

2024 Existing Traffic Operational Conditions

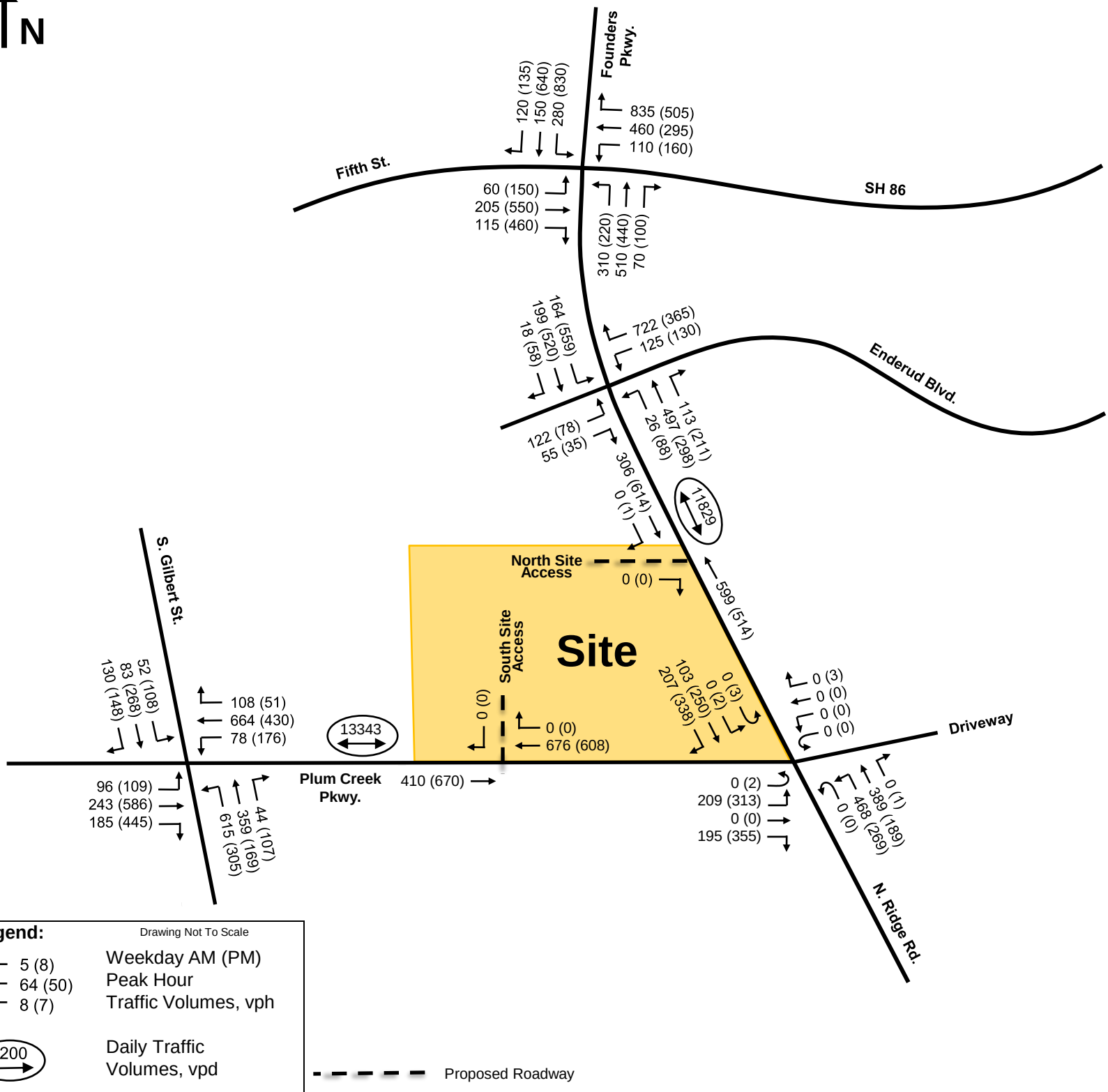
Figure 4



2026 Background Traffic Volumes

Terra Morte
Urban Moment Development
HKS #231150

Figure 5





Legend:

Drawing Not To Scale

A (B)

Weekday AM (PM)

A (B)

Peak Hour

A (B)

Level of Service

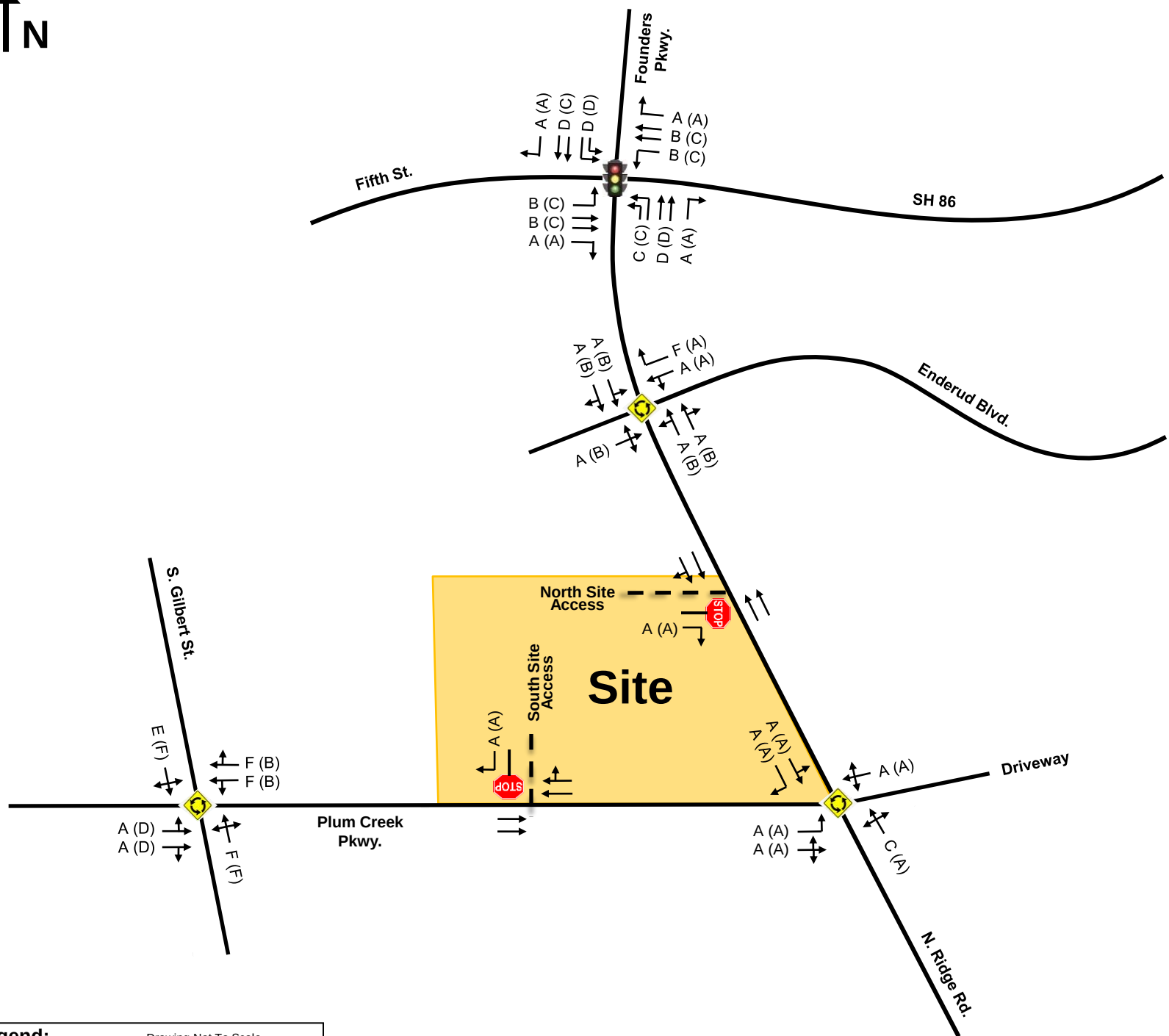
- - - - - Proposed Roadway



2026 Background Traffic Operational Conditions

Terra Morte
Urban Moment Development
HKS #231150

Figure 7



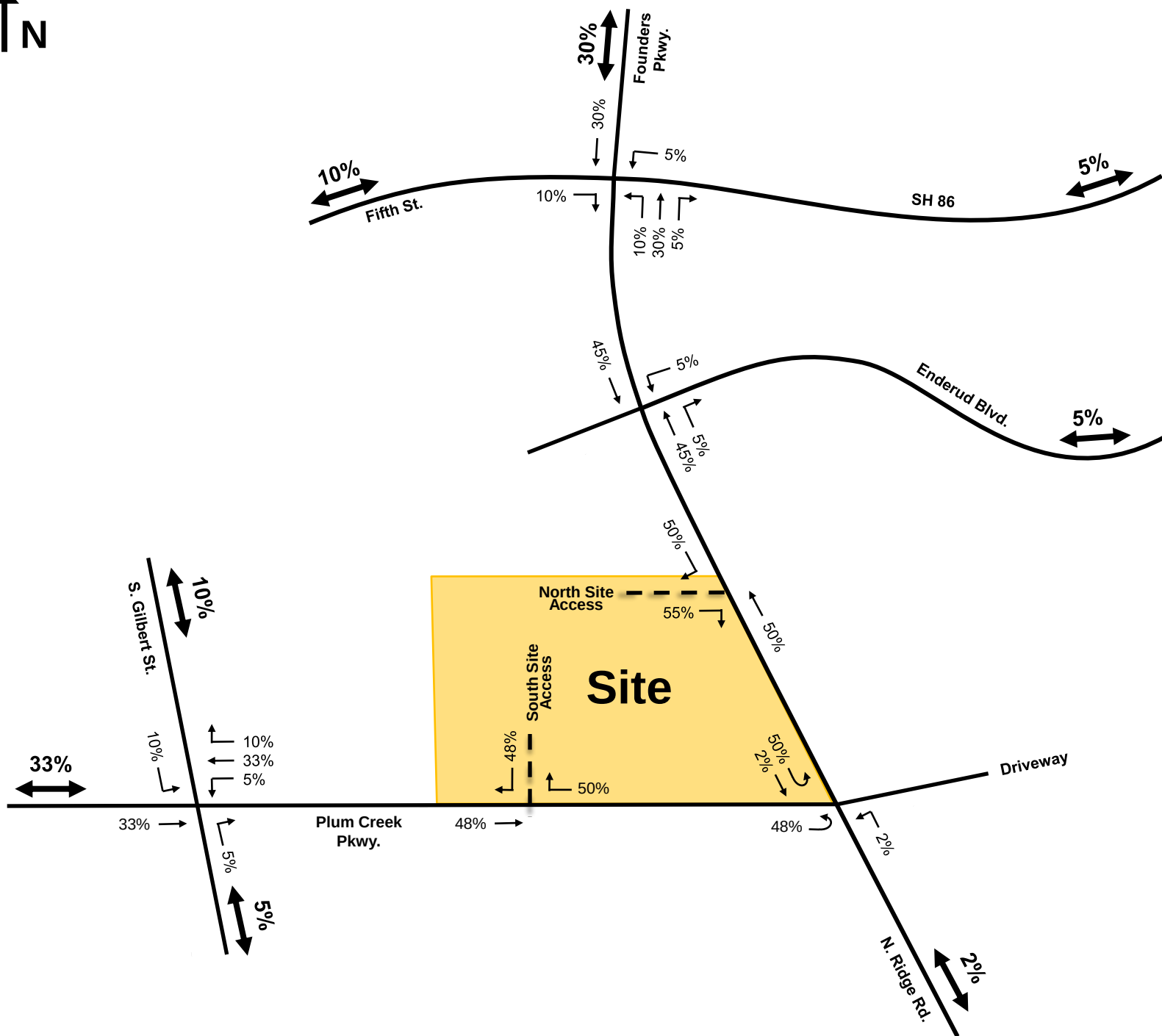
Legend: Drawing Not To Scale

	A (B)	Weekday AM (PM)
	A (B)	Peak Hour
	A (B)	Level of Service

--- Proposed Roadway



2050 Background Traffic Operational Conditions



Legend:

XX%

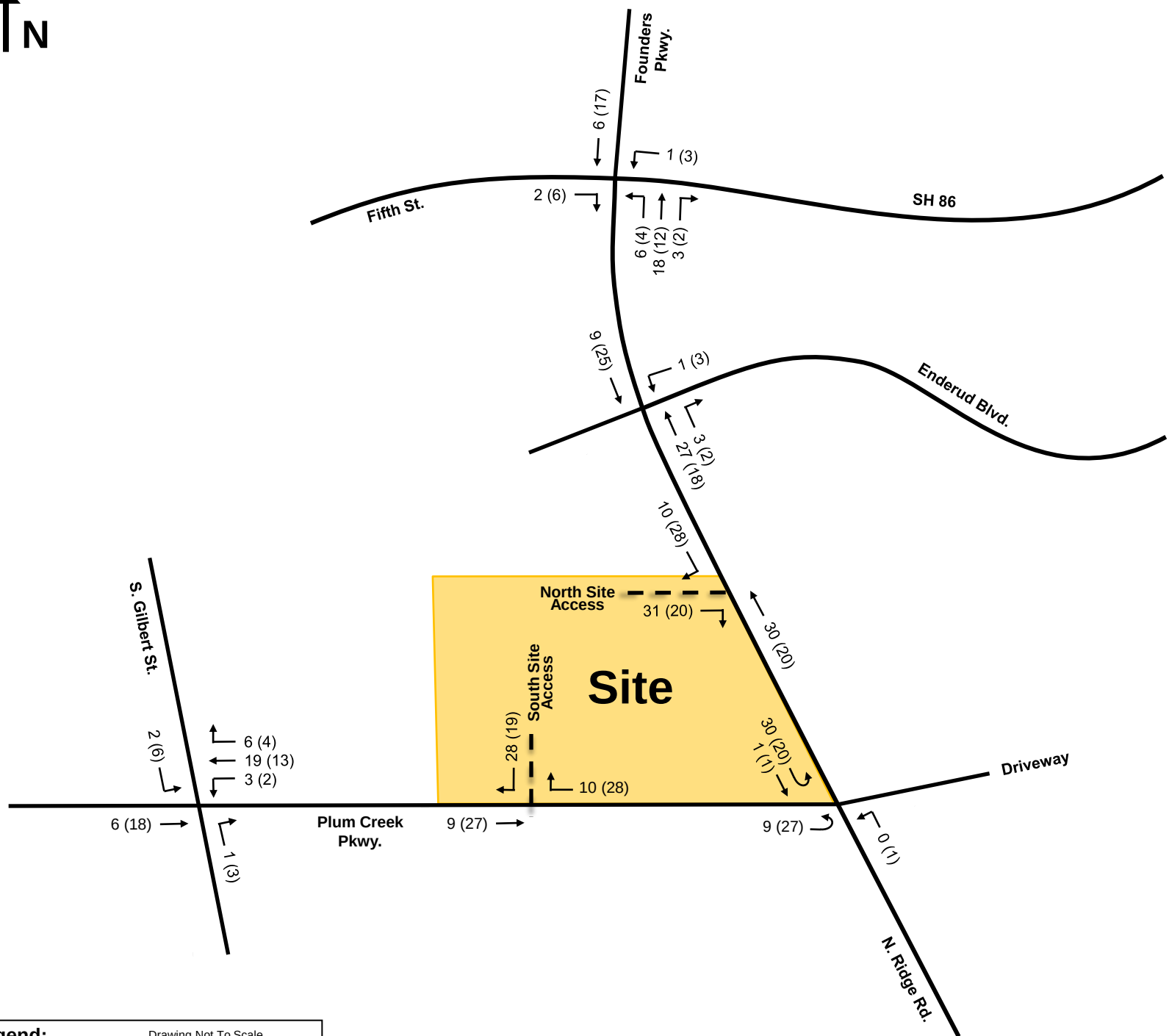
Site-Generated Trip Distribution

Proposed Roadway

Drawing Not To Scale



Site Generated Trip Distribution



Legend: Drawing Not To Scale

↑	5 (8)	Weekday AM (PM)
←	64 (50)	Peak Hour
↘	8 (7)	Traffic Volumes, vph

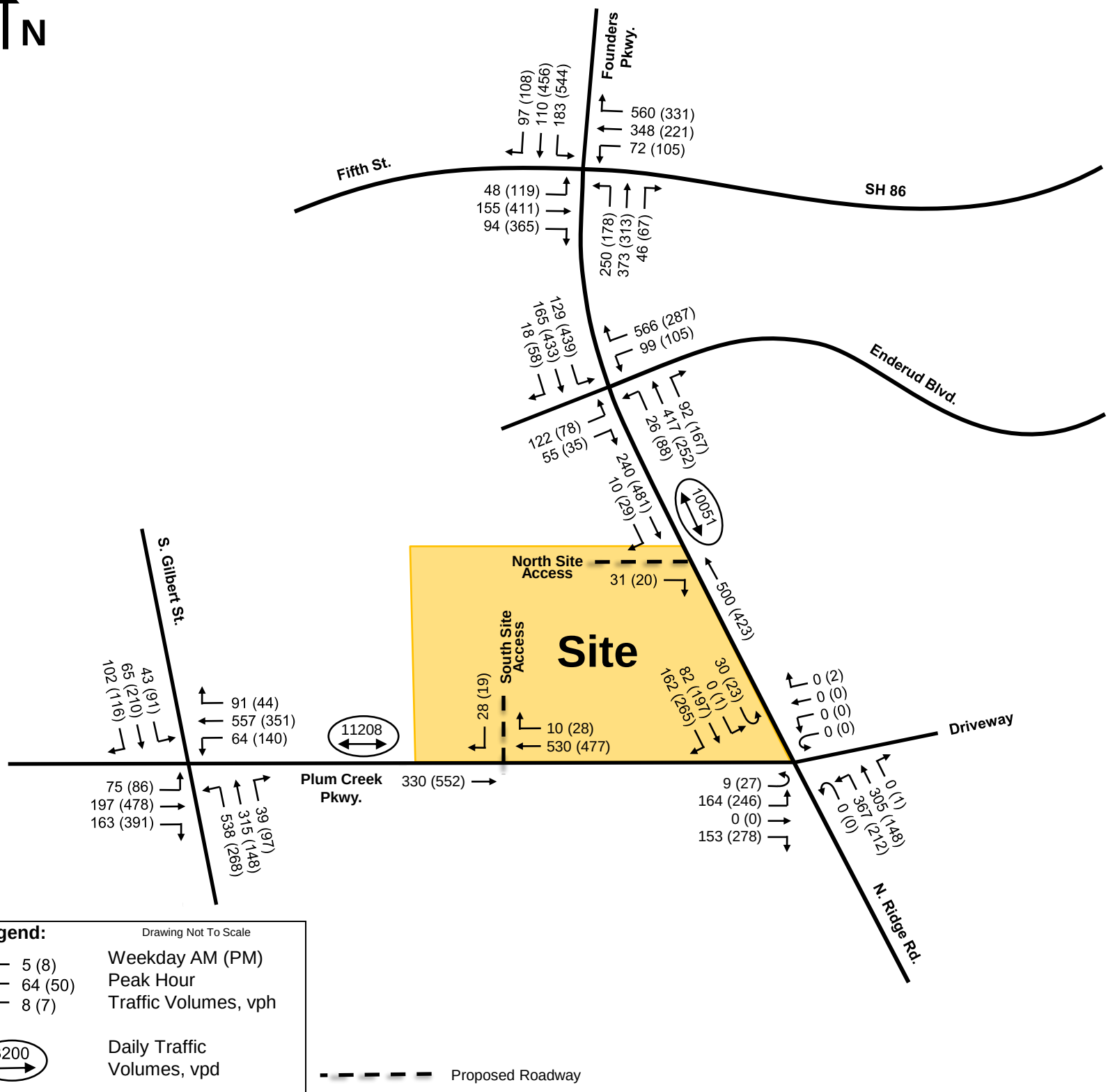
--- Proposed Roadway



Site Generated Trip Assignment

Terra Morte
Urban Moment Development
HKS #231150

Figure 10



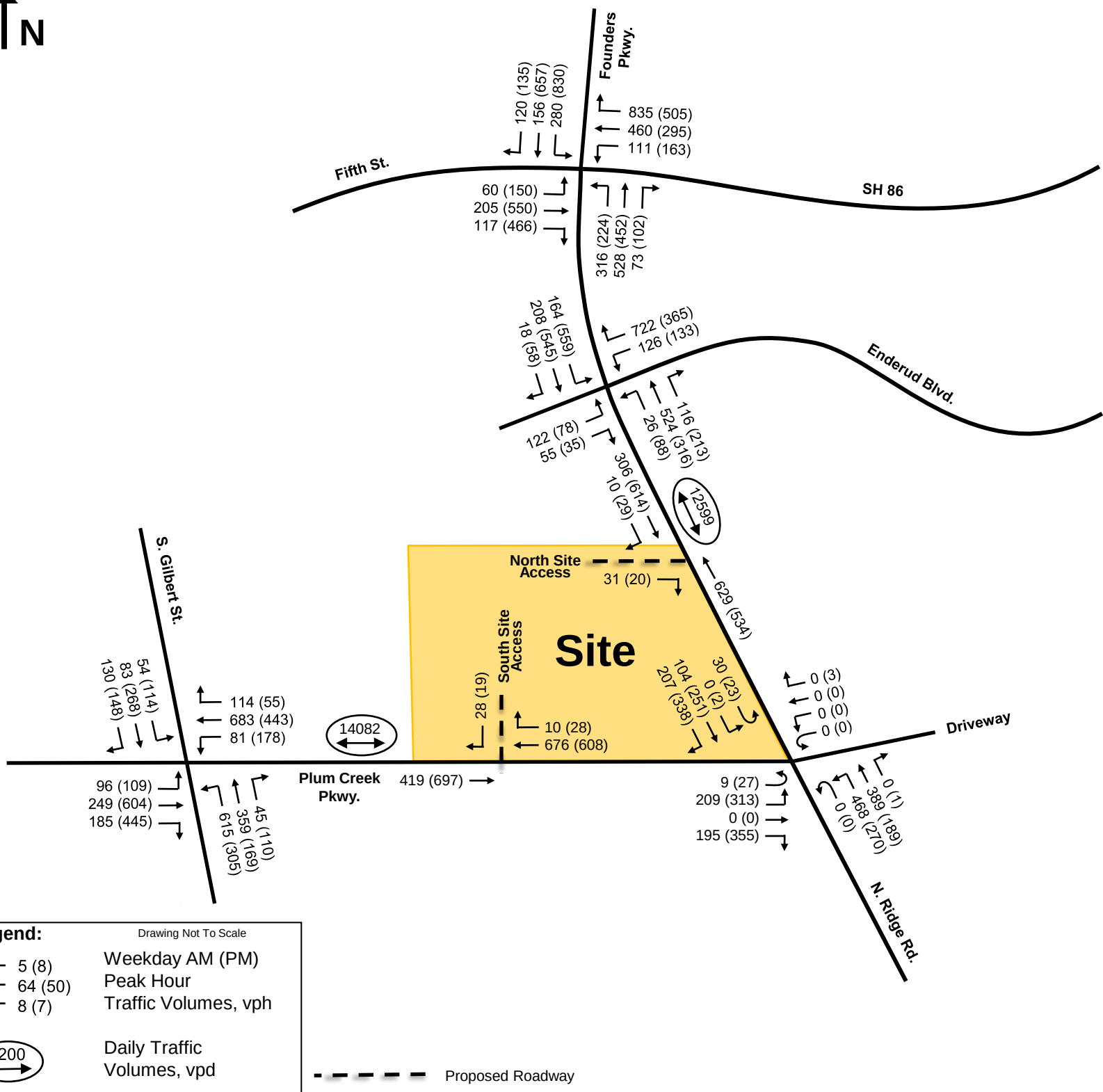
2026 Total Traffic Volumes (Background + Site Generated)

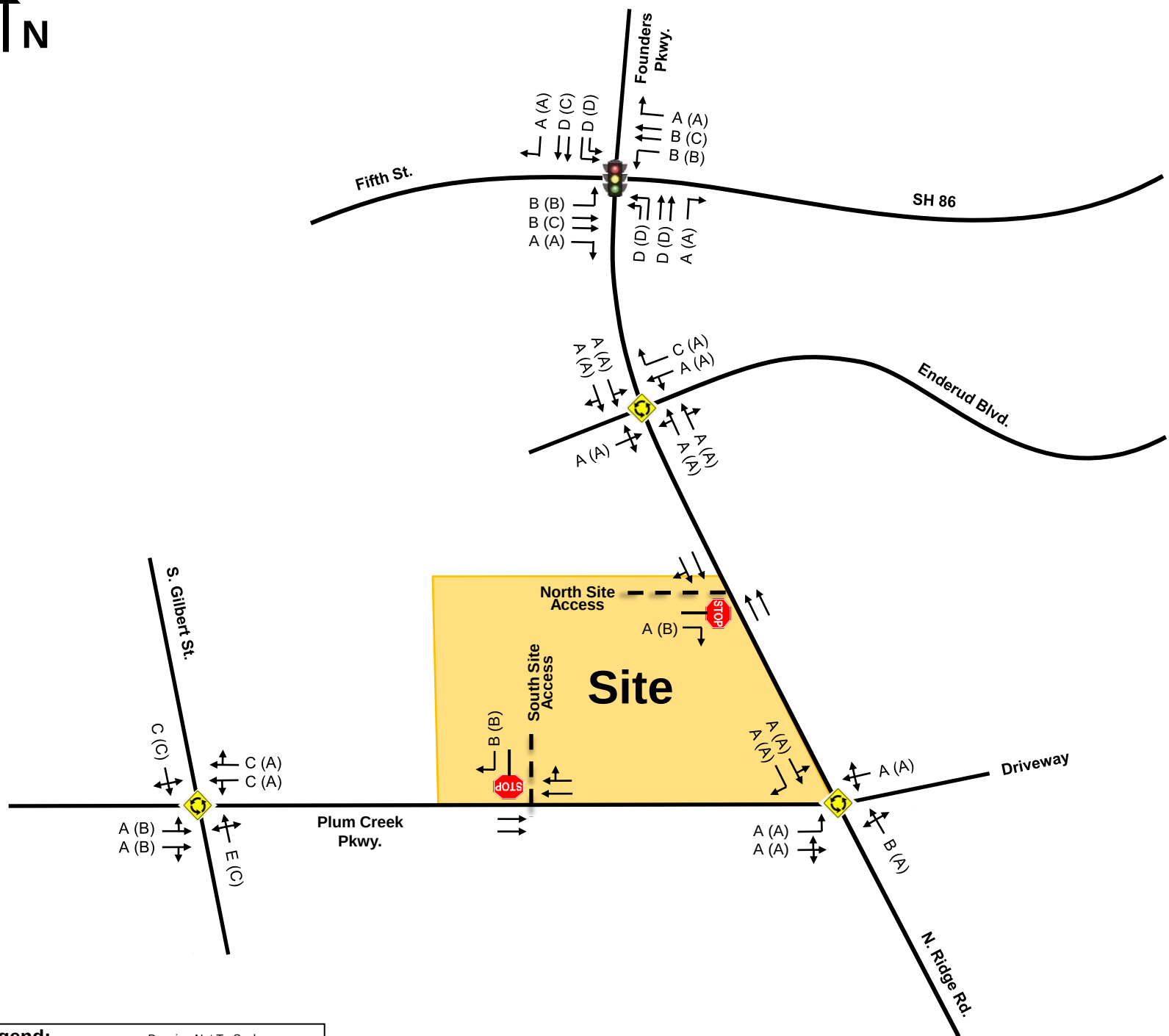
Terra Morte

Urban Moment Development

HKS #231150

Figure 11





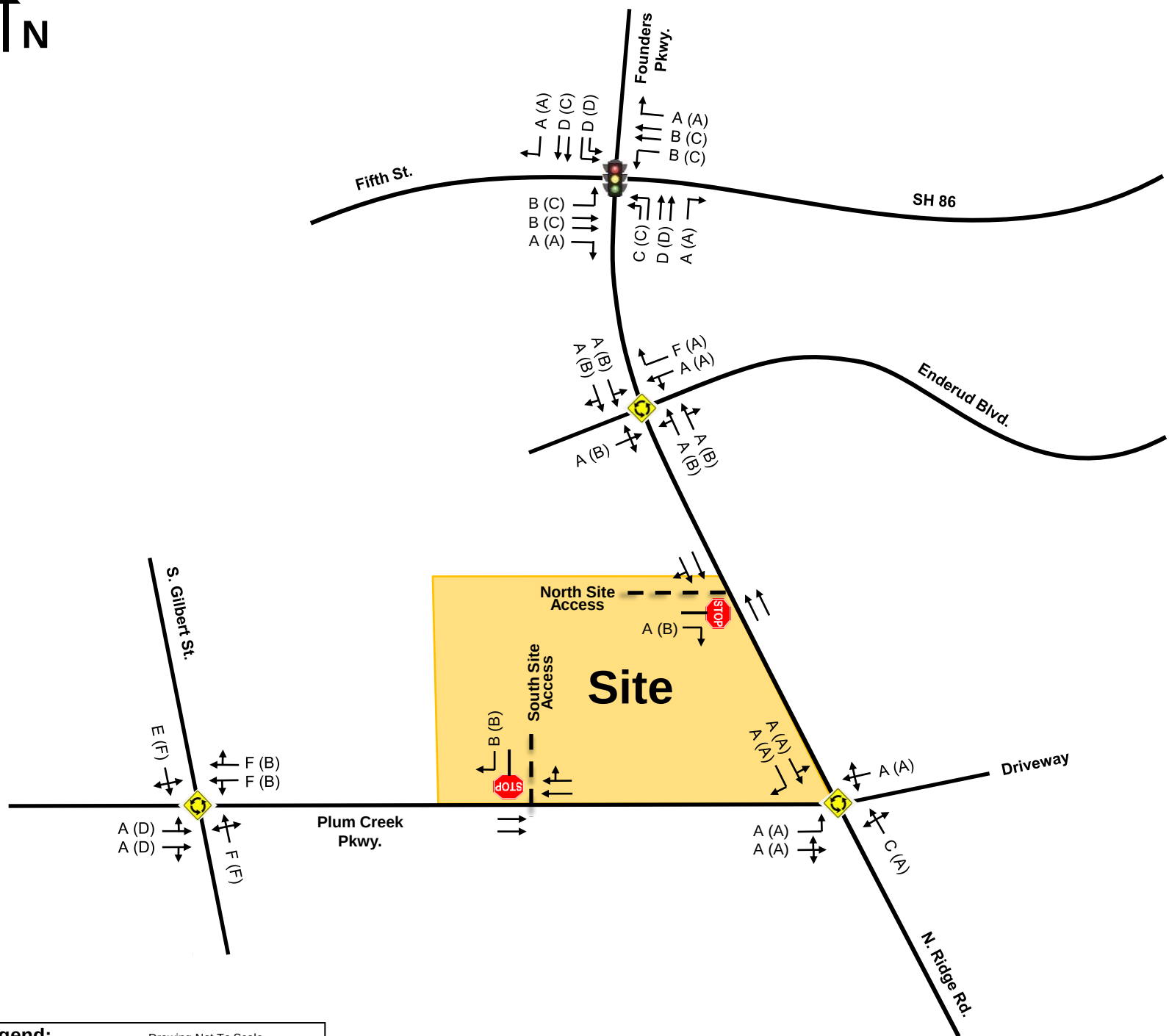
2026 Total Traffic Operational Conditions

Terra Morte

Urban Moment Development

HKS #231150

Figure 13



2050 Total Traffic
Operational Conditions

Terra Morte

Urban Moment Development

HKS #231150

Figure 14

APPENDIX “A”

2024 (EXISTING)
TRAFFIC VOLUME COUNTS



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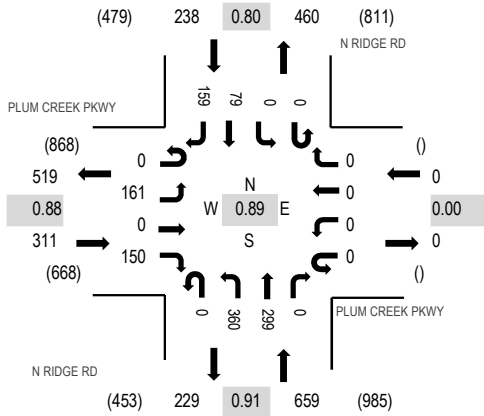
Location: 1 N RIDGE RD & PLUM CREEK PKWY AM

Date: Thursday, April 11, 2024

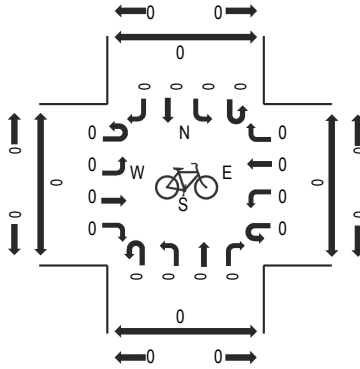
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

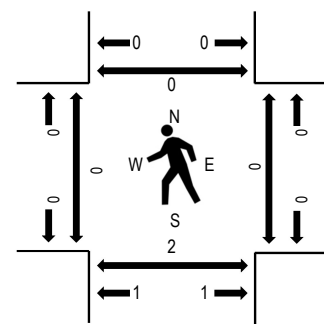
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PLUM CREEK PKWY Eastbound				PLUM CREEK PKWY Westbound				N RIDGE RD Northbound				N RIDGE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	26	0	56	0	0	0	0	0	93	85	0	0	0	14	26	300	1,208	0	0	0	0
7:15 AM	0	33	0	41	0	0	0	0	0	93	81	0	0	0	21	36	305	1,146	0	0	2	0
7:30 AM	0	55	0	22	0	0	0	0	0	95	87	0	0	0	26	53	338	1,070	0	0	0	0
7:45 AM	0	47	0	31	0	0	0	0	0	79	46	0	0	0	18	44	265	954	0	0	0	0
8:00 AM	1	58	0	43	0	0	0	0	0	42	43	0	0	0	14	37	238	924	0	0	0	0
8:15 AM	0	64	0	31	0	0	0	0	0	40	32	0	0	0	13	49	229		0	0	0	0
8:30 AM	0	35	0	24	0	0	0	0	0	55	39	0	0	0	24	45	222		0	0	0	0
8:45 AM	0	49	0	52	0	0	0	0	0	44	31	0	0	0	23	36	235		0	0	0	0
Count Total	1	367	0	300	0	0	0	0	0	541	444	0	0	0	153	326	2,132		0	0	2	0
Peak Hour	0	161	0	150	0	0	0	0	0	360	299	0	0	0	79	159	1,208		0	0	2	0



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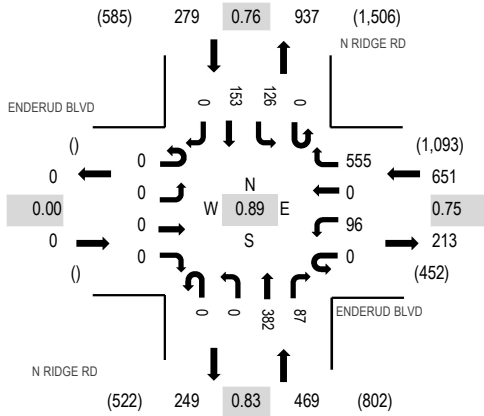
Location: 2 N RIDGE RD & ENDERUD BLVD AM

Date: Thursday, April 11, 2024

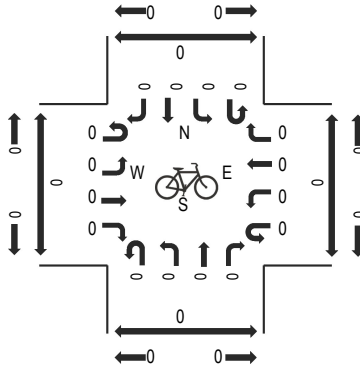
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:15 AM - 07:30 AM

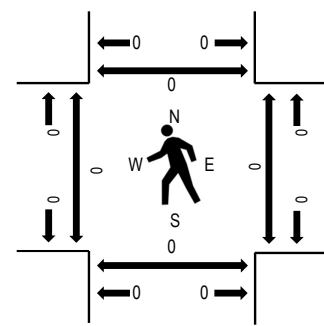
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ENDERUD BLVD Eastbound				ENDERUD BLVD Westbound				N RIDGE RD Northbound				N RIDGE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	13	0	124	0	0	101	16	0	27	29	0	310	1,399	0	0	0	0
7:15 AM	0	0	0	0	0	25	0	192	0	0	98	16	0	25	37	0	393	1,365	0	0	0	0
7:30 AM	0	0	0	0	0	36	0	131	0	0	114	27	0	37	40	0	385	1,267	0	0	0	0
7:45 AM	0	0	0	0	0	22	0	108	0	0	69	28	0	37	47	0	311	1,132	0	0	0	0
8:00 AM	0	0	0	0	0	25	0	90	0	0	67	31	0	37	26	0	276	1,081	0	0	0	0
8:15 AM	0	0	0	0	0	30	0	101	0	0	53	37	0	36	38	0	295		0	0	0	0
8:30 AM	0	0	0	0	0	27	0	82	0	0	60	13	0	27	41	0	250		1	0	0	0
8:45 AM	0	0	0	0	0	24	0	63	0	0	53	19	0	39	62	0	260		0	0	0	0
Count Total	0	0	0	0	0	202	0	891	0	0	615	187	0	265	320	0	2,480		1	0	0	0
Peak Hour	0	0	0	0	0	96	0	555	0	0	382	87	0	126	153	0	1,399		0	0	0	0



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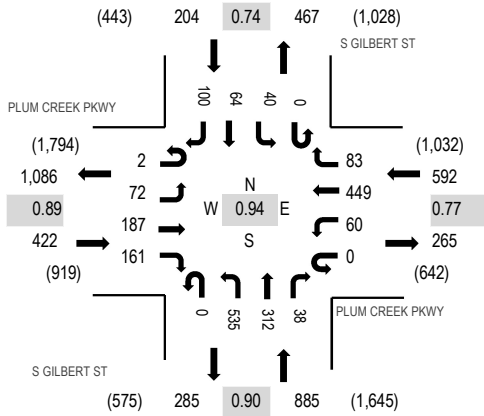
Location: 3 S GILBERT ST & PLUM CREEK PKWY AM

Date: Thursday, April 11, 2024

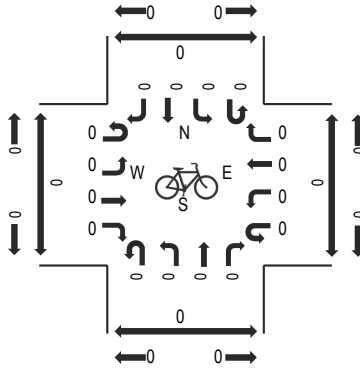
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

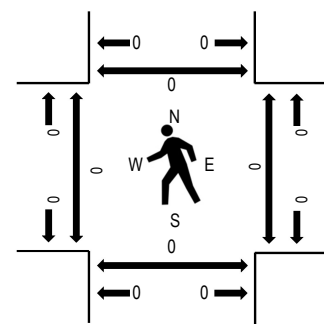
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PLUM CREEK PKWY Eastbound				PLUM CREEK PKWY Westbound				S GILBERT ST Northbound				S GILBERT ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	21	46	41	0	12	70	11	0	158	87	0	0	8	10	23	487	2,103	0	0	0	0
7:15 AM	2	11	41	34	0	15	115	23	0	145	93	3	0	8	10	29	529	2,080	0	0	0	0
7:30 AM	0	17	38	24	0	21	145	27	0	122	81	22	0	10	24	26	557	2,030	0	0	0	0
7:45 AM	0	23	62	62	0	12	119	22	0	110	51	13	0	14	20	22	530	1,949	0	0	0	0
8:00 AM	0	53	69	15	0	11	71	15	0	95	60	31	0	10	14	20	464	1,936	0	0	0	0
8:15 AM	0	61	49	18	0	24	67	17	0	94	82	32	0	7	17	11	479		0	0	0	0
8:30 AM	0	50	42	22	0	22	72	21	0	80	68	18	0	10	44	27	476		0	0	0	0
8:45 AM	1	25	50	42	0	22	74	24	0	68	85	47	0	12	39	28	517		0	0	0	0
Count Total	3	261	397	258	0	139	733	160	0	872	607	166	0	79	178	186	4,039		0	0	0	0
Peak Hour	2	72	187	161	0	60	449	83	0	535	312	38	0	40	64	100	2,103		0	0	0	0



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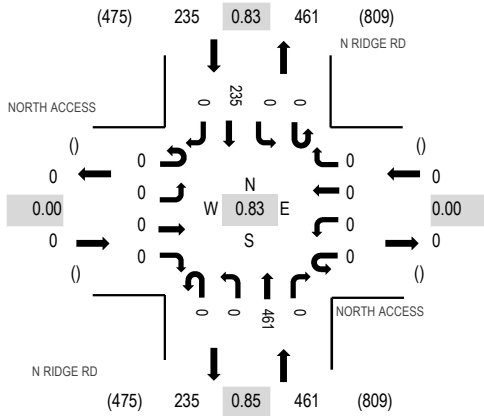
Location: 4 N RIDGE RD & NORTH ACCESS AM

Date: Thursday, April 11, 2024

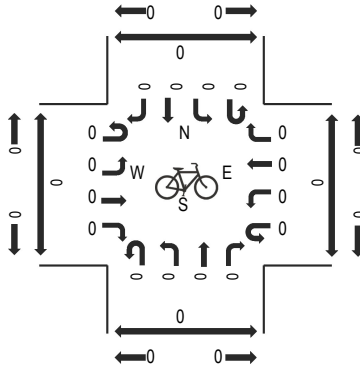
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

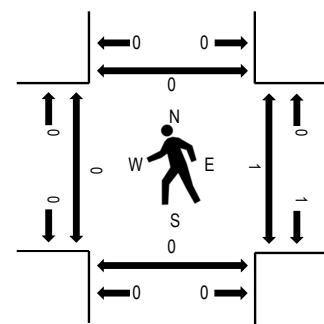
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	NORTH ACCESS Eastbound				NORTH ACCESS Westbound				N RIDGE RD Northbound				N RIDGE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	0	0	0	0	0	118	0	0	0	40	0	158	696	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	114	0	0	0	59	0	173	687	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	136	0	0	0	74	0	210	669	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	93	0	0	0	62	0	155	603	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	98	0	0	0	51	0	149	588	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	95	0	0	0	60	0	155		0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	76	0	0	0	68	0	144		1	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	79	0	0	0	61	0	140		0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	809	0	0	0	475	0	1,284		1	1	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	461	0	0	0	235	0	696		0	1	0	0



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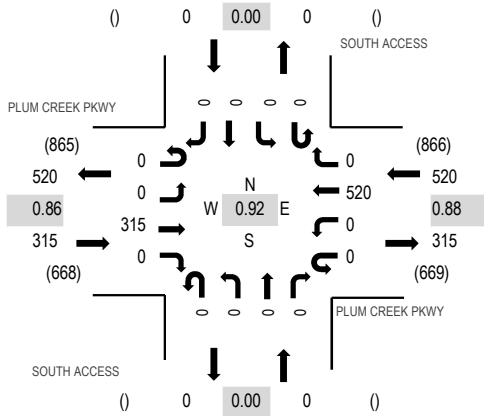
Location: 5 SOUTH ACCESS & PLUM CREEK PKWY AM

Date: Thursday, April 11, 2024

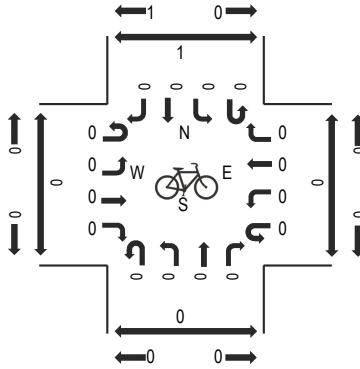
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

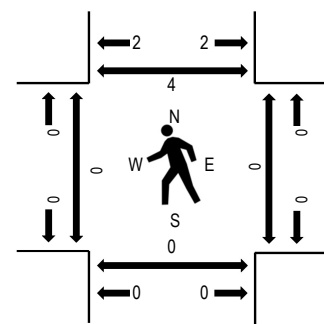
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PLUM CREEK PKWY Eastbound				PLUM CREEK PKWY Westbound				SOUTH ACCESS Northbound				SOUTH ACCESS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	84	0	0	0	121	0	0	0	0	0	0	0	0	0	205	835	0	0	0	0
7:15 AM	0	0	76	0	0	0	129	0	0	0	0	0	0	0	0	0	205	813	0	0	0	2
7:30 AM	0	0	79	0	0	0	147	0	0	0	0	0	0	0	0	0	226	785	0	0	0	0
7:45 AM	0	0	76	0	0	0	123	0	0	0	0	0	0	0	0	0	199	718	0	0	0	2
8:00 AM	0	0	103	0	0	0	80	0	0	0	0	0	0	0	0	0	183	699	0	0	0	0
8:15 AM	0	0	90	0	0	0	87	0	0	0	0	0	0	0	0	0	177		0	0	0	0
8:30 AM	0	0	60	0	0	0	99	0	0	0	0	0	0	0	0	0	159		0	0	0	1
8:45 AM	0	0	100	0	1	0	79	0	0	0	0	0	0	0	0	0	180		0	0	0	0
Count Total	0	0	668	0	1	0	865	0	0	0	0	0	0	0	0	0	1,534		0	0	0	5
Peak Hour	0	0	315	0	0	0	520	0	0	0	0	0	0	0	0	0	835		0	0	0	4



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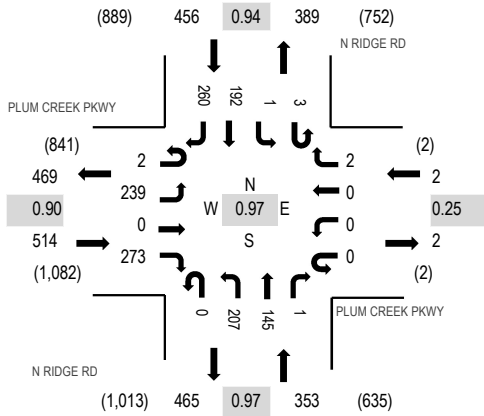
Location: 1 N RIDGE RD & PLUM CREEK PKWY PM

Date: Thursday, April 11, 2024

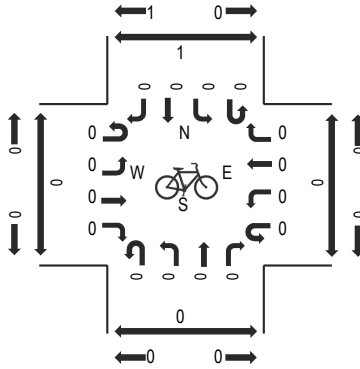
Peak Hour: 04:00 PM - 05:00 PM

Peak 15-Minutes: 04:15 PM - 04:30 PM

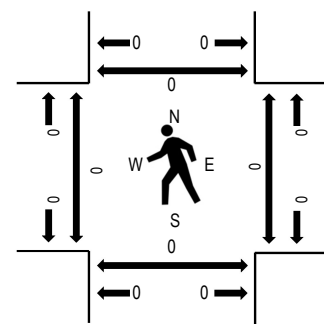
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PLUM CREEK PKWY Eastbound				PLUM CREEK PKWY Westbound				N RIDGE RD Northbound				N RIDGE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	61	0	80	0	0	0	0	0	63	28	0	3	0	40	55	330	1,325	0	0	0	0
4:15 PM	0	59	0	75	0	0	0	0	0	55	36	0	0	0	60	57	342	1,295	0	0	0	0
4:30 PM	1	53	0	56	0	0	0	2	0	37	49	1	0	0	52	74	325	1,315	0	0	0	0
4:45 PM	1	66	0	62	0	0	0	0	0	52	32	0	0	1	40	74	328	1,313	0	0	0	0
5:00 PM	0	58	0	62	0	0	0	0	0	39	31	0	0	0	53	57	300	1,283	0	0	0	0
5:15 PM	0	59	0	95	0	0	0	0	0	41	39	0	0	0	76	52	362		0	0	0	0
5:30 PM	0	70	0	87	0	0	0	0	0	33	27	0	0	0	49	57	323		0	0	0	0
5:45 PM	0	48	0	89	0	0	0	0	0	41	31	0	0	0	37	52	298		0	0	0	0
Count Total	2	474	0	606	0	0	0	2	0	361	273	1	3	1	407	478	2,608		0	0	0	0
Peak Hour	2	239	0	273	0	0	0	2	0	207	145	1	3	1	192	260	1,325		0	0	0	0



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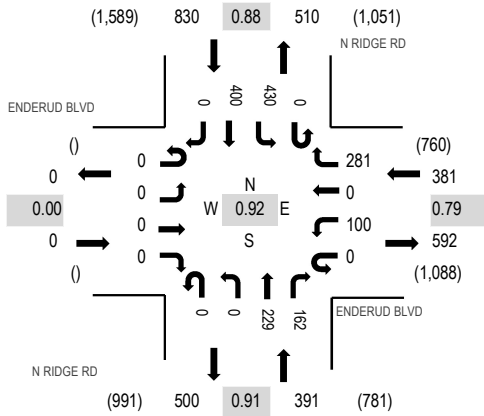
Location: 2 N RIDGE RD & ENDERUD BLVD PM

Date: Thursday, April 11, 2024

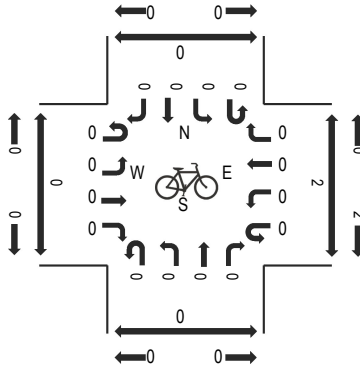
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:30 PM - 05:45 PM

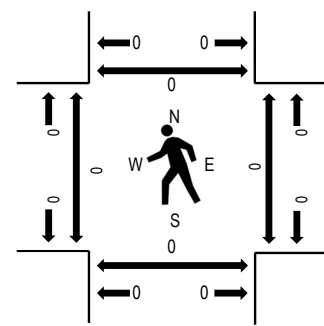
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ENDERUD BLVD Eastbound				ENDERUD BLVD Westbound				N RIDGE RD Northbound				N RIDGE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	22	0	74	0	0	70	32	0	79	73	0	350	1,528	0	0	0	0
4:15 PM	0	0	0	0	0	23	0	64	0	0	56	39	0	109	115	0	406	1,549	0	0	0	0
4:30 PM	0	0	0	0	0	28	0	68	0	0	74	27	0	96	110	0	403	1,569	0	0	0	0
4:45 PM	0	0	0	0	0	30	0	70	0	0	65	27	0	87	90	0	369	1,599	0	1	0	0
5:00 PM	0	0	0	0	0	20	0	62	0	0	62	32	0	96	99	0	371	1,602	0	0	0	0
5:15 PM	0	0	0	0	0	24	0	56	0	0	55	54	0	122	115	0	426		0	0	0	0
5:30 PM	0	0	0	0	0	34	0	87	0	0	57	46	0	115	94	0	433		0	0	0	0
5:45 PM	0	0	0	0	0	22	0	76	0	0	55	30	0	97	92	0	372		0	0	0	0
Count Total	0	0	0	0	0	203	0	557	0	0	494	287	0	801	788	0	3,130		0	1	0	0
Peak Hour	0	0	0	0	0	100	0	281	0	0	229	162	0	430	400	0	1,602		0	0	0	0



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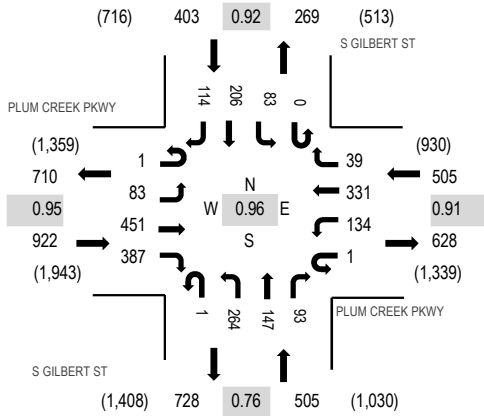
Location: 3 S GILBERT ST & PLUM CREEK PKWY PM

Date: Thursday, April 11, 2024

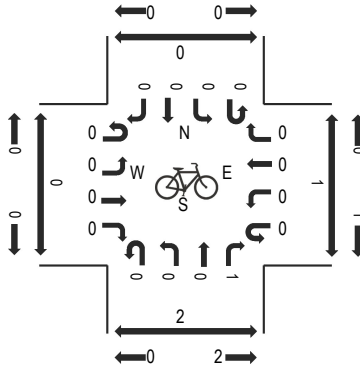
Peak Hour: 04:00 PM - 05:00 PM

Peak 15-Minutes: 04:15 PM - 04:30 PM

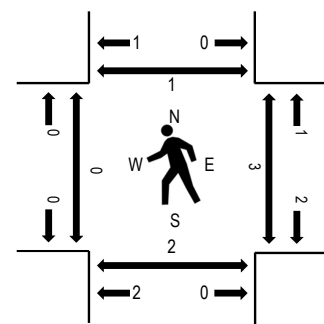
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PLUM CREEK PKWY Eastbound				PLUM CREEK PKWY Westbound				S GILBERT ST Northbound				S GILBERT ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	24	118	93	0	35	71	11	0	59	38	28	0	29	57	24	587	2,335	0	1	2	0
4:15 PM	0	21	128	98	0	36	86	14	0	67	29	31	0	19	51	30	610	2,298	0	0	0	0
4:30 PM	1	23	102	85	1	24	82	7	0	59	45	16	0	22	51	32	550	2,300	0	2	0	0
4:45 PM	0	15	103	111	0	39	92	7	1	79	35	18	0	13	47	28	588	2,314	0	0	0	1
5:00 PM	0	21	118	90	0	31	71	6	0	61	34	27	0	20	46	25	550	2,284	0	0	0	1
5:15 PM	0	23	148	93	0	14	62	17	0	98	48	39	0	19	39	12	612		0	0	1	0
5:30 PM	1	14	144	101	0	35	73	9	0	64	20	21	0	14	48	20	564		0	1	0	0
5:45 PM	1	16	123	128	0	20	77	10	0	69	26	18	0	20	35	15	558		0	0	0	0
Count Total	3	157	984	799	1	234	614	81	1	556	275	198	0	156	374	186	4,619		0	4	3	2
Peak Hour	1	83	451	387	1	134	331	39	1	264	147	93	0	83	206	114	2,335		0	3	2	1



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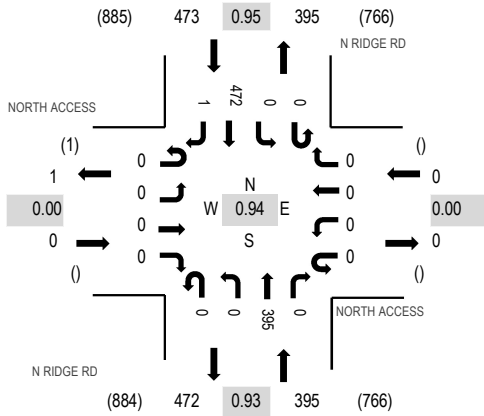
Location: 4 N RIDGE RD & NORTH ACCESS PM

Date: Thursday, April 11, 2024

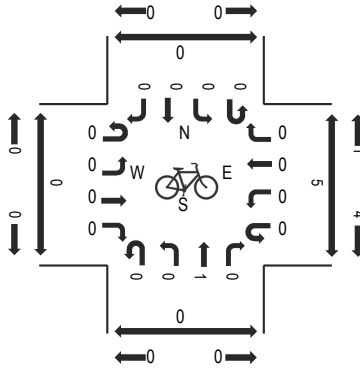
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

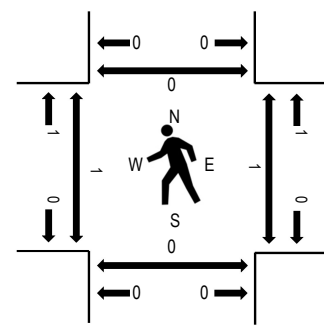
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	NORTH ACCESS Eastbound				NORTH ACCESS Westbound				N RIDGE RD Northbound				N RIDGE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	0	0	0	0	0	99	0	0	0	96	0	195	841	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	92	0	0	0	118	0	210	848	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	104	0	0	0	125	0	229	868	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	96	0	0	0	110	1	207	845	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	89	0	0	0	113	0	202	810	0	1	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	106	0	0	0	124	0	230		0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	99	0	0	0	107	0	206		0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	81	0	0	0	91	0	172		0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	766	0	0	0	884	1	1,651		1	1	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	395	0	0	0	472	1	868		1	1	0	0



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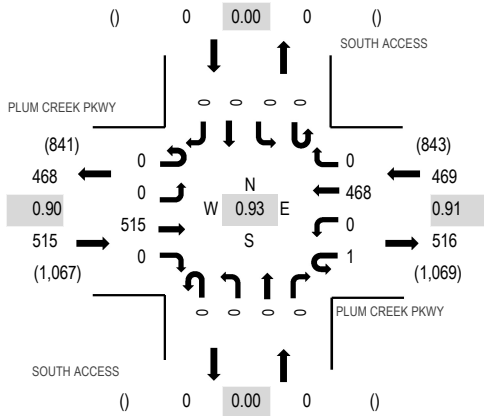
Location: 5 SOUTH ACCESS & PLUM CREEK PKWY PM

Date: Thursday, April 11, 2024

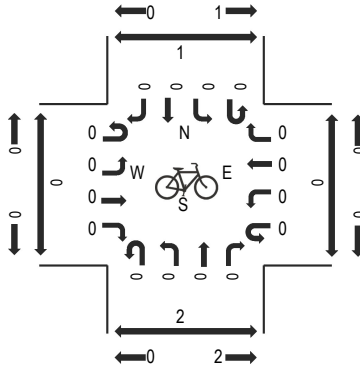
Peak Hour: 04:00 PM - 05:00 PM

Peak 15-Minutes: 04:00 PM - 04:15 PM

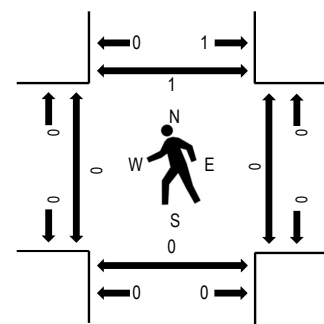
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PLUM CREEK PKWY Eastbound				PLUM CREEK PKWY Westbound				SOUTH ACCESS Northbound				SOUTH ACCESS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	143	0	1	0	120	0	0	0	0	0	0	0	0	0	264	984	0	0	0	0
4:15 PM	0	0	137	0	0	0	111	0	0	0	0	0	0	0	0	0	248	938	0	0	0	0
4:30 PM	0	0	109	0	0	0	108	0	0	0	0	0	0	0	0	0	217	937	0	0	0	0
4:45 PM	0	0	126	0	0	0	129	0	0	0	0	0	0	0	0	0	255	952	0	0	0	1
5:00 PM	0	0	121	0	1	0	96	0	0	0	0	0	0	0	0	0	218	926	0	0	0	0
5:15 PM	0	0	153	0	0	0	94	0	0	0	0	0	0	0	0	0	247		0	0	0	0
5:30 PM	0	0	142	0	0	0	90	0	0	0	0	0	0	0	0	0	232		0	0	0	0
5:45 PM	0	0	136	0	0	0	93	0	0	0	0	0	0	0	0	0	229		0	0	0	0
Count Total	0	0	1,067	0	2	0	841	0	0	0	0	0	0	0	0	0	1,910		0	0	0	1
Peak Hour	0	0	515	0	1	0	468	0	0	0	0	0	0	0	0	0	984		0	0	0	1

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Wheat Ridge, CO 80033
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Site Code: 5

Station ID: 5

RIDGE RD N.O. PLUM CREEK PKWY

Start Time	11-Apr-24 Thu	NB	SB							Total
12:00 AM		8	6							14
01:00		2	4							6
02:00		2	7							9
03:00		3	1							4
04:00		33	7							40
05:00		46	26							72
06:00		171	89							260
07:00		461	235							696
08:00		348	240							588
09:00		309	267							576
10:00		206	187							393
11:00		265	263							528
12:00 PM		280	294							574
01:00		229	269							498
02:00		264	250							514
03:00		375	427							802
04:00		391	450							841
05:00		375	435							810
06:00		286	423							709
07:00		198	253							451
08:00		146	215							361
09:00		90	116							206
10:00		46	58							104
11:00		16	27							43
Total		4550	4549							9099
Percent		50.0%	50.0%							
AM Peak Vol.	-	07:00 461	09:00 267	-	-	-	-	-	-	07:00 696
PM Peak Vol.	-	16:00 391	16:00 450	-	-	-	-	-	-	16:00 841
Grand Total		4550	4549							9099
Percent		50.0%	50.0%							
ADT		ADT 9,099	AADT 9,099							

All Traffic Data Services
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Page 1

Site Code: 6
Station ID: 6
PLUM CREEK PKWY W.O. RIDGE RD

Start Time	11-Apr-24 Thu	EB	WB							Total
12:00 AM		22	5							27
01:00		2	5							7
02:00		5	7							12
03:00		4	11							15
04:00		8	27							35
05:00		16	104							120
06:00		116	236							352
07:00		315	520							835
08:00		353	345							698
09:00		237	344							581
10:00		197	221							418
11:00		276	278							554
12:00 PM		279	272							551
01:00		284	259							543
02:00		349	282							631
03:00		551	387							938
04:00		515	468							983
05:00		552	373							925
06:00		408	331							739
07:00		299	216							515
08:00		241	146							387
09:00		153	65							218
10:00		67	47							114
11:00		43	23							66
Total		5292	4972							10264
Percent		51.6%	48.4%							
AM Peak	-	08:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	353	520	-	-	-	-	-	-	835
PM Peak	-	17:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	552	468	-	-	-	-	-	-	983
Grand Total		5292	4972							10264
Percent		51.6%	48.4%							
ADT		ADT 10,264	AADT 10,264							

Brett Zmenkowski

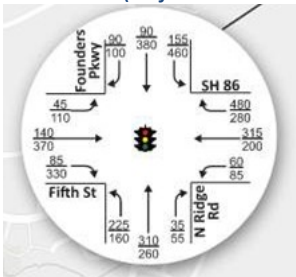
From: Thomas Reiff <TReiff@crgov.com>
Sent: Wednesday, April 3, 2024 8:19 AM
To: Mike Kibbee
Cc: Rachel Patton; Nick Galen; Hunter Hendrix; Ben Leech; Brett Zmenkowski; Jay Jensma
Subject: RE: Urban Moment - Castle Rock TIS - Updated Base Parameters
Attachments: Founders_5th_Ridge intersestion improvements.docx

Caution: External email

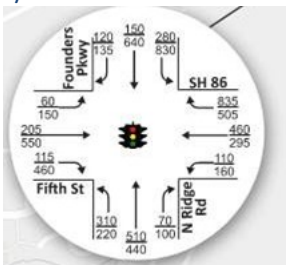
Hi Mike,

Here is the data I promised.

- Traffic volumes on Plum Creek Pkwy e/o Gilbert
 - o Existing = 22,300 ADT
 - o 2050= 28,400 ADT
- Traffic volumes on Ridge Road s/o 5th Street
 - o Existing = 14,500 ADT
 - o 2050 = 18,600 ADT
- June 2019 counts (adjust for 2024 counts using a straight line interpolation)



- 2050 AM/PM counts for Founders/5th St. Ridge Road intersection;



- Attached are the improvements to the intersection that will be completed later this year.
- Its OK to use Synchro 12 for the roundabout analysis

Let me know if you need any additional information.

Thanks,

Tom

Thomas Reiff | Transportation Planner
Town of Castle Rock | Public Works Department
4175 N. Castleton Ct. | Castle Rock, CO 80109
Direct 720.733.2483 | main 303.660.1020

Brett Zmenkowski

From: Thomas Reiff <TReiff@crgov.com>
Sent: Thursday, September 26, 2024 10:34 AM
To: Brett Zmenkowski
Subject: Terra Monte TIA Items

Follow Up Flag: Follow up
Flag Status: Flagged

Caution: External email

Hello Brett,

I did some research on the existing and 2050 traffic volumes on Lake Gulch Road. It seems our new model run is showing just a 15% traffic growth with the Crystal Valley Interchange and other improvements in place. Therefore, I think its safe to assume a total Background growth of 15% in traffic to 2050. You'll need to break that down to an annual growth rate for the report. But it will provide a fairly significant drop in NB traffic. Also the EB right should be treated the same. For the additional 80 trips that should be assigned to the WB AM through volume.

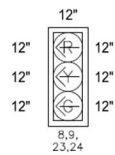
I think that covers the items you had questions on, but if there's more let me know.

Thanks,
Tom

Thomas Reiff | Transportation Planner
Town of Castle Rock | Public Works Department
4175 N. Castleton Ct. | Castle Rock, CO 80109
Direct 720.733.2483 | main 303.660.1020

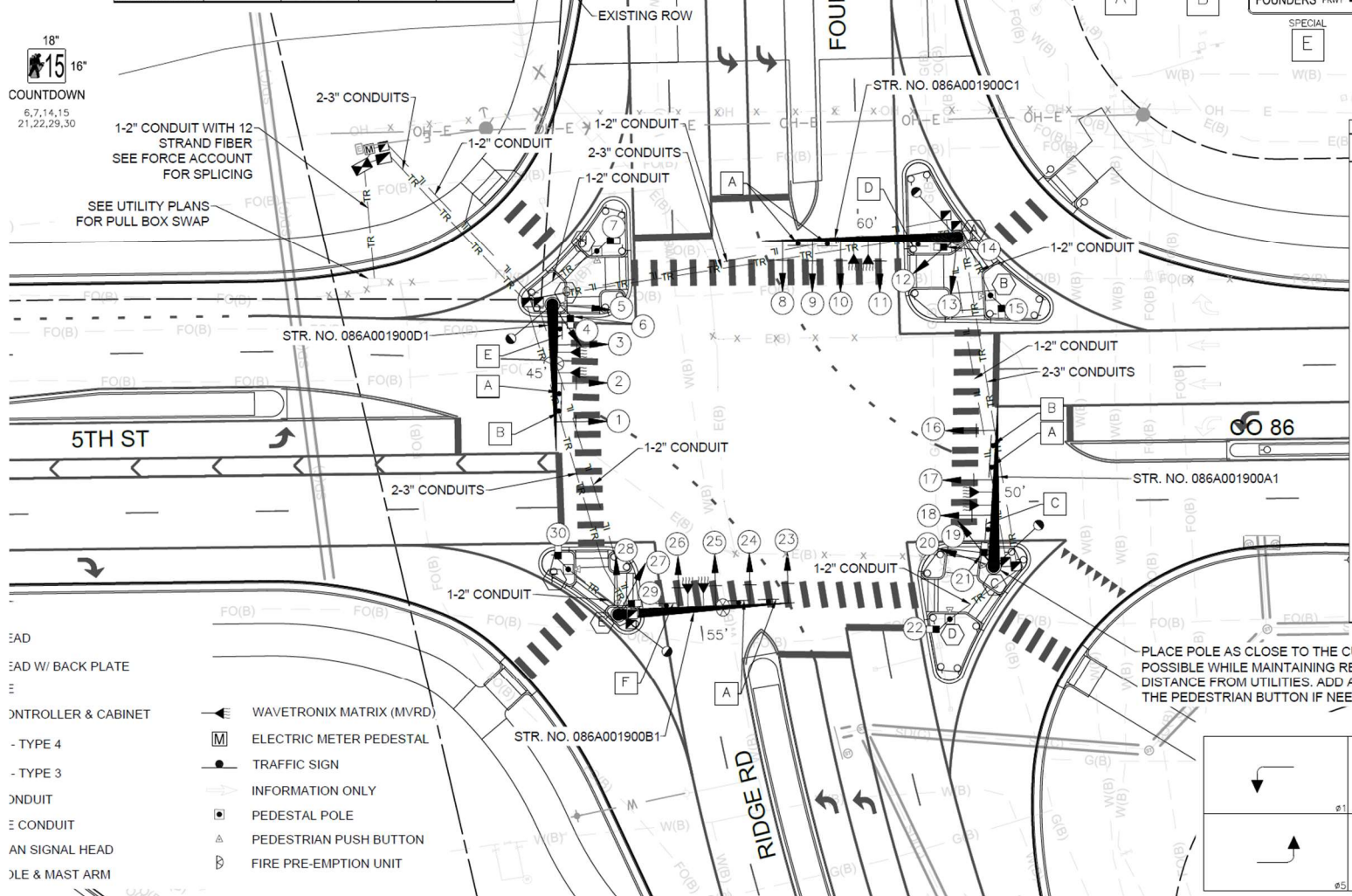


LS:

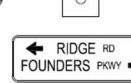
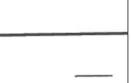
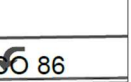
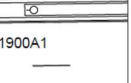
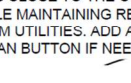
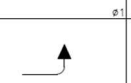


POLE NUMBER	A	B	C	D
LOCATION	NE CORNER	NE CORNER	SE CORNER	SE CORNER
NORTHING	3189513.07	3189519.31	3189503.22	3189486.71
EASTING	1562886.82	1562867.12	1562885.33	1562872.31
DIA./DEPTH	48" / 20.5'	18" / 5'	36" / 18.5'	18" / 5'
MAST ARM LENGTH	60'	PEDESTAL POLE	50'	PEDESTAL POLE

POLE NUMBER	E	F	G	H
LOCATION	SW CORNER	SW CORNER	NW CORNER	NW CORNER
NORTHING	3189387.27	3189375.06	3189386.95	3189403.68
EASTING	1562894.54	1562911.32	1562991.94	1563005.22
DIA./DEPTH	36" / 18.5'	18" / 5'	36" / 18.5'	18" / 5'
MAST ARM LENGTH	55'	PEDESTAL POLE	45'	PEDESTAL POLE



SIGN LEGEN



APPENDIX “B”

**EXISTING TRAFFIC
SIGNAL TIMING PLANS**

2.1.2



Controller ID	0
Main St.	SH 86
Side St.	Founders Pkwy/Ridge Rd

Adapter	IP Address	Subnet Mask	Default Gateway	ARP	DHCP
1	10.11.79.96	255.255.255.0	10.11.79.1	Disable	
2	10.20.70.51	255.255.0.0	0.0.0.0	Disable	

Port	Description	Function	Address	Baud	Bits	Stop	Parity	Flow	CTS	RTS
1	Port 2/C21S	None	1	9600	8	1	None	None	0	0
2	Aux P3/C22S	None	1	9600	8	1	None	None	0	0
3	SDLC Port 1	None	1	9600	8	1	None	None	0	0
4	Com A/C50S	None	1	9600	8	1	None	None	0	0
5	FIO	None	1	9600	8	1	None	None	0	0
6	DISPLAY/C60M	None	1	9600	8	1	None	None	0	0
7	SP7	None	1	9600	8	1	None	None	0	0
8	SP8/Com B	None	1	9600	8	1	None	None	0	0

Startup Flash	0	Auto Ped Clr	Enable	Red Revert	4.0	Backup Time	600	Ext Mode	Disable
All Red Exit	6	Grn Flash Freq.	60	Yel Flash Freq.	60	MCE Enable	Enable	Free Seq.	1
MCE Seq.	1	Start Yellow	0.0	Start Red	0.0	Start Clear Hold	6		

[illegible]

Phases	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Walk Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clear Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yel Change	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	3.0	3.0	3.0	3.0
Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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 Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0
Dyn Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyn Max 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	0.0	0.0	0.0	0.0
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr																				
Pre Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Clearance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Options

[illegible][illegible]

[illegible]

Additional Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher																				
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				

Phases	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher																				
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				

Phase Configuration

Ph.	Startup	Ring	Concurrent	No Served Phases	Startup Mir	Description
1	Phase Not On	1	5,6		0	
2	Green No Walk	1	5,6		0	
3	Phase Not On	0			0	
4	Phase Not On	1			0	
5	Phase Not On	2	1,2		0	
6	Green No Walk	2	1,2		0	
7	Phase Not On	0			0	
8	Phase Not On	1			0	
9	None	0			0	
10	None	0			0	
11	None	0			0	
12	None	0			0	
13	None	0			0	
14	None	0			0	
15	None	0			0	
16	None	0			0	
17	None	0			0	
18	None	0			0	

19	None	0			0	
20	None	0			0	
21	None	0			0	
22	None	0			0	
23	None	0			0	
24	None	0			0	
25	None	0			0	
26	None	0			0	
27	None	0			0	
28	None	0			0	
29	None	0			0	
30	None	0			0	
31	None	0			0	
32	None	0			0	
33	None	0			0	
34	None	0			0	
35	None	0			0	
36	None	0			0	
37	None	0			0	
38	None	0			0	
39	None	0			0	
40	None	0			0	

Sequence Configuration

Sequence 1

Ring	Phases
1	1,2,a,4,8,b
2	5,6,a,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 2

Ring	Phases
1	2,1,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 3

Ring	Phases
1	1,2,a,4,3,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 4

Ring	Phases
1	2,1,a,4,3,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 5

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 6

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 7

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 8

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 9

Sequence 10

Sequence 11

Sequence 12

Ring	Phases	Ring	Phases	Ring	Phases	Ring	Phases
------	--------	------	--------	------	--------	------	--------

1	1,2,a,3,4,b	1	2,1,a,3,4,b	1	1,2,a,4,3,b	1	2,1,a,4,3,b
2	5,6,a,8,7,b	2	5,6,a,8,7,b	2	5,6,a,8,7,b	2	5,6,a,8,7,b
3		3		3		3	
4		4		4		4	
5		5		5		5	
6		6		6		6	
7		7		7		7	
8		8		8		8	
9		9		9		9	
10		10		10		10	
11		11		11		11	
12		12		12		12	
13		13		13		13	
14		14		14		14	
15		15		15		15	
16		16		16		16	

Sequence 13

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 14

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 15

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 16

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 13

11	
12	
13	
14	
15	
16	

Sequence 14

11	
12	
13	
14	
15	
16	

Sequence 15

11	
12	
13	
14	
15	
16	

Sequence 16

11	
12	
13	
14	
15	
16	

Sequence 17

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

Sequence 18

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

Sequence 19

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

Sequence 20

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

Vehicle Detection Parameters

Det.	Call Phs	Call Ovl	Additional Call Phase	Switch Phase	Delay	Extend	Queue Limit	No Activity	Max Presence	Erratic Counts	Failed Time	Description
1	1	0		0	0.0	0.0	0	0	0	0	0	
2	2	0		0	0.0	0.0	0	0	0	0	0	
3	2	0		0	0.0	0.0	0	0	0	0	0	
4	2	0		0	0.0	0.0	0	0	0	0	0	

5	2	0		0	0.0	0.0	0	0	0	0	0	
6	2	0		0	0.0	0.0	0	0	0	0	0	
7	3	0		0	0.0	0.0	0	0	0	0	0	
8	4	0		0	0.0	0.0	0	0	0	0	0	
9	4	0		0	0.0	0.0	0	0	0	0	0	
10	4	0		0	0.0	0.0	0	0	0	0	0	
11	4	0		0	0.0	0.0	0	0	0	0	0	
12	4	0		0	0.0	0.0	0	0	0	0	0	
13	1	0		0	0.0	0.0	0	0	0	0	0	
14	3	0		0	0.0	0.0	0	0	0	0	0	
15	5	0		0	0.0	0.0	0	0	0	0	0	
16	6	0		0	0.0	0.0	0	0	0	0	0	
17	6	0		0	0.0	0.0	0	0	0	0	0	
18	6	0		0	0.0	0.0	0	0	0	0	0	
19	6	0		0	0.0	0.0	0	0	0	0	0	
20	6	0		0	0.0	0.0	0	0	0	0	0	
21	7	0		0	0.0	0.0	0	0	0	0	0	
22	8	0		0	0.0	0.0	0	0	0	0	0	
23	8	0		0	0.0	0.0	0	0	0	0	0	
24	8	0		0	0.0	0.0	0	0	0	0	0	
25	8	0		0	0.0	0.0	0	0	0	0	0	
26	8	0		0	0.0	0.0	0	0	0	0	0	
27	5	0		0	0.0	0.0	0	0	0	0	0	
28	7	0		0	0.0	0.0	0	0	0	0	0	
29	0	0		0	0.0	0.0	0	0	0	0	0	
30	0	0		0	0.0	0.0	0	0	0	0	0	
31	0	0		0	0.0	0.0	0	0	0	0	0	
32	0	0		0	0.0	0.0	0	0	0	0	0	
33	0	0		0	0.0	0.0	0	0	0	0	0	
34	0	0		0	0.0	0.0	0	0	0	0	0	
35	0	0		0	0.0	0.0	0	0	0	0	0	
36	0	0		0	0.0	0.0	0	0	0	0	0	
37	0	0		0	0.0	0.0	0	0	0	0	0	
38	0	0		0	0.0	0.0	0	0	0	0	0	
39	0	0		0	0.0	0.0	0	0	0	0	0	
40	0	0		0	0.0	0.0	0	0	0	0	0	
41	0	0		0	0.0	0.0	0	0	0	0	0	
42	0	0		0	0.0	0.0	0	0	0	0	0	
43	0	0		0	0.0	0.0	0	0	0	0	0	
44	0	0		0	0.0	0.0	0	0	0	0	0	
45	0	0		0	0.0	0.0	0	0	0	0	0	
46	0	0		0	0.0	0.0	0	0	0	0	0	
47	0	0		0	0.0	0.0	0	0	0	0	0	
48	0	0		0	0.0	0.0	0	0	0	0	0	
49	0	0		0	0.0	0.0	0	0	0	0	0	
50	0	0		0	0.0	0.0	0	0	0	0	0	
51	0	0		0	0.0	0.0	0	0	0	0	0	
52	0	0		0	0.0	0.0	0	0	0	0	0	
53	0	0		0	0.0	0.0	0	0	0	0	0	
54	0	0		0	0.0	0.0	0	0	0	0	0	
55	0	0		0	0.0	0.0	0	0	0	0	0	
56	0	0		0	0.0	0.0	0	0	0	0	0	
57	0	0		0	0.0	0.0	0	0	0	0	0	
58	0	0		0	0.0	0.0	0	0	0	0	0	
59	0	0		0	0.0	0.0	0	0	0	0	0	
60	0	0		0	0.0	0.0	0	0	0	0	0	
61	0	0		0	0.0	0.0	0	0	0	0	0	
62	0	0		0	0.0	0.0	0	0	0	0	0	
63	0	0		0	0.0	0.0	0	0	0	0	0	
64	0	0		0	0.0	0.0	0	0	0	0	0	
65	0	0		0	0.0	0.0	0	0	0	0	0	
66	0	0		0	0.0	0.0	0	0	0	0	0	
67	0	0		0	0.0	0.0	0	0	0	0	0	
68	0	0		0	0.0	0.0	0	0	0	0	0	

69	0	0		0	0.0	0.0	0	0	0	0	0	
70	0	0		0	0.0	0.0	0	0	0	0	0	
71	0	0		0	0.0	0.0	0	0	0	0	0	
72	0	0		0	0.0	0.0	0	0	0	0	0	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Volume Detector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Occupancy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellow Lock Call																				
Red Lock call																				
Passage	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Queue																				
Call	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Terminate																				

Detector	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Volume Detector	X	X	X	X	X	X	X	X												
Occupancy	X	X	X	X	X	X	X	X												
Yellow Lock Call																				
Red Lock call			X																	
Passage	X	X	X	X	X	X	X	X												
Queue																				
Call	X	X	X	X	X	X	X	X												
Terminate																				

Detector	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Passage																				
Queue																				
Call																				
Terminate																				

Detector	61	62	63	64	65	66	67	68	69	70	71	72	Data Collection Period		60
Volume Detector															
Occupancy															
Yellow Lock Call															
Red Lock call															
Passage															
Queue															
Call															
Terminate															

Pedestrian Detectors

	Call	Call	No	Max	
Det	Phase	Ovlp	Act	Presence	Erratic Count
1	0	0	0	0	0
2	2	0	0	0	0
3	0	0	0	0	0
4	4	0	0	0	0
5	0	0	0	0	0
6	6	0	0	0	0
7	0	0	0	0	0
8	8	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0
11	0	0	0	0	0
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0

	Call	Call	No	Max	
Det	Phase	Ovlp	Act	Presence	Erratic Count
21	0	0	0	0	0
22	0	0	0	0	0
23	0	0	0	0	0
24	0	0	0	0	0
25	0	0	0	0	0
26	0	0	0	0	0
27	0	0	0	0	0
28	0	0	0	0	0
29	0	0	0	0	0
30	0	0	0	0	0
31	0	0	0	0	0
32	0	0	0	0	0
33	0	0	0	0	0
34	0	0	0	0	0
35	0	0	0	0	0

16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
19	0	0	0	0	0
20	0	0	0	0	0

36	0	0	0	0	0
37	0	0	0	0	0
38	0	0	0	0	0
39	0	0	0	0	0
40	0	0	0	0	0

Overlaps

OLP	Type	Included Phases	Modifier Phases	Trail	Trail	Trail	Walk	Ped	Walk	Ped	Delay	Flash	Descriptions
				GRN	YEL	RED	1	Clr 1	2	Clr 2			
1	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
2	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
3	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
4	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
5	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
6	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
7	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
8	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
9	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
10	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
11	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
12	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
13	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
14	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
15	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
16	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
17	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
18	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
19	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
20	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
21	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
22	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
23	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
24	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
25	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
26	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
27	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
28	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
29	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
30	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
31	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
32	Off			0	0.0	0.0	0	0	0	0	0.0	Off	

Coordination Parameters

Operational Mode	Correction Mode	Maximum Mode	Force Mode
Automatic	Dwell	Per Pattern	Floating

Patterns

Patt.	Cycle	Offset 1	Offset 2	Offset 2	Split	Sequence	Ref. Color	Max Mode	Phs	Det	Ped
									Pln	Pln	Pln
1	0	0	0	0	1	1	Yel	Inh	1	1	1
2	0	0	0	0	2	1	Yel	Inh	1	1	1
3	0	0	0	0	3	1	Yel	Inh	1	1	1
4	0	0	0	0	4	1	Yel	Inh	1	1	1
5	0	0	0	0	0	0	Yel	Inh	1	1	1
6	0	0	0	0	0	0	Yel	Inh	1	1	1
7	0	0	0	0	0	0	Yel	Inh	1	1	1
8	0	0	0	0	0	0	Yel	Inh	1	1	1
9	0	0	0	0	0	0	Yel	Inh	1	1	1
10	0	0	0	0	0	0	Yel	Inh	1	1	1
11	0	0	0	0	0	0	Yel	Inh	1	1	1
12	0	0	0	0	0	0	Yel	Inh	1	1	1
13	0	0	0	0	0	0	Yel	Inh	1	1	1
14	0	0	0	0	0	0	Yel	Inh	1	1	1
15	0	0	0	0	0	0	Yel	Inh	1	1	1
16	0	0	0	0	0	0	Yel	Inh	1	1	1
17	0	0	0	0	0	0	Yel	Inh	1	1	1

18	0	0	0	0	0	0	Yel	Inh	1	1	1
19	0	0	0	0	19	1	Yel	Max1	1	1	1
20	0	0	0	0	20	1	Yel	Max2	1	1	1
21	0	0	0	0	0	0	Yel	Inh	1	1	1
22	0	0	0	0	0	0	Yel	Inh	1	1	1
23	0	0	0	0	0	0	Yel	Inh	1	1	1
24	0	0	0	0	0	0	Yel	Inh	1	1	1
25	0	0	0	0	0	0	Yel	Inh	1	1	1
26	0	0	0	0	0	0	Yel	Inh	1	1	1
27	0	0	0	0	0	0	Yel	Inh	1	1	1
28	0	0	0	0	0	0	Yel	Inh	1	1	1
29	0	0	0	0	0	0	Yel	Inh	1	1	1
30	0	0	0	0	0	0	Yel	Inh	1	1	1
31	0	0	0	0	0	0	Yel	Inh	1	1	1
32	0	0	0	0	0	0	Yel	Inh	1	1	1
33	0	0	0	0	0	0	Yel	Inh	1	1	1
34	0	0	0	0	0	0	Yel	Inh	1	1	1
35	0	0	0	0	0	0	Yel	Inh	1	1	1
36	0	0	0	0	0	0	Yel	Inh	1	1	1
37	0	0	0	0	0	0	Yel	Inh	1	1	1
38	0	0	0	0	0	0	Yel	Inh	1	1	1
39	0	0	0	0	0	0	Yel	Inh	1	1	1
40	0	0	0	0	0	0	Yel	Inh	1	1	1
41	0	0	0	0	0	0	Yel	Inh	1	1	1
42	0	0	0	0	0	0	Yel	Inh	1	1	1
43	0	0	0	0	0	0	Yel	Inh	1	1	1
44	0	0	0	0	0	0	Yel	Inh	1	1	1
45	0	0	0	0	0	0	Yel	Inh	1	1	1
46	0	0	0	0	0	0	Yel	Inh	1	1	1
47	0	0	0	0	0	0	Yel	Inh	1	1	1
48	0	0	0	0	0	0	Yel	Inh	1	1	1
49	0	0	0	0	0	0	Yel	Inh	1	1	1
50	0	0	0	0	0	0	Yel	Inh	1	1	1
51	0	0	0	0	0	0	Yel	Inh	1	1	1
52	0	0	0	0	0	0	Yel	Inh	1	1	1
53	0	0	0	0	0	0	Yel	Inh	1	1	1
54	0	0	0	0	0	0	Yel	Inh	1	1	1
55	0	0	0	0	0	0	Yel	Inh	1	1	1
56	0	0	0	0	0	0	Yel	Inh	1	1	1
57	0	0	0	0	0	0	Yel	Inh	1	1	1
58	0	0	0	0	0	0	Yel	Inh	1	1	1
59	0	0	0	0	0	0	Yel	Inh	1	1	1
60	0	0	0	0	0	0	Yel	Inh	1	1	1
61	0	0	0	0	0	0	Yel	Inh	1	1	1
62	0	0	0	0	0	0	Yel	Inh	1	1	1
63	0	0	0	0	0	0	Yel	Inh	1	1	1
64	0	0	0	0	0	0	Yel	Inh	1	1	1
65	0	0	0	0	0	0	Yel	Inh	1	1	1
66	0	0	0	0	0	0	Yel	Inh	1	1	1
67	0	0	0	0	0	0	Yel	Inh	1	1	1
68	0	0	0	0	0	0	Yel	Inh	1	1	1
69	0	0	0	0	0	0	Yel	Inh	1	1	1
70	0	0	0	0	0	0	Yel	Inh	1	1	1
71	0	0	0	0	0	0	Yel	Inh	1	1	1
72	0	0	0	0	0	0	Yel	Inh	1	1	1
73	0	0	0	0	0	0	Yel	Inh	1	1	1
74	0	0	0	0	0	0	Yel	Inh	1	1	1
75	0	0	0	0	0	0	Yel	Inh	1	1	1
76	0	0	0	0	0	0	Yel	Inh	1	1	1
77	0	0	0	0	0	0	Yel	Inh	1	1	1
78	0	0	0	0	0	0	Yel	Inh	1	1	1
79	0	0	0	0	0	0	Yel	Inh	1	1	1
80	0	0	0	0	0	0	Yel	Inh	1	1	1
81	0	0	0	0	0	0	Yel	Inh	1	1	1

82	0	0	0	0	0	0	Yel	Inh	1	1	1
83	0	0	0	0	0	0	Yel	Inh	1	1	1
84	0	0	0	0	0	0	Yel	Inh	1	1	1
85	0	0	0	0	0	0	Yel	Inh	1	1	1
86	0	0	0	0	0	0	Yel	Inh	1	1	1
87	0	0	0	0	0	0	Yel	Inh	1	1	1
88	0	0	0	0	0	0	Yel	Inh	1	1	1
89	0	0	0	0	0	0	Yel	Inh	1	1	1
90	0	0	0	0	0	0	Yel	Inh	1	1	1
91	0	0	0	0	0	0	Yel	Inh	1	1	1
92	0	0	0	0	0	0	Yel	Inh	1	1	1
93	0	0	0	0	0	0	Yel	Inh	1	1	1
94	0	0	0	0	0	0	Yel	Inh	1	1	1
95	0	0	0	0	0	0	Yel	Inh	1	1	1
96	0	0	0	0	0	0	Yel	Inh	1	1	1
97	0	0	0	0	0	0	Yel	Inh	1	1	1
98	0	0	0	0	0	0	Yel	Inh	1	1	1
99	0	0	0	0	0	0	Yel	Inh	1	1	1
100	0	0	0	0	0	0	Yel	Inh	1	1	1
101	0	0	0	0	0	0	Yel	Inh	1	1	1
102	0	0	0	0	0	0	Yel	Inh	1	1	1
103	0	0	0	0	0	0	Yel	Inh	1	1	1
104	0	0	0	0	0	0	Yel	Inh	1	1	1
105	0	0	0	0	0	0	Yel	Inh	1	1	1
106	0	0	0	0	0	0	Yel	Inh	1	1	1
107	0	0	0	0	0	0	Yel	Inh	1	1	1
108	0	0	0	0	0	0	Yel	Inh	1	1	1
109	0	0	0	0	0	0	Yel	Inh	1	1	1
110	0	0	0	0	0	0	Yel	Inh	1	1	1
111	0	0	0	0	0	0	Yel	Inh	1	1	1
112	0	0	0	0	0	0	Yel	Inh	1	1	1
113	0	0	0	0	0	0	Yel	Inh	1	1	1
114	0	0	0	0	0	0	Yel	Inh	1	1	1
115	0	0	0	0	0	0	Yel	Inh	1	1	1
116	0	0	0	0	0	0	Yel	Inh	1	1	1
117	0	0	0	0	0	0	Yel	Inh	1	1	1
118	0	0	0	0	0	0	Yel	Inh	1	1	1
119	0	0	0	0	0	0	Yel	Inh	1	1	1
120	0	0	0	0	0	0	Yel	Inh	1	1	1
121	0	0	0	0	0	0	Yel	Inh	1	1	1
122	0	0	0	0	0	0	Yel	Inh	1	1	1
123	0	0	0	0	0	0	Yel	Inh	1	1	1
124	0	0	0	0	0	0	Yel	Inh	1	1	1
125	0	0	0	0	0	0	Yel	Inh	1	1	1
126	0	0	0	0	0	0	Yel	Inh	1	1	1
127	0	0	0	0	0	0	Yel	Inh	1	1	1
128	0	0	0	0	0	0	Yel	Inh	1	1	1

Split Parameters

Split 1		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0	X	X	None
3	0			None
4	0			None
5	0			None
6	0	X	X	None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None

Split 2		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0	X	X	None
3	0			None
4	0			None
5	0			None
6	0	X	X	None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None

14	0			None
15	0			None
16	0			None

14	0			None
15	0			None
16	0			None

Split 3		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0	X	X	None
3	0			None
4	0			None
5	0			None
6	0	X	X	None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 4		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0	X	X	None
3	0			None
4	0			None
5	0			None
6	0	X	X	None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 5		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 6		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 7		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 8		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 9		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None

Split 10		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None

2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None

2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None

Split 9		Coord	Ref	Mode
PH.	Time	PH	PH	
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 10		Coord	Ref	Mode
PH.	Time	PH	PH	
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 11		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 12		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 13		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 14		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 15		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None

Split 16		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None

6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 17		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 18		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 19		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None

Split 20		Coord	Ref	Mode
PH.	Time	PH	PH	
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None

Split 19		Coord	Ref	Mode
PH.	Time	PH	PH	
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 20		Coord	Ref	Mode
PH.	Time	PH	PH	
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

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

Day Plan		1																										
Month of Year					Days of Week					Days of Month																		
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

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Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 12

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 13

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 14

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 15

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 1

Event	Hour	Min.	Act
1	5	30	19
2	18	0	20
3	0	0	
4	0	0	
5	0	0	

Day Plan 2

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	

Day Plan 3

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	

Day Plan 4

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	

Day Plan 1

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 2

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 3

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 4

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 5

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 6

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 7

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 8

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 9

Day Plan 10

Day Plan 11

Day Plan 12

25	None								
26	None								
27	None								
28	None								
29	None								
30	None								
31	None								
32	None								

57	None								
58	None								
59	None								
60	None								
61	None								
62	None								
63	None								
64	None								

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Link	0	0	0	0	0	0	0	0
Delay	0	0	0	0	0	0	0	0
Min Duration	0	0	10	10	10	10	0	0
Min Green	0	0	0	0	0	0	0	0
Min Walk	0	0	0	0	0	0	0	0
Ent. Ped Clear	255	255	255	255	255	255	255	255
Track Green	0	0	0	0	0	0	0	0
Dwell Green	0	0	0	0	0	0	0	0
Max Presence	0	0	0	0	0	0	0	0
Enter Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Ent. Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Track Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Ped Clear	255	255	255	255	255	255	255	255
Exit Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Preempt	1	2	3	4	5	6	7	8
Non Lock Mem								
Not Override Flash								
NotOverrideNextPre								
Flash Dwell								

Preemption Configuration

Preempt	1	2	3	4	5	6	7	8
Track phase								
Dwell Phase			8	1,6	4	2,5		
Dwell Ped								
Exit Phase								
Track Overlap								
Dwell overlap								
Cycling phase								
Cycling Ped								
Cycling Overlap								

IO Modules

IO Mod	TYPE
1	Caltrans 332
2	None
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None

Channel Configuration

Chan	Ctrl Type	Source
1	Phs Veh	1
2	Phs Veh	2
3	Phs Veh	3
4	Phs Veh	4
5	Phs Veh	5
6	Phs Veh	6
7	Phs Veh	7
8	Phs Veh	8
9	Olp	1
10	Olp	2

Chan	Ctrl Type	Source
11	Olp	3
12	Olp	4
13	Phs Ped	2
14	Phs Ped	4
15	Phs Ped	6
16	Phs Ped	8
17	Olp	5
18	Olp	6
19	None	0
20	None	0

Channel Options

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flash Yellow																
Flash Red	X	X	X	X	X	X	X	X								
Alt Flash	X			X	X			X								
Channel	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Flash Yellow																
Flash Red																
Alt Flash																

Startup Clearance Hold Type

1=off, 2=On, 3=Flash and 4= Alt Flash

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Red																
Yellow																
Green																
Channel	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

Red															
Yellow															
Green															

Phase Intervals

Interval	Description	Red	Yel	Grn	Type
1	notActive	On	Off	Off	Red
2	dltGrn	On	Off	Off	Red
3	PreGrn	Off	Off	On	Green
4	minGrn	Off	Off	On	Green
5	grnExt	Off	Off	On	Green
6	grnDwell	Off	Off	On	Green
7	preClear	Off	Off	On	Green
8	yelChange	Off	On	Off	Yellow
9	redClear	On	Off	Off	Red
10	redDwell	On	Off	Off	Red
11	Barrier	On	Off	Off	Red
12					

Pedestrian Intervals

Interval	Description	DWK	CLR	Wlk	Type
1	notActive	On	Off	Off	Dont Walk
2	dltPed	On	Off	Off	Dont Walk
3	walk	Off	Off	On	Walk
4	walkDwell	Off	Off	On	Walk
5	flashDtWlk	Flash	Off	Off	Ped Clear
6	dWalk	On	Off	Off	Dont Walk
7					
8					

Countdown Display

Display	Addr	Phase	Time
1			
2			
3			
4			
5			
6			
7			
8			

Display	Addr	Phase	Time
9			
10			
11			
12			
13			
14			
15			
16			

Display	Addr	Phase	Time
17			
18			
19			
20			
21			
22			
23			
24			

Display	Addr	Phase	Time
25			
26			
27			
28			
29			
30			
31			
32			

Manual Control Phase Groups

Grp 1		Grp 2		Grp 3		Grp 4		Grp 5		Grp 6		Grp 7		Grp 8	
Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph
1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0
4	0	4	0	4	0	4	0	4	0	4	0	4	0	4	0
5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0
6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0
7	0	7	0	7	0	7	0	7	0	7	0	7	0	7	0
8	0	8	0	8	0	8	0	8	0	8	0	8	0	8	0
9	0	9	0	9	0	9	0	9	0	9	0	9	0	9	0
10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0
11	0	11	0	11	0	11	0	11	0	11	0	11	0	11	0
12	0	12	0	12	0	12	0	12	0	12	0	12	0	12	0
13	0	13	0	13	0	13	0	13	0	13	0	13	0	13	0
14	0	14	0	14	0	14	0	14	0	14	0	14	0	14	0
15	0	15	0	15	0	15	0	15	0	15	0	15	0	15	0
16	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0

Prioritor Settings

Prioritor	Priority Ph	Output Dly
1		0
2		0
3		0
4		0
5		0
6		0
7		0
8		0

Enabled	Lock Out Time
No	0

Loopback Functions

Func	Result	Function Type	Index	Source	Function Type	Index

Func	Result	Function Type	Index	Source	Function Type	Index

1				
---	--	--	--	--

51				
----	--	--	--	--

2					52				
3					53				
4					54				
5					55				
6					56				
7					57				
8					58				
9					59				
10					60				
11					61				
12					62				
13					63				
14					64				
15					65				
16					66				
17					67				
18					68				
19					69				
20					70				
21					71				
22					72				
23					73				
24					74				
25					75				
26					76				
27					77				
28					78				
29					79				
30					80				
31					81				
32					82				
33					83				
34					84				
35					85				
36					86				
37					87				
38					88				
39					89				
40					90				
41					91				
42					92				
43					93				
44					94				
45					95				
46					96				
47					97				
48					98				
49					99				
50					100				

Peer Configuration

Ctrl	Peer ID	IP address	SNMP Port	Hot Port	Serial Port	Serial Addr.	Master Sect.	P2P TO	Description
1	0		161	80	0	0	0	15	
2	0		161	80	0	0	0	15	
3	0		161	80	0	0	0	15	
4	0		161	80	0	0	0	15	
5	0		161	80	0	0	0	15	
6	0		161	80	0	0	0	15	
7	0		161	80	0	0	0	15	
8	0		161	80	0	0	0	15	
9	0		161	80	0	0	0	15	
10	0		161	80	0	0	0	15	
11	0		161	80	0	0	0	15	

12	0		161	80	0	0	0	15	
13	0		161	80	0	0	0	15	
14	0		161	80	0	0	0	15	
15	0		161	80	0	0	0	15	
16	0		161	80	0	0	0	15	
17	0		161	80	0	0	0	15	
18	0		161	80	0	0	0	15	
19	0		161	80	0	0	0	15	
20	0		161	80	0	0	0	15	
21	0		161	80	0	0	0	15	
22	0		161	80	0	0	0	15	
23	0		161	80	0	0	0	15	
24	0		161	80	0	0	0	15	
25	0		161	80	0	0	0	15	
26	0		161	80	0	0	0	15	
27	0		161	80	0	0	0	15	
28	0		161	80	0	0	0	15	
29	0		161	80	0	0	0	15	
30	0		161	80	0	0	0	15	
31	0		161	80	0	0	0	15	
32	0		161	80	0	0	0	15	
33	0		161	80	0	0	0	15	
34	0		161	80	0	0	0	15	
35	0		161	80	0	0	0	15	
36	0		161	80	0	0	0	15	
37	0		161	80	0	0	0	15	
38	0		161	80	0	0	0	15	
39	0		161	80	0	0	0	15	
40	0		161	80	0	0	0	15	
41	0		161	80	0	0	0	15	
42	0		161	80	0	0	0	15	
43	0		161	80	0	0	0	15	
44	0		161	80	0	0	0	15	
45	0		161	80	0	0	0	15	
46	0		161	80	0	0	0	15	
47	0		161	80	0	0	0	15	
48	0		161	80	0	0	0	15	
49	0		161	80	0	0	0	15	
50	0		161	80	0	0	0	15	
51	0		161	80	0	0	0	15	
52	0		161	80	0	0	0	15	
53	0		161	80	0	0	0	15	
54	0		161	80	0	0	0	15	
55	0		161	80	0	0	0	15	
56	0		161	80	0	0	0	15	
57	0		161	80	0	0	0	15	
58	0		161	80	0	0	0	15	
59	0		161	80	0	0	0	15	
60	0		161	80	0	0	0	15	
61	0		161	80	0	0	0	15	
62	0		161	80	0	0	0	15	
63	0		161	80	0	0	0	15	
64	0		161	80	0	0	0	15	
65	0		161	80	0	0	0	15	
66	0		161	80	0	0	0	15	
67	0		161	80	0	0	0	15	
68	0		161	80	0	0	0	15	
69	0		161	80	0	0	0	15	
70	0		161	80	0	0	0	15	
71	0		161	80	0	0	0	15	
72	0		161	80	0	0	0	15	
73	0		161	80	0	0	0	15	
74	0		161	80	0	0	0	15	
75	0		161	80	0	0	0	15	

76	0		161	80	0	0	0	15	
77	0		161	80	0	0	0	15	
78	0		161	80	0	0	0	15	
79	0		161	80	0	0	0	15	
80	0		161	80	0	0	0	15	
81	0		161	80	0	0	0	15	
82	0		161	80	0	0	0	15	
83	0		161	80	0	0	0	15	
84	0		161	80	0	0	0	15	
85	0		161	80	0	0	0	15	
86	0		161	80	0	0	0	15	
87	0		161	80	0	0	0	15	
88	0		161	80	0	0	0	15	
89	0		161	80	0	0	0	15	
90	0		161	80	0	0	0	15	
91	0		161	80	0	0	0	15	
92	0		161	80	0	0	0	15	
93	0		161	80	0	0	0	15	
94	0		161	80	0	0	0	15	
95	0		161	80	0	0	0	15	
96	0		161	80	0	0	0	15	
97	0		161	80	0	0	0	15	
98	0		161	80	0	0	0	15	
99	0		161	80	0	0	0	15	
100	0		161	80	0	0	0	15	
101	0		161	80	0	0	0	15	
102	0		161	80	0	0	0	15	
103	0		161	80	0	0	0	15	
104	0		161	80	0	0	0	15	
105	0		161	80	0	0	0	15	
106	0		161	80	0	0	0	15	
107	0		161	80	0	0	0	15	
108	0		161	80	0	0	0	15	
109	0		161	80	0	0	0	15	
110	0		161	80	0	0	0	15	
111	0		161	80	0	0	0	15	
112	0		161	80	0	0	0	15	
113	0		161	80	0	0	0	15	
114	0		161	80	0	0	0	15	
115	0		161	80	0	0	0	15	
116	0		161	80	0	0	0	15	
117	0		161	80	0	0	0	15	
118	0		161	80	0	0	0	15	
119	0		161	80	0	0	0	15	
120	0		161	80	0	0	0	15	
121	0		161	80	0	0	0	15	
122	0		161	80	0	0	0	15	
123	0		161	80	0	0	0	15	
124	0		161	80	0	0	0	15	
125	0		161	80	0	0	0	15	
126	0		161	80	0	0	0	15	
127	0		161	80	0	0	0	15	
128	0		161	80	0	0	0	15	
129	0		161	80	0	0	0	15	
130	0		161	80	0	0	0	15	
131	0		161	80	0	0	0	15	
132	0		161	80	0	0	0	15	
133	0		161	80	0	0	0	15	
134	0		161	80	0	0	0	15	
135	0		161	80	0	0	0	15	
136	0		161	80	0	0	0	15	
137	0		161	80	0	0	0	15	
138	0		161	80	0	0	0	15	
139	0		161	80	0	0	0	15	

140	0		161	80	0	0	0	15	
141	0		161	80	0	0	0	15	
142	0		161	80	0	0	0	15	
143	0		161	80	0	0	0	15	
144	0		161	80	0	0	0	15	
145	0		161	80	0	0	0	15	
146	0		161	80	0	0	0	15	
147	0		161	80	0	0	0	15	
148	0		161	80	0	0	0	15	
149	0		161	80	0	0	0	15	
150	0		161	80	0	0	0	15	
151	0		161	80	0	0	0	15	
152	0		161	80	0	0	0	15	
153	0		161	80	0	0	0	15	
154	0		161	80	0	0	0	15	
155	0		161	80	0	0	0	15	
156	0		161	80	0	0	0	15	
157	0		161	80	0	0	0	15	
158	0		161	80	0	0	0	15	
159	0		161	80	0	0	0	15	
160	0		161	80	0	0	0	15	
161	0		161	80	0	0	0	15	
162	0		161	80	0	0	0	15	
163	0		161	80	0	0	0	15	
164	0		161	80	0	0	0	15	
165	0		161	80	0	0	0	15	
166	0		161	80	0	0	0	15	
167	0		161	80	0	0	0	15	
168	0		161	80	0	0	0	15	
169	0		161	80	0	0	0	15	
170	0		161	80	0	0	0	15	
171	0		161	80	0	0	0	15	
172	0		161	80	0	0	0	15	
173	0		161	80	0	0	0	15	
174	0		161	80	0	0	0	15	
175	0		161	80	0	0	0	15	
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178	0		161	80	0	0	0	15	
179	0		161	80	0	0	0	15	
180	0		161	80	0	0	0	15	
181	0		161	80	0	0	0	15	
182	0		161	80	0	0	0	15	
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191	0		161	80	0	0	0	15	
192	0		161	80	0	0	0	15	
193	0		161	80	0	0	0	15	
194	0		161	80	0	0	0	15	
195	0		161	80	0	0	0	15	
196	0		161	80	0	0	0	15	
197	0		161	80	0	0	0	15	
198	0		161	80	0	0	0	15	
199	0		161	80	0	0	0	15	
200	0		161	80	0	0	0	15	
201	0		161	80	0	0	0	15	
202	0		161	80	0	0	0	15	
203	0		161	80	0	0	0	15	

204	0		161	80	0	0	0	15	
205	0		161	80	0	0	0	15	
206	0		161	80	0	0	0	15	
207	0		161	80	0	0	0	15	
208	0		161	80	0	0	0	15	
209	0		161	80	0	0	0	15	
210	0		161	80	0	0	0	15	
211	0		161	80	0	0	0	15	
212	0		161	80	0	0	0	15	
213	0		161	80	0	0	0	15	
214	0		161	80	0	0	0	15	
215	0		161	80	0	0	0	15	
216	0		161	80	0	0	0	15	
217	0		161	80	0	0	0	15	
218	0		161	80	0	0	0	15	
219	0		161	80	0	0	0	15	
220	0		161	80	0	0	0	15	
221	0		161	80	0	0	0	15	
222	0		161	80	0	0	0	15	
223	0		161	80	0	0	0	15	
224	0		161	80	0	0	0	15	
225	0		161	80	0	0	0	15	
226	0		161	80	0	0	0	15	
227	0		161	80	0	0	0	15	
228	0		161	80	0	0	0	15	
229	0		161	80	0	0	0	15	
230	0		161	80	0	0	0	15	
231	0		161	80	0	0	0	15	
232	0		161	80	0	0	0	15	
233	0		161	80	0	0	0	15	
234	0		161	80	0	0	0	15	
235	0		161	80	0	0	0	15	
236	0		161	80	0	0	0	15	
237	0		161	80	0	0	0	15	
238	0		161	80	0	0	0	15	
239	0		161	80	0	0	0	15	
240	0		161	80	0	0	0	15	
241	0		161	80	0	0	0	15	
242	0		161	80	0	0	0	15	
243	0		161	80	0	0	0	15	
244	0		161	80	0	0	0	15	
245	0		161	80	0	0	0	15	
246	0		161	80	0	0	0	15	
247	0		161	80	0	0	0	15	
248	0		161	80	0	0	0	15	
249	0		161	80	0	0	0	15	
250	0		161	80	0	0	0	15	
251	0		161	80	0	0	0	15	
252	0		161	80	0	0	0	15	
253	0		161	80	0	0	0	15	
254	0		161	80	0	0	0	15	
255	0		161	80	0	0	0	15	

Section Configuration

Section	Control	Poll	Req #	Fail Time	Algorithm Period	Description
1	None	60	1	300	240	
2	None	60	1	300	240	
3	None	60	1	300	240	
4	None	60	1	300	240	
5	None	60	1	300	240	
6	None	60	1	300	240	
7	None	60	1	300	240	
8	None	60	1	300	240	
9	None	60	1	300	240	

10	None	60	1	300	240	
11	None	60	1	300	240	
12	None	60	1	300	240	
13	None	60	1	300	240	
14	None	60	1	300	240	
15	None	60	1	300	240	
16	None	60	1	300	240	

User Program Info

Pgrm	Description
1	Stop Time
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
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27	
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31	
32	

APPENDIX “C”

INTERSECTION CAPACITY ANALYSIS WORKSHEETS

Lanes and Geometrics
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
04/22/2024

										
Lane Group	WBL	WBR	NBL	NBR	NBR2	SEU	SEL	SER	SWL	SWR
Lane Configurations			 							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	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	1	1			0	0	1	0
Taper Length (ft)	25		25				25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor										
Frt	0.939		0.928				0.947	0.850		
Flt Protected	0.973		0.975				0.969			
Satd. Flow (prot)	1702	0	3270	0	0	0	1709	1504	1863	0
Flt Permitted	0.973		0.975				0.969			
Satd. Flow (perm)	1702	0	3270	0	0	0	1709	1504	1863	0
Link Speed (mph)	45		40				45		25	
Link Distance (ft)	1387		406				481		223	
Travel Time (s)	31.5		9.2				10.9		4.6	
Intersection Summary										
Area Type:	Other									

HCM 7th Roundabout
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
04/22/2024

Intersection						
Intersection Delay, s/veh	7.7					
Intersection LOS	A					
Approach	WB	NB		SE		SW
Entry Lanes	1	2		2		1
Conflicting Circle Lanes	2	2		2		2
Adj Approach Flow, veh/h	716	338		260		0
Demand Flow Rate, veh/h	731	345		265		0
Vehicles Circulating, veh/h	179	89		399		910
Vehicles Exiting, veh/h	254	575		512		0
Ped Vol Crossing Leg, #/h	0	0		0		0
Ped Cap Adj	1.000	1.000		1.000		1.000
Approach Delay, s/veh	10.4	4.0		5.0		0.0
Approach LOS	B	A		A		-
Lane	Left	Left	Right	Left	Right	Left
Designated Moves	LR	L	LTR	LTR	R	LR
Assumed Moves	LR	L	LTR	LTR	R	LR
RT Channelized						
Lane Util	1.000	0.530	0.470	0.472	0.528	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1420	1350	1420	1350	1420	1420
B (Slope)	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	731	183	162	125	140	0
Cap Entry Lane, veh/h	1220	1244	1317	935	1012	655
Entry HV Adj Factor	0.979	0.979	0.981	0.978	0.984	1.000
Flow Entry, veh/h	716	179	159	122	138	0
Cap Entry, veh/h	1195	1217	1291	914	996	655
V/C Ratio	0.599	0.147	0.123	0.134	0.138	0.000
Control Delay, s/veh	10.4	4.2	3.8	5.2	4.9	5.5
LOS	B	A	A	A	A	A
95th %tile Queue, veh	4	1	0	0	0	0

Lanes and Geometrics
2: N. Ridge Rd. & Enderud Blvd.

RidgeView
04/22/2024



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
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	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.972			0.850
Flt Protected		0.978			0.950	
Satd. Flow (prot)	0	3461	3440	0	1770	1583
Flt Permitted		0.978			0.950	
Satd. Flow (perm)	0	3461	3440	0	1770	1583
Link Speed (mph)		45	45		35	
Link Distance (ft)		3366	1847		1714	
Travel Time (s)		76.5	42.0		39.0	

Intersection Summary

Area Type: Other

Intersection						
Intersection Delay, s/veh	7.8					
Intersection LOS	A					
Approach	SE		NW		SW	
Entry Lanes	2		2		2	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	303		510		707	
Demand Flow Rate, veh/h	309		520		721	
Vehicles Circulating, veh/h	106		140		423	
Vehicles Exiting, veh/h	1038		275		237	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	3.9		4.9		11.6	
Approach LOS	A		A		B	
Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	LT	TR	LT	TR	L	TR
RT Channelized						
Lane Util	0.469	0.531	0.469	0.531	0.147	0.853
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	145	164	244	276	106	615
Cap Entry Lane, veh/h	1224	1298	1187	1261	915	991
Entry HV Adj Factor	0.981	0.978	0.982	0.979	0.981	0.980
Flow Entry, veh/h	142	160	240	270	104	603
Cap Entry, veh/h	1201	1269	1165	1234	897	972
V/C Ratio	0.118	0.126	0.206	0.219	0.116	0.620
Control Delay, s/veh	4.0	3.9	4.9	4.8	5.1	12.7
LOS	A	A	A	A	A	B
95th %tile Queue, veh	0	0	1	1	0	4

Lanes and Geometrics
3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
04/22/2024

												
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%		0%		0%	
Storage Length (ft)	350		400	600		800	400		0	650		0
Storage Lanes	1		1	1		1	1		1	1		1
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		0.850		0.850		0.850		0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.401			0.626			0.950			0.950		
Satd. Flow (perm)	747	1863	1583	1166	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes				Yes				Yes	
Satd. Flow (RTOR)			105				584				118	
Link Speed (mph)	45				45				45		50	
Link Distance (ft)	1219				1546				3366		989	
Travel Time (s)	18.5				23.4				51.0		13.5	

Intersection Summary

Area Type: Other

Timings
3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
04/22/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	150	90	68	338	537	239	342	41	175	100	95
Future Volume (vph)	47	150	90	68	338	537	239	342	41	175	100	95
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2		2	6		6			4			8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
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	5.0
Minimum Split (s)	10.0	25.5	25.5	10.0	26.5	26.5	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (s)	15.0	30.0	30.0	15.0	30.0	30.0	40.0	40.0	40.0	40.0	40.0	40.0
Total Split (%)	12.0%	24.0%	24.0%	12.0%	24.0%	24.0%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	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	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	0.0
Total Lost Time (s)	5.0	6.5	6.5	5.0	6.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	56.3	48.3	48.3	58.0	49.2	49.2	29.9	29.9	29.9	18.9	18.9	18.9
Actuated g/C Ratio	0.45	0.39	0.39	0.46	0.39	0.39	0.24	0.24	0.24	0.15	0.15	0.15
v/c Ratio	0.12	0.22	0.14	0.12	0.50	0.59	0.61	0.83	0.09	0.70	0.38	0.30
Control Delay (s/veh)	21.6	31.7	6.4	21.0	35.8	5.7	48.2	61.4	0.4	64.2	50.4	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.6	31.7	6.4	21.0	35.8	5.7	48.2	61.4	0.4	64.2	50.4	7.7
LOS	C	C	A	C	D	A	D	E	A	E	D	A
Approach Delay (s/veh)		22.1			17.6			52.3			46.0	
Approach LOS		C			B			D			D	

Intersection Summary

Cycle Length: 125

Actuated Cycle Length: 125

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay (s/veh): 32.7

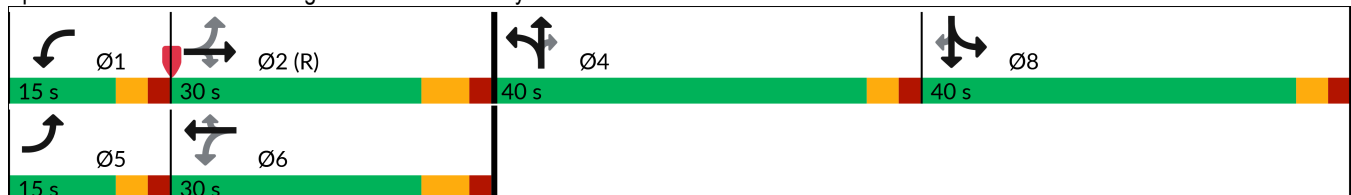
Intersection LOS: C

Intersection Capacity Utilization 69.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86



Queues

RidgeView

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

04/22/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	51	163	98	74	367	584	260	372	45	190	109	103
v/c Ratio	0.12	0.22	0.14	0.12	0.50	0.59	0.61	0.83	0.09	0.70	0.38	0.30
Control Delay (s/veh)	21.6	31.7	6.4	21.0	35.8	5.7	48.2	61.4	0.4	64.2	50.4	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.6	31.7	6.4	21.0	35.8	5.7	48.2	61.4	0.4	64.2	50.4	7.7
Queue Length 50th (ft)	21	91	0	31	231	0	187	284	0	148	81	0
Queue Length 95th (ft)	53	176	40	71	#395	102	266	386	0	215	129	37
Internal Link Dist (ft)	1139				1466				3286		909	
Turn Bay Length (ft)	350			400	600			800	400			650
Base Capacity (vph)	427	720	676	600	732	977	495	521	528	495	521	528
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	0.12	0.23	0.14	0.12	0.50	0.60	0.53	0.71	0.09	0.38	0.21	0.20

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
04/22/2024

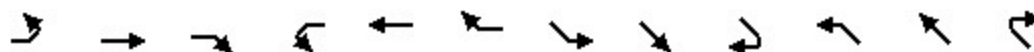
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	150	90	68	338	537	239	342	41	175	100	95
Future Volume (veh/h)	47	150	90	68	338	537	239	342	41	175	100	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	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	51	163	0	74	367	0	260	372	0	190	109	0
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	428	822		595	829		399	419		228	239	
Arrive On Green	0.03	0.44	0.00	0.04	0.44	0.00	0.22	0.22	0.00	0.13	0.13	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	51	163	0	74	367	0	260	372	0	190	109	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.9	6.7	0.0	2.8	17.0	0.0	16.6	24.1	0.0	13.0	6.7	0.0
Cycle Q Clear(g_c), s	1.9	6.7	0.0	2.8	17.0	0.0	16.6	24.1	0.0	13.0	6.7	0.0
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	428	822		595	829		399	419		228	239	
V/C Ratio(X)	0.12	0.20		0.12	0.44		0.65	0.89		0.84	0.46	
Avail Cap(c_a), veh/h	512	822		672	829		499	524		499	524	
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.1	21.5	0.0	18.1	24.1	0.0	44.1	47.0	0.0	53.2	50.5	0.0
Incr Delay (d2), s/veh	0.1	0.5	0.0	0.1	1.7	0.0	2.1	14.4	0.0	7.8	1.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	3.0	0.0	1.1	7.6	0.0	7.3	12.5	0.0	6.1	3.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.2	22.1	0.0	18.2	25.8	0.0	46.1	61.4	0.0	61.1	51.9	0.0
LnGrp LOS	B	C		B	C		D	E		E	D	
Approach Vol, veh/h	214			441			632			299		
Approach Delay, s/veh	21.4			24.6			55.1			57.7		
Approach LOS	C			C			E			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	61.4		33.0	9.1	61.9		21.0				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	10.0	23.5		35.0	10.0	23.5		35.0				
Max Q Clear Time (g_c+I1), s	4.8	8.7		26.1	3.9	19.0		15.0				
Green Ext Time (p_c), s	0.1	0.6		1.9	0.0	0.8		0.9				

Intersection Summary

HCM 7th Control Delay, s/veh 42.5
HCM 7th LOS D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.943			0.979			0.934			0.994	
Flt Protected		0.991			0.995			0.990			0.971	
Satd. Flow (prot)	0	3307	0	0	3448	0	0	1722	0	0	1798	0
Flt Permitted		0.991			0.995			0.990			0.971	
Satd. Flow (perm)	0	3307	0	0	3448	0	0	1722	0	0	1798	0
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		824			7080			1214			1006	
Travel Time (s)		18.7			161.7			27.6			22.9	

Intersection Summary

Area Type: Other

HCM 7th Roundabout
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
04/22/2024

Intersection						
Intersection Delay, s/veh	20.7					
Intersection LOS	C					
Approach	EB		WB		SE	NW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	458		643		222	962
Demand Flow Rate, veh/h	468		656		226	982
Vehicles Circulating, veh/h	181		1022		1158	333
Vehicles Exiting, veh/h	1203		293		520	316
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	4.9		18.2		14.1	31.5
Approach LOS	A		C		B	D
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	220	248	308	348	226	982
Cap Entry Lane, veh/h	1143	1218	527	596	531	1070
Entry HV Adj Factor	0.978	0.979	0.982	0.980	0.981	0.980
Flow Entry, veh/h	215	243	302	341	222	962
Cap Entry, veh/h	1118	1192	518	584	520	1048
V/C Ratio	0.193	0.204	0.584	0.584	0.426	0.918
Control Delay, s/veh	4.9	4.8	19.2	17.4	14.1	31.5
LOS	A	A	C	C	B	D
95th %tile Queue, veh	1	1	4	4	2	14

Lanes and Geometrics
5: Plum Creek Pkwy. & South Site Access

RidgeView
04/22/2024



Lane Group	SEL	SER	NEL	NET	SWT	SWR
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	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	3539	3539	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	3539	3539	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	232			7080	406	
Travel Time (s)	6.3			161.7	9.2	

Intersection Summary

Area Type: Other

HCM 7th TWSC
5: Plum Creek Pkwy. & South Site Access

RidgeView
04/22/2024

Intersection						
Int Delay, s/veh	0					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↗		↕↕	↕↗	
Traffic Vol, veh/h	0	0	0	315	520	0
Future Vol, veh/h	0	0	0	315	520	0
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	0	0	0	342	565	0
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	283	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	714	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	714	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s/v	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Control Delay (s/veh)	-	0	-	-		
HCM Lane LOS	-	A	-	-		
HCM 95th %tile Q(veh)	-	-	-	-		

Lanes and Geometrics
6: N. Ridge Rd. & North Site Access

RidgeView
04/22/2024



Lane Group	EBL	EBR	SET	SER	NWL	NWT
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	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	3539	0	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1863	3539	0	0	3539
Link Speed (mph)	30		45			45
Link Distance (ft)	492		1847			481
Travel Time (s)	11.2		42.0			10.9

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	0	235	0	0	461
Future Vol, veh/h	0	0	235	0	0	461
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	0	0	255	0	0	501

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	128	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	899	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	899	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT EBLn1	SET	SER
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s/veh)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

Lanes and Geometrics
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
04/22/2024

												
Lane Group	WBL	WBR	WBR2	NBU	NBL	NBR	NBR2	SEU	SEL2	SEL	SER	SWL
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
Storage Lanes	0	0			1	1				0	0	1
Taper Length (ft)	25				25					25		25
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	0.95	0.95	1.00	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt	0.944				0.921					0.974	0.850	0.865
Flt Protected	0.972				0.977					0.960		
Satd. Flow (prot)	1709	0	0	0	3252	0	0	0	0	1742	1504	1611
Flt Permitted	0.972				0.977					0.960		
Satd. Flow (perm)	1709	0	0	0	3252	0	0	0	0	1742	1504	1611
Link Speed (mph)	45				40					45		25
Link Distance (ft)	1387				406					481		223
Travel Time (s)	31.5				9.2					10.9		4.6

Intersection Summary

Area Type: Other



Lane Group	SWR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	

Intersection Summary

HCM 7th Roundabout
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
04/22/2024

Intersection						
Intersection Delay, s/veh	5.8					
Intersection LOS	A					
Approach	WB	NB		SE		SW
Entry Lanes	1	2		2		1
Conflicting Circle Lanes	2	2		2		2
Adj Approach Flow, veh/h	384	561		496		2
Demand Flow Rate, veh/h	392	572		506		2
Vehicles Circulating, veh/h	273	217		232		663
Vehicles Exiting, veh/h	516	521		433		2
Ped Vol Crossing Leg, #/h	0	0		0		0
Ped Cap Adj	1.000	1.000		1.000		1.000
Approach Delay, s/veh	6.7	5.5		5.3		4.5
Approach LOS	A	A		A		A
Lane	Left	Left	Right	Left	Right	Left
Designated Moves	LR	L	LTR	LTR	R	LR
Assumed Moves	LR	L	TR	LTR	R	LR
RT Channelized						
Lane Util	1.000	0.470	0.530	0.470	0.530	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1420	1350	1420	1350	1420	1420
B (Slope)	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	392	269	303	238	268	2
Cap Entry Lane, veh/h	1126	1106	1181	1090	1166	808
Entry HV Adj Factor	0.980	0.981	0.980	0.979	0.981	1.000
Flow Entry, veh/h	384	264	297	233	263	2
Cap Entry, veh/h	1103	1085	1157	1068	1143	808
V/C Ratio	0.348	0.243	0.257	0.218	0.230	0.002
Control Delay, s/veh	6.7	5.6	5.5	5.4	5.2	4.5
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	1	1	1	1	0



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
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	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.938			0.850
Flt Protected		0.975			0.950	
Satd. Flow (prot)	0	3451	3320	0	1770	1583
Flt Permitted		0.975			0.950	
Satd. Flow (perm)	0	3451	3320	0	1770	1583
Link Speed (mph)		45	45		35	
Link Distance (ft)		3366	1847		1714	
Travel Time (s)		76.5	42.0		39.0	

Intersection Summary

Area Type: Other

Intersection						
Intersection Delay, s/veh	6.2					
Intersection LOS	A					
Approach	SE		NW		SW	
Entry Lanes	2		2		2	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	902		425		414	
Demand Flow Rate, veh/h	920		434		422	
Vehicles Circulating, veh/h	111		476		254	
Vehicles Exiting, veh/h	565		555		656	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	6.5		6.5		5.4	
Approach LOS	A		A		A	
Lane	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	L	TR
Assumed Moves	L	TR	LT	TR	L	TR
RT Channelized						
Lane Util	0.517	0.483	0.470	0.530	0.263	0.737
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	476	444	204	230	111	311
Cap Entry Lane, veh/h	1219	1292	871	948	1069	1144
Entry HV Adj Factor	0.981	0.980	0.979	0.979	0.982	0.981
Flow Entry, veh/h	467	435	200	225	109	305
Cap Entry, veh/h	1196	1267	853	928	1049	1122
V/C Ratio	0.391	0.344	0.234	0.243	0.104	0.272
Control Delay, s/veh	6.9	6.0	6.7	6.3	4.3	5.8
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	2	1	1	0	1

Lanes and Geometrics
3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
04/22/2024

												
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%		0%		0%	
Storage Length (ft)	350		400	600		800	400		0	650		0
Storage Lanes	1		1	1		1	1		1	1		1
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				0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.387			0.167			0.950			0.950		
Satd. Flow (perm)	721	1863	1583	311	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes				Yes		Yes		Yes	
Satd. Flow (RTOR)			382				343				118	
Link Speed (mph)	45				45				45		50	
Link Distance (ft)	1219				1546				3366		989	
Travel Time (s)	18.5				23.4				51.0		13.5	

Intersection Summary

Area Type: Other

Timings
3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
04/22/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	399	351	97	215	316	170	289	62	520	422	106
Future Volume (vph)	116	399	351	97	215	316	170	289	62	520	422	106
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2		2	6		6			4			8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
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	5.0
Minimum Split (s)	10.0	25.5	25.5	10.0	26.5	26.5	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (s)	15.0	30.0	30.0	15.0	30.0	30.0	40.0	40.0	40.0	40.0	40.0	40.0
Total Split (%)	12.0%	24.0%	24.0%	12.0%	24.0%	24.0%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	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	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	0.0
Total Lost Time (s)	5.0	6.5	6.5	5.0	6.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	35.3	24.2	24.2	34.7	23.9	23.9	26.8	26.8	26.8	43.2	43.2	43.2
Actuated g/C Ratio	0.28	0.19	0.19	0.28	0.19	0.19	0.21	0.21	0.21	0.35	0.35	0.35
v/c Ratio	0.44	1.20	0.62	0.54	0.65	0.59	0.48	0.78	0.15	0.92	0.71	0.18
Control Delay (s/veh)	36.8	158.8	9.1	41.7	56.7	9.0	46.3	60.0	1.2	62.5	44.2	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)	36.8	158.8	9.1	41.7	56.7	9.0	46.3	60.0	1.2	62.5	44.2	6.2
LOS	D	F	A	D	E	A	D	E	A	E	D	A
Approach Delay (s/veh)		81.8			30.5			48.6			49.5	
Approach LOS		F			C			D			D	

Intersection Summary

Cycle Length: 125

Actuated Cycle Length: 125

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay (s/veh): 54.6

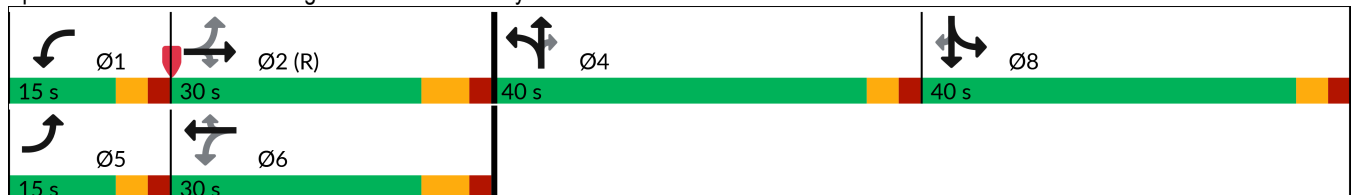
Intersection LOS: D

Intersection Capacity Utilization 88.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	126	434	382	105	234	343	185	314	67	565	459	115
v/c Ratio	0.44	1.20	0.62	0.54	0.65	0.59	0.48	0.78	0.15	0.92	0.71	0.18
Control Delay (s/veh)	36.8	158.8	9.1	41.7	56.7	9.0	46.3	60.0	1.2	62.5	44.2	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)	36.8	158.8	9.1	41.7	56.7	9.0	46.3	60.0	1.2	62.5	44.2	6.2
Queue Length 50th (ft)	74	~435	0	61	177	0	132	241	0	439	322	0
Queue Length 95th (ft)	126	#640	91	107	268	84	190	319	4	#757	#542	43
Internal Link Dist (ft)		1139			1466			3286			909	
Turn Bay Length (ft)	350		400	600		800	400			650		
Base Capacity (vph)	289	360	614	204	356	580	495	521	528	611	643	624
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	0.44	1.21	0.62	0.51	0.66	0.59	0.37	0.60	0.13	0.92	0.71	0.18

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.

HCM 7th Signalized Intersection Summary

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
04/22/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	399	351	97	215	316	170	289	62	520	422	106
Future Volume (veh/h)	116	399	351	97	215	316	170	289	62	520	422	106
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	126	434	0	105	234	0	185	314	0	565	459	0
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	389	559		240	543		344	361		499	524	
Arrive On Green	0.06	0.30	0.00	0.06	0.29	0.00	0.19	0.19	0.00	0.28	0.28	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	126	434	0	105	234	0	185	314	0	565	459	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	6.1	26.5	0.0	5.1	12.7	0.0	11.7	20.4	0.0	35.0	29.3	0.0
Cycle Q Clear(g_c), s	6.1	26.5	0.0	5.1	12.7	0.0	11.7	20.4	0.0	35.0	29.3	0.0
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	389	559		240	543		344	361		499	524	
V/C Ratio(X)	0.32	0.78		0.44	0.43		0.54	0.87		1.13	0.88	
Avail Cap(c_a), veh/h	417	559		283	543		499	524		499	524	
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.7	40.0	0.0	31.3	36.0	0.0	45.4	48.9	0.0	45.0	42.9	0.0
Incr Delay (d2), s/veh	0.5	10.1	0.0	1.2	2.5	0.0	1.3	10.5	0.0	82.2	15.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	13.3	0.0	2.2	6.0	0.0	5.2	10.3	0.0	26.1	15.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.2	50.1	0.0	32.5	38.5	0.0	46.7	59.4	0.0	127.2	58.3	0.0
LnGrp LOS	C	D		C	D		D	E		F	E	
Approach Vol, veh/h	560			339			499			1024		
Approach Delay, s/veh	45.4			36.6			54.7			96.3		
Approach LOS	D			D			D			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	43.9		29.1	13.1	42.8		40.0				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	10.0	23.5		35.0	10.0	23.5		35.0				
Max Q Clear Time (g_c+I1), s	7.1	28.5		22.4	8.1	14.7		37.0				
Green Ext Time (p_c), s	0.1	0.0		1.8	0.0	0.7		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 67.6
HCM 7th LOS E

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.937			0.989			0.962			0.975	
Flt Protected		0.995			0.987			0.990			0.974	
Satd. Flow (prot)	0	3300	0	0	3455	0	0	1774	0	0	1769	0
Flt Permitted		0.995			0.987			0.990			0.974	
Satd. Flow (perm)	0	3300	0	0	3455	0	0	1774	0	0	1769	0
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		824			7080			1214			1006	
Travel Time (s)		18.7			161.7			27.6			22.9	
Intersection Summary												
Area Type:	Other											

HCM 7th Roundabout
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
04/22/2024

Intersection						
Intersection Delay, s/veh	13.2					
Intersection LOS	B					
Approach	EB		WB		SE	NW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	1002		549		438	549
Demand Flow Rate, veh/h	1022		560		446	560
Vehicles Circulating, veh/h	470		550		811	685
Vehicles Exiting, veh/h	787		695		299	807
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	11.8		8.0		16.5	18.5
Approach LOS	B		A		C	C
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	480	542	263	297	446	560
Cap Entry Lane, veh/h	876	952	814	890	713	793
Entry HV Adj Factor	0.981	0.980	0.981	0.979	0.981	0.980
Flow Entry, veh/h	471	531	258	291	438	549
Cap Entry, veh/h	860	933	798	871	699	777
V/C Ratio	0.548	0.569	0.323	0.334	0.626	0.706
Control Delay, s/veh	11.9	11.7	8.3	7.9	16.5	18.5
LOS	B	B	A	A	C	C
95th %tile Queue, veh	3	4	1	1	4	6

Lanes and Geometrics
5: Plum Creek Pkwy. & South Site Access

RidgeView
04/22/2024



Lane Group	SEL	SER	NEL	NET	SWT	SWR
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	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	3539	3539	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	3539	3539	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	232			7080	406	
Travel Time (s)	6.3			161.7	9.2	

Intersection Summary

Area Type: Other

HCM 7th TWSC
5: Plum Creek Pkwy. & South Site Access

RidgeView
04/22/2024

Intersection						
Int Delay, s/veh	0					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↗		↕↕	↕↗	
Traffic Vol, veh/h	0	0	0	515	468	0
Future Vol, veh/h	0	0	0	515	468	0
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	0	0	0	560	509	0
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	254	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	745	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	745	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s/v	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NET SELn1	SWT	SWR			
Capacity (veh/h)	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s/veh)	-	0	-	-	-	-
HCM Lane LOS	-	A	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-	-

Lanes and Geometrics

6: N. Ridge Rd. & North Site Access

RidgeView
04/22/2024



Lane Group	EBL	EBR	SET	SER	NWL	NWT
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	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	3539	0	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1863	3539	0	0	3539
Link Speed (mph)	30		45			45
Link Distance (ft)	492		1847			481
Travel Time (s)	11.2		42.0			10.9
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	0	472	1	0	395
Future Vol, veh/h	0	0	472	1	0	395
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	0	0	513	1	0	429

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	257	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	742	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	742	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT EBLn1	SET	SER
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s/veh)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

										
Lane Group	WBL	WBR	NBL	NBR	NBR2	SEU	SEL	SER	SWL	SWR
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	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	1	1			0	0	1	0
Taper Length (ft)	25		25				25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor										
Frt	0.939		0.928				0.947	0.850		
Flt Protected	0.973		0.975				0.969			
Satd. Flow (prot)	1702	0	3270	0	0	0	1709	1504	1863	0
Flt Permitted	0.973		0.975				0.969			
Satd. Flow (perm)	1702	0	3270	0	0	0	1709	1504	1863	0
Link Speed (mph)	45		40				45		25	
Link Distance (ft)	1387		406				481		223	
Travel Time (s)	31.5		9.2				10.9		4.6	
Intersection Summary										
Area Type:	Other									

HCM 7th Roundabout
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	7.9					
Intersection LOS	A					
Approach	WB	NB		SE		SW
Entry Lanes	1	2		2		1
Conflicting Circle Lanes	2	2		2		2
Adj Approach Flow, veh/h	731	344		265		0
Demand Flow Rate, veh/h	746	351		271		0
Vehicles Circulating, veh/h	183	91		407		929
Vehicles Exiting, veh/h	259	587		522		0
Ped Vol Crossing Leg, #/h	0	0		0		0
Ped Cap Adj	1.000	1.000		1.000		1.000
Approach Delay, s/veh	10.8	4.0		5.1		0.0
Approach LOS	B	A		A		-
Lane	Left	Left	Right	Left	Right	Left
Designated Moves	LR	L	LTR	LTR	R	LR
Assumed Moves	LR	L	LTR	LTR	R	LR
RT Channelized						
Lane Util	1.000	0.530	0.470	0.469	0.531	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1420	1350	1420	1350	1420	1420
B (Slope)	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	746	186	165	127	144	0
Cap Entry Lane, veh/h	1216	1241	1314	928	1005	645
Entry HV Adj Factor	0.980	0.980	0.980	0.981	0.975	1.000
Flow Entry, veh/h	731	182	162	125	140	0
Cap Entry, veh/h	1191	1217	1288	910	980	645
V/C Ratio	0.614	0.150	0.126	0.137	0.143	0.000
Control Delay, s/veh	10.8	4.2	3.8	5.3	5.0	5.6
LOS	B	A	A	A	A	A
95th %tile Queue, veh	4	1	0	0	0	0

Lanes and Geometrics
2: Access A/Enderud Blvd. & N. Ridge Rd.

RidgeView
10/01/2024

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.991			0.973			0.958				0.850
Flt Protected		0.979			0.997			0.967			0.950	
Satd. Flow (prot)	0	3434	0	0	3433	0	0	1726	0	0	1770	1583
Flt Permitted		0.979			0.997			0.967			0.950	
Satd. Flow (perm)	0	3434	0	0	3433	0	0	1726	0	0	1770	1583
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		3366			1847			417			1714	
Travel Time (s)		76.5			42.0			0.0			39.0	
Intersection Summary												
Area Type:	Other											

HCM 7th Roundabout
2: Access A/Enderud Blvd. & N. Ridge Rd.

RidgeView
10/01/2024

Intersection								
Intersection Delay, s/veh	10.0							
Intersection LOS	A							
Approach	SE		NW		NE		SW	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	330		549		193		722	
Demand Flow Rate, veh/h	336		560		197		736	
Vehicles Circulating, veh/h	138		279		425		597	
Vehicles Exiting, veh/h	1195		343		49		242	
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		5.9		5.6		16.9	
Approach LOS	A		A		A		C	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	1.000	0.148	0.852	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	9.199e-4	8.501e-4	
Entry Flow, veh/h	158	178	263	297	197	109	627	
Cap Entry Lane, veh/h	1189	1263	1044	1120	989	779	855	
Entry HV Adj Factor	0.980	0.981	0.980	0.979	0.980	0.982	0.981	
Flow Entry, veh/h	155	175	258	291	193	107	615	
Cap Entry, veh/h	1166	1239	1024	1097	969	765	839	
V/C Ratio	0.133	0.141	0.252	0.265	0.199	0.140	0.733	
Control Delay, s/veh	4.2	4.1	6.0	5.8	5.6	6.2	18.8	
LOS	A	A	A	A	A	A	C	
95th %tile Queue, veh	0	0	1	1	1	0	7	

Lanes and Geometrics
3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

													
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)	350		400	600		800	400		350	650		300	
Storage Lanes	1		1	1		1	2		1	2		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	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	1770	3539	1583	3433	3539	1583	3433	3539	1583	
Flt Permitted	0.528			0.615			0.950			0.950			
Satd. Flow (perm)	984	3539	1583	1146	3539	1583	3433	3539	1583	3433	3539	1583	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			145			609			164			164	
Link Speed (mph)		45			45			45			50		
Link Distance (ft)		1219			1546			3366			989		
Travel Time (s)		18.5			23.4			51.0			13.5		

Intersection Summary

Area Type: Other

Timings 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	155	92	71	348	560	244	355	43	183	104	97
Future Volume (vph)	48	155	92	71	348	560	244	355	43	183	104	97
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2		2	6		6			4			8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
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	5.0
Minimum Split (s)	10.0	25.5	25.5	10.0	26.5	26.5	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (%)	11.1%	34.4%	34.4%	11.1%	34.4%	34.4%	26.7%	26.7%	26.7%	27.8%	27.8%	27.8%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	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	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	0.0
Total Lost Time (s)	5.0	6.5	6.5	5.0	6.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	44.0	36.7	36.7	46.1	39.5	39.5	15.7	15.7	15.7	10.7	10.7	10.7
Actuated g/C Ratio	0.49	0.41	0.41	0.51	0.44	0.44	0.17	0.17	0.17	0.12	0.12	0.12
v/c Ratio	0.09	0.11	0.13	0.12	0.24	0.58	0.44	0.62	0.11	0.48	0.26	0.31
Control Delay (s/veh)	12.4	20.0	2.1	12.3	19.2	4.8	35.0	38.7	0.5	40.7	36.9	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.4	20.0	2.1	12.3	19.2	4.8	35.0	38.7	0.5	40.7	36.9	3.9
LOS	B	C	A	B	B	A	D	D	A	D	D	A
Approach Delay (s/veh)		13.2			10.5			34.7			30.4	
Approach LOS		B			B			C			C	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay (s/veh): 20.9

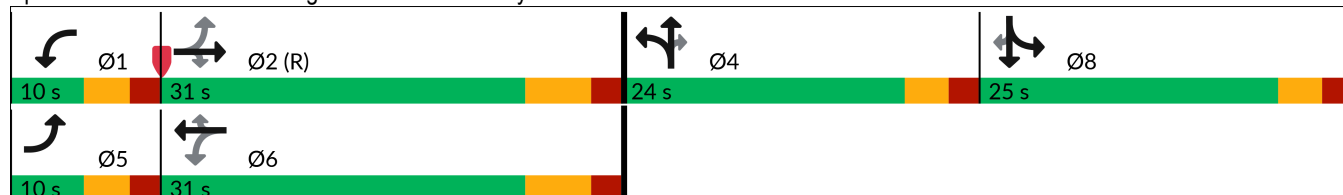
Intersection LOS: C

Intersection Capacity Utilization 62.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86



Queues

RidgeView

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	52	168	100	77	378	609	265	386	47	199	113	105
v/c Ratio	0.09	0.11	0.13	0.12	0.24	0.58	0.44	0.62	0.11	0.48	0.26	0.31
Control Delay (s/veh)	12.4	20.0	2.1	12.3	19.2	4.8	35.0	38.7	0.5	40.7	36.9	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.4	20.0	2.1	12.3	19.2	4.8	35.0	38.7	0.5	40.7	36.9	3.9
Queue Length 50th (ft)	13	31	0	20	75	0	70	107	0	55	31	0
Queue Length 95th (ft)	36	63	16	49	128	85	102	148	0	85	54	13
Internal Link Dist (ft)	1139			1466			3286			909		
Turn Bay Length (ft)	350		400	600		800	400		350	650		300
Base Capacity (vph)	541	1442	731	639	1553	1036	724	747	463	762	786	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	0.10	0.12	0.14	0.12	0.24	0.59	0.37	0.52	0.10	0.26	0.14	0.22
Intersection Summary												

HCM 7th Signalized Intersection Summary

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

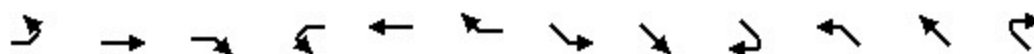
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	155	92	71	348	560	244	355	43	183	104	97
Future Volume (veh/h)	48	155	92	71	348	560	244	355	43	183	104	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	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	168	0	77	378	0	265	386	0	199	113	0
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	576	1694		713	1719		512	526		307	316	
Arrive On Green	0.04	0.48	0.00	0.05	0.48	0.00	0.15	0.15	0.00	0.09	0.09	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	52	168	0	77	378	0	265	386	0	199	113	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.3	2.3	0.0	1.9	5.5	0.0	6.4	9.3	0.0	5.0	2.7	0.0
Cycle Q Clear(g_c), s	1.3	2.3	0.0	1.9	5.5	0.0	6.4	9.3	0.0	5.0	2.7	0.0
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	576	1694		713	1719		512	526		307	316	
V/C Ratio(X)	0.09	0.10		0.11	0.22		0.52	0.73		0.65	0.36	
Avail Cap(c_a), veh/h	603	1694		728	1719		730	750		768	790	
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.0	12.9	0.0	10.7	13.4	0.0	35.4	36.6	0.0	39.6	38.6	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.1	0.3	0.0	0.8	2.2	0.0	2.3	0.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.9	0.0	0.7	2.0	0.0	2.6	4.0	0.0	2.1	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.0	13.1	0.0	10.8	13.7	0.0	36.2	38.8	0.0	41.9	39.3	0.0
LnGrp LOS	B	B		B	B		D	D		D	D	
Approach Vol, veh/h	220			455			651			312		
Approach Delay, s/veh	12.6			13.2			37.8			41.0		
Approach LOS	B			B			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	49.4		18.3	8.6	50.0		13.0				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	5.0	24.5		19.0	5.0	24.5		20.0				
Max Q Clear Time (g_c+I1), s	3.9	4.3		11.3	3.3	7.5		7.0				
Green Ext Time (p_c), s	0.0	0.8		2.0	0.0	2.0		1.0				

Intersection Summary

HCM 7th Control Delay, s/veh 28.2
HCM 7th LOS C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.943			0.981			0.934			0.994	
Flt Protected		0.991			0.996			0.990			0.971	
Satd. Flow (prot)	0	3307	0	0	3458	0	0	1722	0	0	1798	0
Flt Permitted		0.991			0.996			0.990			0.971	
Satd. Flow (perm)	0	3307	0	0	3458	0	0	1722	0	0	1798	0
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		824			7080			1214			1006	
Travel Time (s)		18.7			161.7			27.6			22.9	

Intersection Summary

Area Type: Other

HCM 7th Roundabout
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	23.1					
Intersection LOS	C					
Approach	EB		WB		SE	NW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	467		743		227	968
Demand Flow Rate, veh/h	477		758		231	988
Vehicles Circulating, veh/h	185		1030		1261	342
Vehicles Exiting, veh/h	1307		300		527	320
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	4.9		22.8		16.6	33.6
Approach LOS	A		C		C	D
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	224	253	356	402	231	988
Cap Entry Lane, veh/h	1139	1213	523	592	486	1062
Entry HV Adj Factor	0.980	0.978	0.981	0.980	0.981	0.980
Flow Entry, veh/h	219	247	349	394	227	968
Cap Entry, veh/h	1115	1187	514	580	477	1041
V/C Ratio	0.197	0.208	0.680	0.679	0.475	0.930
Control Delay, s/veh	5.0	4.9	24.0	21.7	16.6	33.6
LOS	A	A	C	C	C	D
95th %tile Queue, veh	1	1	5	5	3	15

Lanes and Geometrics
5: Plum Creek Pkwy. & South Site Access

RidgeView
10/01/2024



Lane Group	SEL	SER	NEL	NET	SWT	SWR
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	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	3539	3539	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	3539	3539	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	232			7080	406	
Travel Time (s)	6.3			161.7	9.2	

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↗		↕↕	↕↗	
Traffic Vol, veh/h	0	0	0	321	530	0
Future Vol, veh/h	0	0	0	321	530	0
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	0	0	0	349	576	0
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	288	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	709	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	709	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s/v	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Control Delay (s/veh)	-	0	-	-		
HCM Lane LOS	-	A	-	-		
HCM 95th %tile Q(veh)	-	-	-	-		

Lanes and Geometrics

6: N. Ridge Rd. & North Site Access

RidgeView
10/01/2024



Lane Group	EBL	EBR	SET	SER	NWL	NWT
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	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	3539	0	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1863	3539	0	0	3539
Link Speed (mph)	30		45			45
Link Distance (ft)	492		1847			481
Travel Time (s)	11.2		42.0			10.9
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	0	240	0	0	470
Future Vol, veh/h	0	0	240	0	0	470
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	0	0	261	0	0	511

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	130	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	895	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	895	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT EBLn1	SET	SER
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s/veh)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

Lanes and Geometrics
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

												
Lane Group	WBL	WBR	WBR2	NBU	NBL	NBR	NBR2	SEU	SEL2	SEL	SER	SWL
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
Storage Lanes	0	0			1	1				0	0	1
Taper Length (ft)	25				25					25		25
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	0.95	0.95	1.00	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt	0.944				0.921					0.974	0.850	0.865
Flt Protected	0.972				0.977					0.960		
Satd. Flow (prot)	1709	0	0	0	3252	0	0	0	0	1742	1504	1611
Flt Permitted	0.972				0.977					0.960		
Satd. Flow (perm)	1709	0	0	0	3252	0	0	0	0	1742	1504	1611
Link Speed (mph)	45				40					45		25
Link Distance (ft)	1387				406					481		223
Travel Time (s)	31.5				9.2					10.9		4.6

Intersection Summary

Area Type: Other



Lane Group	SWR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	

Intersection Summary

HCM 7th Roundabout
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	5.9					
Intersection LOS	A					
Approach	WB	NB		SE		SW
Entry Lanes	1	2		2		1
Conflicting Circle Lanes	2	2		2		2
Adj Approach Flow, veh/h	391	571		505		2
Demand Flow Rate, veh/h	399	582		515		2
Vehicles Circulating, veh/h	278	221		236		675
Vehicles Exiting, veh/h	525	530		441		2
Ped Vol Crossing Leg, #/h	0	0		0		0
Ped Cap Adj	1.000	1.000		1.000		1.000
Approach Delay, s/veh	6.9	5.6		5.4		4.5
Approach LOS	A	A		A		A
Lane	Left	Left	Right	Left	Right	Left
Designated Moves	LR	L	LTR	LTR	R	LR
Assumed Moves	LR	L	TR	LTR	R	LR
RT Channelized						
Lane Util	1.000	0.471	0.529	0.470	0.530	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1420	1350	1420	1350	1420	1420
B (Slope)	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	399	274	308	242	273	2
Cap Entry Lane, veh/h	1121	1102	1177	1086	1162	800
Entry HV Adj Factor	0.980	0.982	0.981	0.981	0.980	1.000
Flow Entry, veh/h	391	269	302	237	268	2
Cap Entry, veh/h	1099	1081	1154	1065	1139	800
V/C Ratio	0.356	0.249	0.262	0.223	0.235	0.002
Control Delay, s/veh	6.9	5.7	5.5	5.5	5.3	4.5
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	1	1	1	1	0

Lanes and Geometrics

RidgeView

2: Access A/Enderud Blvd. & N. Ridge Rd.

10/01/2024

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.990			0.949			0.958				0.850
Flt Protected		0.976			0.991			0.967			0.950	
Satd. Flow (prot)	0	3420	0	0	3328	0	0	1726	0	0	1770	1583
Flt Permitted		0.976			0.991			0.967			0.950	
Satd. Flow (perm)	0	3420	0	0	3328	0	0	1726	0	0	1770	1583
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		3366			1847			417			1714	
Travel Time (s)		76.5			42.0			0.0			39.0	
Intersection Summary												
Area Type:	Other											

HCM 7th Roundabout
2: Access A/Enderud Blvd. & N. Ridge Rd.

RidgeView
10/01/2024

Intersection								
Intersection Delay, s/veh	7.8							
Intersection LOS	A							
Approach	SE		NW		NE		SW	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	983		529		123		423	
Demand Flow Rate, veh/h	1003		540		126		431	
Vehicles Circulating, veh/h	211		574		1052		444	
Vehicles Exiting, veh/h	664		604		162		670	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	7.8		8.1		9.2		6.7	
Approach LOS	A		A		A		A	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	1.000	0.262	0.738	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	9.199e-4	8.501e-4	
Entry Flow, veh/h	471	532	254	286	126	113	318	
Cap Entry Lane, veh/h	1112	1187	796	872	581	897	974	
Entry HV Adj Factor	0.981	0.979	0.979	0.980	0.976	0.982	0.981	
Flow Entry, veh/h	462	521	249	280	123	111	312	
Cap Entry, veh/h	1091	1163	779	854	567	881	955	
V/C Ratio	0.424	0.448	0.319	0.328	0.217	0.126	0.327	
Control Delay, s/veh	7.8	7.8	8.4	7.9	9.2	5.3	7.2	
LOS	A	A	A	A	A	A	A	
95th %tile Queue, veh	2	2	1	1	1	0	1	

Lanes and Geometrics
3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
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)	350		400	600		800	400		350	650		300
Storage Lanes	1		1	1		1	2		1	2		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	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			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	3539	1583	3433	3539	1583
Flt Permitted	0.573			0.461			0.950			0.950		
Satd. Flow (perm)	1067	3539	1583	859	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes				Yes		Yes		Yes	
Satd. Flow (RTOR)			390				360				164	
Link Speed (mph)	45				45				45		50	
Link Distance (ft)	1219				1546				3366		989	
Travel Time (s)	18.5				23.4				51.0		13.5	

Intersection Summary

Area Type: Other

Timings 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	411	359	102	221	331	174	301	65	544	439	108
Future Volume (vph)	119	411	359	102	221	331	174	301	65	544	439	108
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2		2	6		6			4			8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
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	5.0
Minimum Split (s)	10.0	25.5	25.5	10.0	26.5	26.5	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (s)	11.0	28.0	28.0	11.0	28.0	28.0	24.0	24.0	24.0	27.0	27.0	27.0
Total Split (%)	12.2%	31.1%	31.1%	12.2%	31.1%	31.1%	26.7%	26.7%	26.7%	30.0%	30.0%	30.0%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	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	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	0.0
Total Lost Time (s)	5.0	6.5	6.5	5.0	6.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effct Green (s)	35.2	27.9	27.9	33.9	25.5	25.5	14.2	14.2	14.2	21.7	21.7	21.7
Actuated g/C Ratio	0.39	0.31	0.31	0.38	0.28	0.28	0.16	0.16	0.16	0.24	0.24	0.24
v/c Ratio	0.27	0.40	0.51	0.28	0.23	0.50	0.34	0.58	0.18	0.71	0.55	0.23
Control Delay (s/veh)	19.6	28.2	5.8	19.7	27.1	6.1	34.7	38.9	1.0	36.4	32.4	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.6	28.2	5.8	19.7	27.1	6.1	34.7	38.9	1.0	36.4	32.4	2.9
LOS	B	C	A	B	C	A	C	D	A	D	C	A
Approach Delay (s/veh)		18.1			15.3			33.0			31.5	
Approach LOS		B			B			C			C	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay (s/veh): 24.7

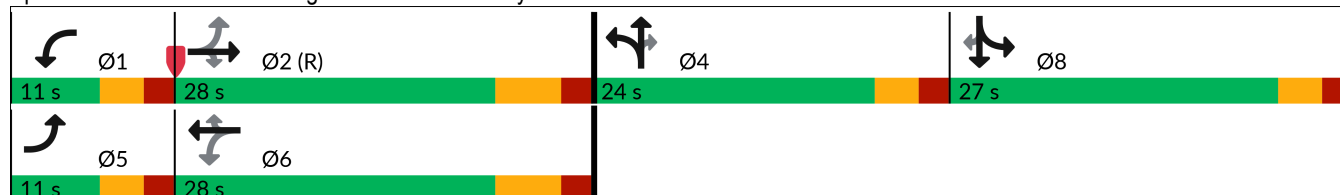
Intersection LOS: C

Intersection Capacity Utilization 58.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86



Queues

RidgeView

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

10/01/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	129	447	390	111	240	360	189	327	71	591	477	117
v/c Ratio	0.27	0.40	0.51	0.28	0.23	0.50	0.34	0.58	0.18	0.71	0.55	0.23
Control Delay (s/veh)	19.6	28.2	5.8	19.7	27.1	6.1	34.7	38.9	1.0	36.4	32.4	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.6	28.2	5.8	19.7	27.1	6.1	34.7	38.9	1.0	36.4	32.4	2.9
Queue Length 50th (ft)	46	116	0	39	58	0	50	91	0	154	121	0
Queue Length 95th (ft)	88	165	72	78	91	68	76	127	0	215	174	19
Internal Link Dist (ft)	1139		1466				3286				909	
Turn Bay Length (ft)	350	400		600	800		400	350		650	300	
Base Capacity (vph)	471	1097	759	393	1004	707	724	747	463	877	904	526
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	0.27	0.41	0.51	0.28	0.24	0.51	0.26	0.44	0.15	0.67	0.53	0.22

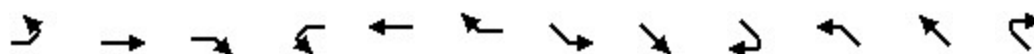
Intersection Summary

HCM 7th Signalized Intersection Summary

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 		 	 		 	 	
Traffic Volume (veh/h)	119	411	359	102	221	331	174	301	65	544	439	108
Future Volume (veh/h)	119	411	359	102	221	331	174	301	65	544	439	108
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	129	447	0	111	240	0	189	327	0	591	477	0
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	547	1288		438	1262		448	461		731	752	
Arrive On Green	0.06	0.36	0.00	0.06	0.36	0.00	0.13	0.13	0.00	0.21	0.21	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	129	447	0	111	240	0	189	327	0	591	477	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	4.1	8.3	0.0	3.5	4.2	0.0	4.5	7.9	0.0	14.6	11.0	0.0
Cycle Q Clear(g_c), s	4.1	8.3	0.0	3.5	4.2	0.0	4.5	7.9	0.0	14.6	11.0	0.0
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	547	1288		438	1262		448	461		731	752	
V/C Ratio(X)	0.24	0.35		0.25	0.19		0.42	0.71		0.81	0.63	
Avail Cap(c_a), veh/h	550	1288		454	1262		730	750		845	869	
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.4	20.9	0.0	16.9	20.1	0.0	36.1	37.5	0.0	33.7	32.3	0.0
Incr Delay (d2), s/veh	0.2	0.7	0.0	0.3	0.3	0.0	0.6	2.0	0.0	5.2	1.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	3.3	0.0	1.4	1.7	0.0	1.9	3.4	0.0	6.2	4.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.7	21.7	0.0	17.2	20.4	0.0	36.7	39.6	0.0	38.9	33.5	0.0
LnGrp LOS	B	C		B	C		D	D		D	C	
Approach Vol, veh/h	576				351		516				1068	
Approach Delay, s/veh	20.5				19.4		38.5				36.5	
Approach LOS	C				B		D				D	
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	10.2	39.1	16.7		10.8	38.5	24.0					
Change Period (Y+Rc), s	5.0	6.5	5.0		5.0	6.5	5.0					
Max Green Setting (Gmax), s	6.0	21.5	19.0		6.0	21.5	22.0					
Max Q Clear Time (g_c+I1), s	5.5	10.3	9.9		6.1	6.2	16.6					
Green Ext Time (p_c), s	0.0	2.0	1.7		0.0	1.1	2.4					
Intersection Summary												
HCM 7th Control Delay, s/veh	30.9											
HCM 7th LOS	C											
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.937			0.988			0.962			0.975	
Flt Protected		0.995			0.987			0.990			0.974	
Satd. Flow (prot)	0	3300	0	0	3451	0	0	1774	0	0	1769	0
Flt Permitted		0.995			0.987			0.990			0.974	
Satd. Flow (perm)	0	3300	0	0	3451	0	0	1774	0	0	1769	0
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		824			7080			1214			1006	
Travel Time (s)		18.7			161.7			27.6			22.9	

Intersection Summary

Area Type: Other

HCM 7th Roundabout
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	13.8					
Intersection LOS	B					
Approach	EB		WB		SE	NW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	1018		560		446	554
Demand Flow Rate, veh/h	1039		571		456	565
Vehicles Circulating, veh/h	480		556		824	699
Vehicles Exiting, veh/h	800		708		303	820
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	12.2		8.2		17.5	19.4
Approach LOS	B		A		C	C
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.469	0.531	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	488	551	268	303	456	565
Cap Entry Lane, veh/h	868	944	809	885	705	784
Entry HV Adj Factor	0.980	0.979	0.982	0.979	0.979	0.980
Flow Entry, veh/h	478	540	263	297	446	554
Cap Entry, veh/h	851	925	794	867	690	768
V/C Ratio	0.562	0.584	0.331	0.342	0.647	0.721
Control Delay, s/veh	12.3	12.1	8.4	8.0	17.5	19.4
LOS	B	B	A	A	C	C
95th %tile Queue, veh	4	4	1	2	5	6

Lanes and Geometrics
5: Plum Creek Pkwy. & South Site Access

RidgeView
10/01/2024



Lane Group	SEL	SER	NEL	NET	SWT	SWR
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	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	3539	3539	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	3539	3539	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	232			7080	406	
Travel Time (s)	6.3			161.7	9.2	
Intersection Summary						

Area Type: Other

Intersection						
Int Delay, s/veh	0					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↗		↕↕	↕↗	
Traffic Vol, veh/h	0	0	0	525	477	0
Future Vol, veh/h	0	0	0	525	477	0
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	0	0	0	571	518	0
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	259	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	740	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	740	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s/v	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Control Delay (s/veh)	-	0	-	-		
HCM Lane LOS	-	A	-	-		
HCM 95th %tile Q(veh)	-	-	-	-		

Lanes and Geometrics

6: N. Ridge Rd. & North Site Access

RidgeView
10/01/2024



Lane Group	EBL	EBR	SET	SER	NWL	NWT
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	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	3539	0	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1863	3539	0	0	3539
Link Speed (mph)	30		45			45
Link Distance (ft)	492		1847			481
Travel Time (s)	11.2		42.0			10.9

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	0	0	481	1	0	403
Future Vol, veh/h	0	0	481	1	0	403
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	0	0	523	1	0	438

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	262	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	737	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	737	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT EBLn1	SET	SER
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s/veh)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

										
Lane Group	WBL	WBR	NBL	NBR	NBR2	SEU	SEL	SER	SWL	SWR
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	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	1	1			0	0	1	0
Taper Length (ft)	25		25				25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor										
Frt	0.939		0.928				0.946	0.850		
Flt Protected	0.973		0.975				0.969			
Satd. Flow (prot)	1702	0	3270	0	0	0	1708	1504	1863	0
Flt Permitted	0.973		0.975				0.969			
Satd. Flow (perm)	1702	0	3270	0	0	0	1708	1504	1863	0
Link Speed (mph)	45		40				45		25	
Link Distance (ft)	1387		406				481		223	
Travel Time (s)	31.5		9.2				10.9		4.6	
Intersection Summary										
Area Type:	Other									

HCM 7th Roundabout
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	12.9					
Intersection LOS	B					
Approach	WB	NB		SE		SW
Entry Lanes	1	2		2		1
Conflicting Circle Lanes	2	2		2		2
Adj Approach Flow, veh/h	932	439		338		0
Demand Flow Rate, veh/h	950	448		345		0
Vehicles Circulating, veh/h	233	115		519		1183
Vehicles Exiting, veh/h	330	749		664		0
Ped Vol Crossing Leg, #/h	0	0		0		0
Ped Cap Adj	1.000	1.000		1.000		1.000
Approach Delay, s/veh	19.4	4.5		6.2		0.0
Approach LOS	C	A		A		-
Lane	Left	Left	Right	Left	Right	Left
Designated Moves	LR	L	LTR	LTR	R	LR
Assumed Moves	LR	L	LTR	LTR	R	LR
RT Channelized						
Lane Util	1.000	0.529	0.471	0.470	0.530	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1420	1350	1420	1350	1420	1420
B (Slope)	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	950	237	211	162	183	0
Cap Entry Lane, veh/h	1165	1214	1288	837	913	519
Entry HV Adj Factor	0.981	0.982	0.978	0.981	0.979	1.000
Flow Entry, veh/h	932	233	206	159	179	0
Cap Entry, veh/h	1143	1192	1259	821	894	519
V/C Ratio	0.816	0.195	0.164	0.193	0.200	0.000
Control Delay, s/veh	19.4	4.7	4.2	6.4	6.0	6.9
LOS	C	A	A	A	A	A
95th %tile Queue, veh	10	1	1	1	1	0

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.993			0.973			0.958				0.850
Flt Protected		0.979			0.998			0.967			0.950	
Satd. Flow (prot)	0	3441	0	0	3437	0	0	1726	0	0	1770	1583
Flt Permitted		0.979			0.998			0.967			0.950	
Satd. Flow (perm)	0	3441	0	0	3437	0	0	1726	0	0	1770	1583
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		3366			1847			417			1714	
Travel Time (s)		76.5			42.0			0.0			39.0	

Intersection Summary

Area Type: Other

Intersection								
Intersection Delay, s/veh	27.3							
Intersection LOS	D							
Approach	SE		NW		NE		SW	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	414		691		193		921	
Demand Flow Rate, veh/h	422		705		197		940	
Vehicles Circulating, veh/h	168		318		541		716	
Vehicles Exiting, veh/h	1488		420		49		307	
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		7.0		6.3		57.2	
Approach LOS	A		A		A		F	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.469	0.531	0.470	0.530	1.000	0.148	0.852	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	9.199e-4	8.501e-4	
Entry Flow, veh/h	198	224	331	374	197	139	801	
Cap Entry Lane, veh/h	1157	1231	1007	1084	897	699	773	
Entry HV Adj Factor	0.982	0.979	0.981	0.980	0.980	0.978	0.980	
Flow Entry, veh/h	194	219	325	366	193	136	785	
Cap Entry, veh/h	1136	1205	989	1062	878	684	757	
V/C Ratio	0.171	0.182	0.329	0.345	0.220	0.199	1.037	
Control Delay, s/veh	4.7	4.6	7.1	6.9	6.3	7.6	65.8	
LOS	A	A	A	A	A	A	F	
95th %tile Queue, veh	1	1	1	2	1	1	19	

Lanes and Geometrics 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
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)	350		400	600		800	400		350	650		300
Storage Lanes	1		1	1		1	2		1	2		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	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			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	3539	1583	3433	3539	1583
Flt Permitted	0.448			0.565			0.950			0.950		
Satd. Flow (perm)	835	3539	1583	1052	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes				Yes		Yes		Yes	
Satd. Flow (RTOR)			145				589				164	
Link Speed (mph)	45				45				45		50	
Link Distance (ft)	1219				1546				3366		989	
Travel Time (s)	18.5				23.4				51.0		13.5	

Intersection Summary

Area Type: Other

Timings 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	205	115	110	460	835	310	510	70	280	150	120
Future Volume (vph)	60	205	115	110	460	835	310	510	70	280	150	120
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2		2	6		6			4			8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
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	5.0
Minimum Split (s)	10.0	25.5	25.5	10.0	26.5	26.5	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (s)	10.0	30.0	30.0	11.0	31.0	31.0	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (%)	11.1%	33.3%	33.3%	12.2%	34.4%	34.4%	26.7%	26.7%	26.7%	27.8%	27.8%	27.8%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	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	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	0.0
Total Lost Time (s)	5.0	6.5	6.5	5.0	6.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	36.6	28.3	28.3	40.0	31.7	31.7	18.2	18.2	18.2	13.9	13.9	13.9
Actuated g/C Ratio	0.41	0.31	0.31	0.44	0.35	0.35	0.20	0.20	0.20	0.15	0.15	0.15
v/c Ratio	0.15	0.20	0.20	0.22	0.40	0.96	0.48	0.77	0.16	0.57	0.29	0.33
Control Delay (s/veh)	15.8	24.7	4.4	15.9	25.2	35.7	34.1	41.9	0.8	39.1	34.2	5.2
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)	15.8	24.7	4.4	15.9	25.2	35.7	34.1	41.9	0.8	39.1	34.2	5.2
LOS	B	C	A	B	C	D	C	D	A	D	C	A
Approach Delay (s/veh)		17.2			30.8			36.0			30.4	
Approach LOS		B			C			D			C	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay (s/veh): 30.6

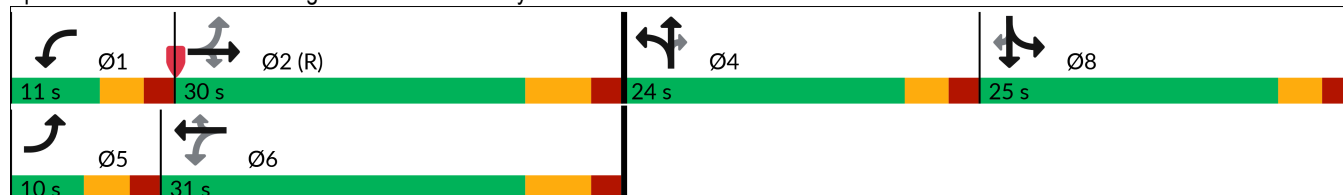
Intersection LOS: C

Intersection Capacity Utilization 83.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86



Queues

RidgeView

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

10/01/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Group Flow (vph)	65	223	125	120	500	908	337	554	76	304	163	130		
v/c Ratio	0.15	0.20	0.20	0.22	0.40	0.96	0.48	0.77	0.16	0.57	0.29	0.33		
Control Delay (s/veh)	15.8	24.7	4.4	15.9	25.2	35.7	34.1	41.9	0.8	39.1	34.2	5.2		
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)	15.8	24.7	4.4	15.9	25.2	35.7	34.1	41.9	0.8	39.1	34.2	5.2		
Queue Length 50th (ft)	20	50	0	38	118	~246	87	155	0	83	43	0		
Queue Length 95th (ft)	47	83	32	77	176	#540	128	214	0	117	68	28		
Internal Link Dist (ft)	1139				1466				3286		909			
Turn Bay Length (ft)	350			400	600			800	400			350	650	300
Base Capacity (vph)	409	1111	596	532	1244	938	724	747	463	762	786	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	0.16	0.20	0.21	0.23	0.40	0.97	0.47	0.74	0.16	0.40	0.21	0.27		

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.

HCM 7th Signalized Intersection Summary

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	205	115	110	460	835	310	510	70	280	150	120
Future Volume (veh/h)	60	205	115	110	460	835	310	510	70	280	150	120
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	65	223	0	120	500	0	337	554	0	304	163	0
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	435	1386		589	1437		654	673		424	436	
Arrive On Green	0.04	0.39	0.00	0.06	0.40	0.00	0.19	0.19	0.00	0.12	0.12	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	65	223	0	120	500	0	337	554	0	304	163	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.9	3.7	0.0	3.6	8.8	0.0	7.9	13.5	0.0	7.6	3.8	0.0
Cycle Q Clear(g_c), s	1.9	3.7	0.0	3.6	8.8	0.0	7.9	13.5	0.0	7.6	3.8	0.0
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	435	1386		589	1437		654	673		424	436	
V/C Ratio(X)	0.15	0.16		0.20	0.35		0.51	0.82		0.72	0.37	
Avail Cap(c_a), veh/h	455	1386		603	1437		730	750		768	790	
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.3	17.9	0.0	14.7	18.6	0.0	32.8	35.0	0.0	38.0	36.3	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.2	0.7	0.0	0.6	6.8	0.0	2.3	0.5	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.4	0.0	1.3	3.4	0.0	3.2	6.1	0.0	3.2	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.4	18.1	0.0	14.9	19.2	0.0	33.4	41.8	0.0	40.3	36.8	0.0
LnGrp LOS	B	B		B	B		C	D		D	D	
Approach Vol, veh/h	288			620			891			467		
Approach Delay, s/veh	17.5			18.4			38.6			39.1		
Approach LOS	B			B			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.3	41.6		22.0	9.0	42.9		16.0				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	6.0	23.5		19.0	5.0	24.5		20.0				
Max Q Clear Time (g_c+I1), s	5.6	5.7		15.5	3.9	10.8		9.6				
Green Ext Time (p_c), s	0.0	1.1		1.6	0.0	2.5		1.4				

Intersection Summary

HCM 7th Control Delay, s/veh	30.5
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes and Geometrics
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.947			0.981			0.934			0.994	
Flt Protected		0.991			0.995			0.990			0.971	
Satd. Flow (prot)	0	3321	0	0	3455	0	0	1722	0	0	1798	0
Flt Permitted		0.991			0.995			0.990			0.971	
Satd. Flow (perm)	0	3321	0	0	3455	0	0	1722	0	0	1798	0
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		824			7080			1214			1006	
Travel Time (s)		18.7			161.7			27.6			22.9	
Intersection Summary												
Area Type:	Other											

HCM 7th Roundabout
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	62.1					
Intersection LOS	F					
Approach	EB		WB		SE	NW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	569		924		288	1106
Demand Flow Rate, veh/h	580		942		294	1128
Vehicles Circulating, veh/h	237		1185		1504	433
Vehicles Exiting, veh/h	1561		376		623	384
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		63.2		35.5	97.1
Approach LOS	A		F		E	F
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.471	0.529	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	273	307	443	499	294	1128
Cap Entry Lane, veh/h	1085	1161	454	519	395	983
Entry HV Adj Factor	0.979	0.982	0.980	0.981	0.980	0.981
Flow Entry, veh/h	267	301	434	489	288	1106
Cap Entry, veh/h	1063	1140	445	509	388	964
V/C Ratio	0.252	0.264	0.976	0.962	0.744	1.148
Control Delay, s/veh	5.8	5.6	67.5	59.4	35.5	97.1
LOS	A	A	F	F	E	F
95th %tile Queue, veh	1	1	12	12	6	31

Lanes and Geometrics
5: Plum Creek Pkwy. & South Site Access

RidgeView
10/01/2024



Lane Group	SEL	SER	NEL	NET	SWT	SWR
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	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	3539	3539	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	3539	3539	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	232			7080	406	
Travel Time (s)	6.3			161.7	9.2	

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↗		↕↕	↕↗	
Traffic Vol, veh/h	0	0	0	410	676	0
Future Vol, veh/h	0	0	0	410	676	0
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	0	0	0	446	735	0
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	367	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	630	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	630	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s/v	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Control Delay (s/veh)	-	0	-	-		
HCM Lane LOS	-	A	-	-		
HCM 95th %tile Q(veh)	-	-	-	-		

Lanes and Geometrics
6: N. Ridge Rd. & North Site Access

RidgeView
10/01/2024



Lane Group	EBL	EBR	SET	SER	NWL	NWT
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	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	3539	0	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1863	3539	0	0	3539
Link Speed (mph)	30		45			45
Link Distance (ft)	492		1847			481
Travel Time (s)	11.2		42.0			10.9

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		↗	↕↕			↕↕
Traffic Vol, veh/h	0	0	306	0	0	599
Future Vol, veh/h	0	0	306	0	0	599
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	0	0	333	0	0	651

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	166	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	849	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	849	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT EBLn1	SET	SER
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s/veh)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

Lanes and Geometrics
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

												
Lane Group	WBL	WBR	WBR2	NBU	NBL	NBR	NBR2	SEU	SEL2	SEL	SER	SWL
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
Storage Lanes	0	0			1	1				0	0	1
Taper Length (ft)	25				25					25		25
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	0.95	0.95	1.00	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt	0.944				0.920					0.974	0.850	0.865
Flt Protected	0.972				0.977					0.960		
Satd. Flow (prot)	1709	0	0	0	3248	0	0	0	0	1742	1504	1611
Flt Permitted	0.972				0.977					0.960		
Satd. Flow (perm)	1709	0	0	0	3248	0	0	0	0	1742	1504	1611
Link Speed (mph)	45				40					45		25
Link Distance (ft)	1387				406					481		223
Travel Time (s)	31.5				9.2					10.9		4.6

Intersection Summary

Area Type: Other



Lane Group	SWR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	

Intersection Summary

HCM 7th Roundabout
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	7.4					
Intersection LOS	A					
Approach	WB	NB		SE		SW
Entry Lanes	1	2		2		1
Conflicting Circle Lanes	2	2		2		2
Adj Approach Flow, veh/h	498	728		644		3
Demand Flow Rate, veh/h	508	743		656		3
Vehicles Circulating, veh/h	354	282		300		859
Vehicles Exiting, veh/h	671	674		562		3
Ped Vol Crossing Leg, #/h	0	0		0		0
Ped Cap Adj	1.000	1.000		1.000		1.000
Approach Delay, s/veh	9.1	6.9		6.5		5.3
Approach LOS	A	A		A		A
Lane	Left	Left	Right	Left	Right	Left
Designated Moves	LR	L	LTR	LTR	R	LR
Assumed Moves	LR	L	TR	LTR	R	LR
RT Channelized						
Lane Util	1.000	0.470	0.530	0.470	0.530	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1420	1350	1420	1350	1420	1420
B (Slope)	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	508	349	394	308	348	3
Cap Entry Lane, veh/h	1051	1041	1117	1024	1100	684
Entry HV Adj Factor	0.980	0.980	0.980	0.983	0.981	1.000
Flow Entry, veh/h	498	342	386	303	341	3
Cap Entry, veh/h	1030	1020	1095	1006	1079	684
V/C Ratio	0.483	0.335	0.353	0.301	0.316	0.004
Control Delay, s/veh	9.1	7.0	6.8	6.6	6.5	5.3
LOS	A	A	A	A	A	A
95th %tile Queue, veh	3	1	2	1	1	0

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.992			0.947			0.958				0.850
Flt Protected		0.976			0.993			0.967			0.950	
Satd. Flow (prot)	0	3427	0	0	3328	0	0	1726	0	0	1770	1583
Flt Permitted		0.976			0.993			0.967			0.950	
Satd. Flow (perm)	0	3427	0	0	3328	0	0	1726	0	0	1770	1583
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		3366			1847			417			1714	
Travel Time (s)		76.5			42.0			0.0			39.0	

Intersection Summary

Area Type: Other

Intersection								
Intersection Delay, s/veh	10.2							
Intersection LOS	B							
Approach	SE		NW		NE		SW	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	1236		649		123		538	
Demand Flow Rate, veh/h	1260		662		126		549	
Vehicles Circulating, veh/h	242		707		1340		515	
Vehicles Exiting, veh/h	822		759		162		854	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	10.2		11.1		12.6		8.5	
Approach LOS	B		B		B		A	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	1.000	0.262	0.738	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	9.199e-4	8.501e-4	
Entry Flow, veh/h	592	668	311	351	126	144	405	
Cap Entry Lane, veh/h	1080	1156	704	779	455	841	917	
Entry HV Adj Factor	0.981	0.980	0.980	0.979	0.976	0.979	0.980	
Flow Entry, veh/h	581	655	305	344	123	141	397	
Cap Entry, veh/h	1060	1133	690	762	444	823	898	
V/C Ratio	0.548	0.578	0.441	0.451	0.277	0.171	0.442	
Control Delay, s/veh	10.2	10.3	11.5	10.8	12.6	6.1	9.3	
LOS	B	B	B	B	B	A	A	
95th %tile Queue, veh	3	4	2	2	1	1	2	

Lanes and Geometrics
3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

													
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)	350		400	600		800	400		350	650		300	
Storage Lanes	1		1	1		1	2		1	2		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	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	1770	3539	1583	3433	3539	1583	3433	3539	1583	
Flt Permitted	0.538			0.255			0.950			0.950			
Satd. Flow (perm)	1002	3539	1583	475	3539	1583	3433	3539	1583	3433	3539	1583	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			446			549			164			164	
Link Speed (mph)		45			45			45			50		
Link Distance (ft)		1219			1546			3366			989		
Travel Time (s)		18.5			23.4			51.0			13.5		

Intersection Summary

Area Type: Other

Timings 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	550	460	160	295	505	220	440	100	830	640	135
Future Volume (vph)	150	550	460	160	295	505	220	440	100	830	640	135
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2		2	6		6			4			8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
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	5.0
Minimum Split (s)	10.0	25.5	25.5	10.0	26.5	26.5	23.0	23.0	23.0	25.0	25.0	25.0
Total Split (s)	10.0	27.0	27.0	10.0	27.0	27.0	23.0	23.0	23.0	30.0	30.0	30.0
Total Split (%)	11.1%	30.0%	30.0%	11.1%	30.0%	30.0%	25.6%	25.6%	25.6%	33.3%	33.3%	33.3%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	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	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	0.0
Total Lost Time (s)	5.0	6.5	6.5	5.0	6.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	27.5	20.5	20.5	27.5	20.5	20.5	16.6	16.6	16.6	25.9	25.9	25.9
Actuated g/C Ratio	0.31	0.23	0.23	0.31	0.23	0.23	0.18	0.18	0.18	0.29	0.29	0.29
v/c Ratio	0.46	0.74	0.71	0.78	0.39	0.70	0.37	0.73	0.25	0.91	0.68	0.25
Control Delay (s/veh)	26.9	38.7	11.3	49.3	31.2	8.2	33.6	41.5	3.0	46.5	32.7	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.9	38.7	11.3	49.3	31.2	8.2	33.6	41.5	3.0	46.5	32.7	4.5
LOS	C	D	B	D	C	A	C	D	A	D	C	A
Approach Delay (s/veh)		26.4			22.2			34.2			37.5	
Approach LOS		C			C			C			D	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay (s/veh): 30.8

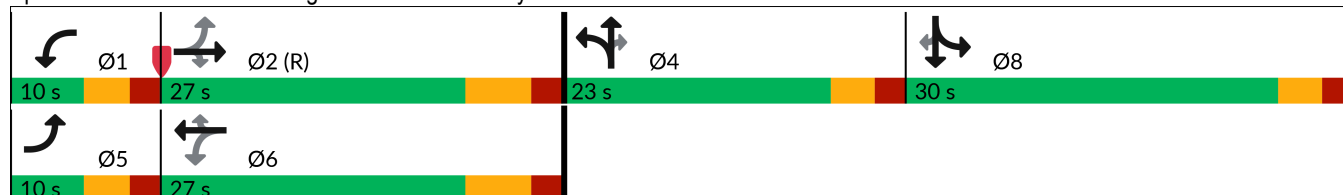
Intersection LOS: C

Intersection Capacity Utilization 77.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86



Queues

RidgeView

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

10/01/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	163	598	500	174	321	549	239	478	109	902	696	147
v/c Ratio	0.46	0.74	0.71	0.78	0.39	0.70	0.37	0.73	0.25	0.91	0.68	0.25
Control Delay (s/veh)	26.9	38.7	11.3	49.3	31.2	8.2	33.6	41.5	3.0	46.5	32.7	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.9	38.7	11.3	49.3	31.2	8.2	33.6	41.5	3.0	46.5	32.7	4.5
Queue Length 50th (ft)	65	167	25	70	82	0	60	133	0	258	186	0
Queue Length 95th (ft)	113	227	131	#164	121	91	94	186	15	#379	250	35
Internal Link Dist (ft)	1139				1466				3286		909	
Turn Bay Length (ft)	350	400		600	800		400	350		650	300	
Base Capacity (vph)	352	806	704	223	806	784	686	707	447	987	1017	572
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	0.46	0.74	0.71	0.78	0.40	0.70	0.35	0.68	0.24	0.91	0.68	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	550	460	160	295	505	220	440	100	830	640	135
Future Volume (veh/h)	150	550	460	160	295	505	220	440	100	830	640	135
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	163	598	0	174	321	0	239	478	0	902	696	0
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	376	922		269	922		582	599		960	987	
Arrive On Green	0.06	0.26	0.00	0.06	0.26	0.00	0.17	0.17	0.00	0.28	0.28	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	163	598	0	174	321	0	239	478	0	902	696	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	5.0	13.5	0.0	5.0	6.6	0.0	5.6	11.6	0.0	23.0	15.8	0.0
Cycle Q Clear(g_c), s	5.0	13.5	0.0	5.0	6.6	0.0	5.6	11.6	0.0	23.0	15.8	0.0
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	376	922		269	922		582	599		960	987	
V/C Ratio(X)	0.43	0.65		0.65	0.35		0.41	0.80		0.94	0.71	
Avail Cap(c_a), veh/h	376	922		269	922		691	711		960	987	
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.6	29.7	0.0	27.8	27.1	0.0	33.4	36.0	0.0	31.8	29.2	0.0
Incr Delay (d2), s/veh	0.8	3.5	0.0	5.3	1.0	0.0	0.5	5.5	0.0	16.5	2.3	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	5.8	0.0	1.4	2.8	0.0	2.3	5.2	0.0	10.9	6.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.4	33.2	0.0	33.1	28.2	0.0	33.9	41.4	0.0	48.3	31.5	0.0
LnGrp LOS	C	C		C	C		C	D		D	C	
Approach Vol, veh/h	761			495			717			1598		
Approach Delay, s/veh	31.5			29.9			38.9			41.0		
Approach LOS	C			C			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	29.9		20.2	10.0	29.9		30.0				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	5.0	20.5		18.0	5.0	20.5		25.0				
Max Q Clear Time (g_c+I1), s	7.0	15.5		13.6	7.0	8.6		25.0				
Green Ext Time (p_c), s	0.0	1.6		1.5	0.0	1.4		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 37.0
HCM 7th LOS D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes and Geometrics
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.937			0.988			0.962			0.975	
Flt Protected		0.995			0.987			0.990			0.974	
Satd. Flow (prot)	0	3300	0	0	3451	0	0	1774	0	0	1769	0
Flt Permitted		0.995			0.987			0.990			0.974	
Satd. Flow (perm)	0	3300	0	0	3451	0	0	1774	0	0	1769	0
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		824			7080			1214			1006	
Travel Time (s)		18.7			161.7			27.6			22.9	
Intersection Summary												
Area Type:	Other											

HCM 7th Roundabout
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	43.1					
Intersection LOS	E					
Approach	EB		WB		SE	NW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	1302		713		569	715
Demand Flow Rate, veh/h	1328		727		580	730
Vehicles Circulating, veh/h	611		714		1053	889
Vehicles Exiting, veh/h	1023		904		388	1050
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	26.0		12.2		64.6	88.1
Approach LOS	D		B		F	F
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	624	704	342	385	580	730
Cap Entry Lane, veh/h	769	845	700	774	580	667
Entry HV Adj Factor	0.981	0.980	0.979	0.981	0.981	0.979
Flow Entry, veh/h	612	690	335	378	569	715
Cap Entry, veh/h	755	828	685	759	569	653
V/C Ratio	0.811	0.833	0.489	0.497	1.000	1.095
Control Delay, s/veh	25.9	26.1	12.6	11.8	64.6	88.1
LOS	D	D	B	B	F	F
95th %tile Queue, veh	9	10	3	3	15	21

Lanes and Geometrics
5: Plum Creek Pkwy. & South Site Access

RidgeView
10/01/2024



Lane Group	SEL	SER	NEL	NET	SWT	SWR
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	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	3539	3539	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	3539	3539	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	232			7080	406	
Travel Time (s)	6.3			161.7	9.2	

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↗		↑↑	↑↑	
Traffic Vol, veh/h	0	0	0	670	608	0
Future Vol, veh/h	0	0	0	670	608	0
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	0	0	0	728	661	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	330	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	665	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	665	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE	NE		SW		
HCM Control Delay, s/v	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NET SELn1		SWT	SWR		
Capacity (veh/h)	-		-	-		
HCM Lane V/C Ratio	-		-	-		
HCM Control Delay (s/veh)	-		0	-		
HCM Lane LOS	-		A	-		
HCM 95th %tile Q(veh)	-		-	-		

Lanes and Geometrics
6: N. Ridge Rd. & North Site Access

RidgeView
10/01/2024



Lane Group	EBL	EBR	SET	SER	NWL	NWT
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	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	3539	0	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1863	3539	0	0	3539
Link Speed (mph)	30		45			45
Link Distance (ft)	492		1847			481
Travel Time (s)	11.2		42.0			10.9

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		↗	↗↘			↗↘
Traffic Vol, veh/h	0	0	614	1	0	514
Future Vol, veh/h	0	0	614	1	0	514
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	0	0	667	1	0	559

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	334	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	662	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	662	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT EBLn1	SET	SER
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s/veh)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

											
Lane Group	WBL	WBR	NBU	NBL	NBR	NBR2	SEU	SEL	SER	SWL	SWR
Lane Configurations											
Ideal Flow (vphpl)	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
Grade (%)	0%			0%				0%		0%	
Storage Length (ft)	0	0		0	0			0	0	0	0
Storage Lanes	0	0		1	1			0	0	1	0
Taper Length (ft)	25			25				25		25	
Lane Util. Factor	1.00	1.00	0.95	0.97	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor											
Frt	0.939			0.930				0.968	0.850		
Flt Protected	0.973			0.974				0.962			
Satd. Flow (prot)	1702	0	0	3273	0	0	0	1735	1504	1863	0
Flt Permitted	0.973			0.974				0.962			
Satd. Flow (perm)	1702	0	0	3273	0	0	0	1735	1504	1863	0
Link Speed (mph)	45			40				45		25	
Link Distance (ft)	1387			406				481		223	
Travel Time (s)	31.5			9.2				10.9		4.6	
Intersection Summary											
Area Type:	Other										

HCM 7th Roundabout
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	8.4					
Intersection LOS	A					
Approach	WB	NB		SE		SW
Entry Lanes	1	2		2		1
Conflicting Circle Lanes	2	2		2		2
Adj Approach Flow, veh/h	731	354		298		0
Demand Flow Rate, veh/h	746	361		305		0
Vehicles Circulating, veh/h	226	125		417		972
Vehicles Exiting, veh/h	260	597		555		0
Ped Vol Crossing Leg, #/h	0	0		0		0
Ped Cap Adj	1.000	1.000		1.000		1.000
Approach Delay, s/veh	11.6	4.2		5.4		0.0
Approach LOS	B	A		A		-
Lane	Left	Left	Right	Left	Right	Left
Designated Moves	LR	L	LTR	LTR	R	LR
Assumed Moves	LR	L	LTR	LTR	R	LR
RT Channelized						
Lane Util	1.000	0.529	0.471	0.469	0.531	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1420	1350	1420	1350	1420	1420
B (Slope)	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	746	191	170	143	162	0
Cap Entry Lane, veh/h	1172	1203	1277	920	996	622
Entry HV Adj Factor	0.980	0.982	0.978	0.981	0.976	1.000
Flow Entry, veh/h	731	188	166	140	158	0
Cap Entry, veh/h	1148	1181	1249	902	972	622
V/C Ratio	0.637	0.159	0.133	0.155	0.163	0.000
Control Delay, s/veh	11.6	4.4	4.0	5.5	5.2	5.8
LOS	B	A	A	A	A	A
95th %tile Queue, veh	5	1	0	1	1	0

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.991			0.974			0.958				0.850
Flt Protected		0.980			0.998			0.967			0.950	
Satd. Flow (prot)	0	3437	0	0	3440	0	0	1726	0	0	1770	1583
Flt Permitted		0.980			0.998			0.967			0.950	
Satd. Flow (perm)	0	3437	0	0	3440	0	0	1726	0	0	1770	1583
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		3366			1847			417			1714	
Travel Time (s)		76.5			42.0			0.0			39.0	

Intersection Summary

Area Type: Other

HCM 7th Roundabout
2: Access A/Enderud Blvd. & N. Ridge Rd.

RidgeView
10/01/2024

Intersection								
Intersection Delay, s/veh	10.4							
Intersection LOS	B							
Approach	SE		NW		NE		SW	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	339		581		193		723	
Demand Flow Rate, veh/h	346		593		197		737	
Vehicles Circulating, veh/h	139		279		436		627	
Vehicles Exiting, veh/h	1225		354		49		245	
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		6.0		5.7		18.2	
Approach LOS	A		A		A		C	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.471	0.529	0.470	0.530	1.000	0.149	0.851	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	9.199e-4	8.501e-4	
Entry Flow, veh/h	163	183	279	314	197	110	627	
Cap Entry Lane, veh/h	1188	1262	1044	1120	980	758	833	
Entry HV Adj Factor	0.979	0.983	0.979	0.981	0.980	0.982	0.981	
Flow Entry, veh/h	160	180	273	308	193	108	615	
Cap Entry, veh/h	1162	1240	1022	1098	960	744	817	
V/C Ratio	0.137	0.145	0.267	0.280	0.201	0.145	0.752	
Control Delay, s/veh	4.3	4.1	6.1	6.0	5.7	6.4	20.2	
LOS	A	A	A	A	A	A	C	
95th %tile Queue, veh	0	1	1	1	1	1	7	

Lanes and Geometrics
3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
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)	350		400	600		800	400		350	650		300
Storage Lanes	1		1	1		1	2		1	2		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	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			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	3539	1583	3433	3539	1583
Flt Permitted	0.528			0.613			0.950			0.950		
Satd. Flow (perm)	984	3539	1583	1142	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			609			164			164
Link Speed (mph)		45			45			45			50	
Link Distance (ft)		1219			1546			3366			989	
Travel Time (s)		18.5			23.4			51.0			13.5	

Intersection Summary

Area Type: Other

Timings 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	155	94	72	348	560	250	373	46	183	110	97
Future Volume (vph)	48	155	94	72	348	560	250	373	46	183	110	97
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2		2	6		6			4			8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
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	5.0
Minimum Split (s)	10.0	25.5	25.5	10.0	26.5	26.5	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (s)	10.0	31.0	31.0	10.0	31.0	31.0	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (%)	11.1%	34.4%	34.4%	11.1%	34.4%	34.4%	26.7%	26.7%	26.7%	27.8%	27.8%	27.8%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	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	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	0.0
Total Lost Time (s)	5.0	6.5	6.5	5.0	6.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	43.6	36.3	36.3	45.8	39.2	39.2	16.0	16.0	16.0	10.7	10.7	10.7
Actuated g/C Ratio	0.48	0.40	0.40	0.51	0.44	0.44	0.18	0.18	0.18	0.12	0.12	0.12
v/c Ratio	0.09	0.11	0.14	0.12	0.24	0.59	0.44	0.64	0.12	0.48	0.28	0.31
Control Delay (s/veh)	12.5	20.2	2.2	12.5	19.4	4.9	34.8	38.9	0.5	40.7	37.1	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.5	20.2	2.2	12.5	19.4	4.9	34.8	38.9	0.5	40.7	37.1	3.9
LOS	B	C	A	B	B	A	C	D	A	D	D	A
Approach Delay (s/veh)		13.3			10.6			34.8			30.6	
Approach LOS		B			B			C			C	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay (s/veh): 21.2

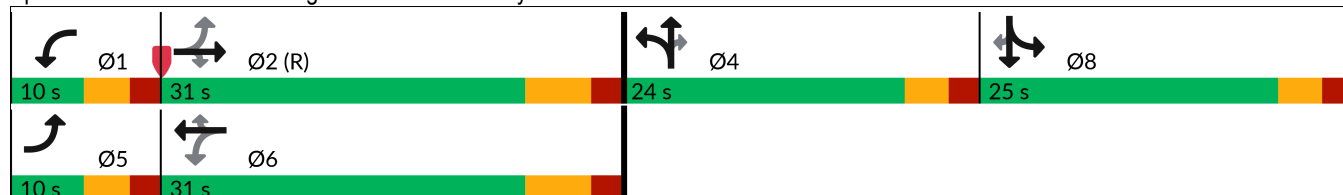
Intersection LOS: C

Intersection Capacity Utilization 62.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86



Queues

RidgeView

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

10/01/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	52	168	102	78	378	609	272	405	50	199	120	105
v/c Ratio	0.09	0.11	0.14	0.12	0.24	0.59	0.44	0.64	0.12	0.48	0.28	0.31
Control Delay (s/veh)	12.5	20.2	2.2	12.5	19.4	4.9	34.8	38.9	0.5	40.7	37.1	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.5	20.2	2.2	12.5	19.4	4.9	34.8	38.9	0.5	40.7	37.1	3.9
Queue Length 50th (ft)	13	32	0	20	75	0	71	113	0	55	33	0
Queue Length 95th (ft)	36	63	17	49	128	85	105	155	0	85	56	13
Internal Link Dist (ft)	1139			1466			3286			909		
Turn Bay Length (ft)	350		400	600		800	400		350	650		300
Base Capacity (vph)	537	1427	724	634	1540	1032	724	747	463	762	786	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	0.10	0.12	0.14	0.12	0.25	0.59	0.38	0.54	0.11	0.26	0.15	0.22

Intersection Summary

HCM 7th Signalized Intersection Summary

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

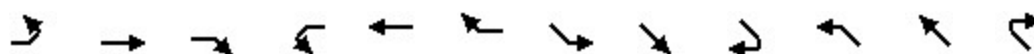
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 		 	 		 	 	
Traffic Volume (veh/h)	48	155	94	72	348	560	250	373	46	183	110	97
Future Volume (veh/h)	48	155	94	72	348	560	250	373	46	183	110	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	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	168	0	78	378	0	272	405	0	199	120	0
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	570	1673		706	1699		530	545		308	317	
Arrive On Green	0.04	0.47	0.00	0.05	0.48	0.00	0.15	0.15	0.00	0.09	0.09	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	52	168	0	78	378	0	272	405	0	199	120	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.3	2.4	0.0	2.0	5.6	0.0	6.5	9.8	0.0	5.0	2.9	0.0
Cycle Q Clear(g_c), s	1.3	2.4	0.0	2.0	5.6	0.0	6.5	9.8	0.0	5.0	2.9	0.0
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	570	1673		706	1699		530	545		308	317	
V/C Ratio(X)	0.09	0.10		0.11	0.22		0.51	0.74		0.65	0.38	
Avail Cap(c_a), veh/h	597	1673		720	1699		730	750		768	790	
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.2	13.2	0.0	10.9	13.7	0.0	35.0	36.4	0.0	39.6	38.6	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.1	0.3	0.0	0.8	2.6	0.0	2.3	0.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.9	0.0	0.7	2.1	0.0	2.7	4.2	0.0	2.1	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.3	13.3	0.0	11.0	14.0	0.0	35.8	39.0	0.0	41.9	39.4	0.0
LnGrp LOS	B	B		B	B		D	D		D	D	
Approach Vol, veh/h	220			456			677			319		
Approach Delay, s/veh	12.9			13.5			37.7			40.9		
Approach LOS	B			B			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	48.9		18.8	8.6	49.5		13.0				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	5.0	24.5		19.0	5.0	24.5		20.0				
Max Q Clear Time (g_c+I1), s	4.0	4.4		11.8	3.3	7.6		7.0				
Green Ext Time (p_c), s	0.0	0.8		2.0	0.0	2.0		1.0				

Intersection Summary

HCM 7th Control Delay, s/veh 28.5
HCM 7th LOS C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.944			0.981			0.935			0.994	
Flt Protected		0.991			0.995			0.990			0.971	
Satd. Flow (prot)	0	3311	0	0	3455	0	0	1724	0	0	1798	0
Flt Permitted		0.991			0.995			0.990			0.971	
Satd. Flow (perm)	0	3311	0	0	3455	0	0	1724	0	0	1798	0
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		824			7080			1214			1006	
Travel Time (s)		18.7			161.7			27.6			22.9	

Intersection Summary

Area Type: Other

HCM 7th Roundabout
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	24.2					
Intersection LOS	C					
Approach	EB		WB		SE	NW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	473		774		229	969
Demand Flow Rate, veh/h	483		789		233	989
Vehicles Circulating, veh/h	191		1030		1285	350
Vehicles Exiting, veh/h	1327		309		534	324
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	5.0		24.5		17.3	35.0
Approach LOS	A		C		C	D
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	227	256	371	418	233	989
Cap Entry Lane, veh/h	1132	1207	523	592	476	1055
Entry HV Adj Factor	0.979	0.979	0.980	0.981	0.981	0.980
Flow Entry, veh/h	222	251	364	410	229	969
Cap Entry, veh/h	1108	1182	513	581	467	1033
V/C Ratio	0.200	0.212	0.709	0.707	0.489	0.938
Control Delay, s/veh	5.1	4.9	25.9	23.3	17.3	35.0
LOS	A	A	D	C	C	D
95th %tile Queue, veh	1	1	6	6	3	15

Lanes and Geometrics
5: Plum Creek Pkwy. & South Site Access

RidgeView
10/01/2024



Lane Group	SEL	SER	NEL	NET	SWT	SWR
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	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor						
Frt		0.865			0.997	
Flt Protected						
Satd. Flow (prot)	0	1611	0	3539	3529	0
Flt Permitted						
Satd. Flow (perm)	0	1611	0	3539	3529	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	232			7080	406	
Travel Time (s)	6.3			161.7	9.2	

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0.3					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↗		↕↕	↕↗	
Traffic Vol, veh/h	0	28	0	330	530	10
Future Vol, veh/h	0	28	0	330	530	10
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	0	30	0	359	576	11
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	293	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	703	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	703	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s/v10.35		0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR		
Capacity (veh/h)	-	703	-	-		
HCM Lane V/C Ratio	-	0.043	-	-		
HCM Control Delay (s/veh)	-	10.4	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0.1	-	-		

Lanes and Geometrics
6: N. Ridge Rd. & North Site Access

RidgeView
10/01/2024



Lane Group	EBL	EBR	SET	SER	NWL	NWT
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	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.865	0.994			
Flt Protected						
Satd. Flow (prot)	0	1611	3518	0	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1611	3518	0	0	3539
Link Speed (mph)	30		45			45
Link Distance (ft)	492		1847			481
Travel Time (s)	11.2		42.0			10.9

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	31	240	10	0	500
Future Vol, veh/h	0	31	240	10	0	500
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	0	34	261	11	0	543

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	136	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	888	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	888	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s/v	9.21	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT EBLn1	SET	SER
Capacity (veh/h)	- 888	-	-
HCM Lane V/C Ratio	- 0.038	-	-
HCM Control Delay (s/veh)	- 9.2	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q(veh)	- 0.1	-	-

Lanes and Geometrics
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

												
Lane Group	WBL	WBR	WBR2	NBU	NBL	NBR	NBR2	SEU	SEL2	SEL	SER	SWL
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
Storage Lanes	0	0			1	1				0	0	1
Taper Length (ft)	25				25					25		25
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	0.95	0.95	1.00	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt	0.944				0.924					0.980	0.850	0.865
Flt Protected	0.971				0.976					0.958		
Satd. Flow (prot)	1707	0	0	0	3259	0	0	0	0	1749	1504	1611
Flt Permitted	0.971				0.976					0.958		
Satd. Flow (perm)	1707	0	0	0	3259	0	0	0	0	1749	1504	1611
Link Speed (mph)	45				40					45		25
Link Distance (ft)	1387				406					481		223
Travel Time (s)	31.5				9.2					10.9		4.6

Intersection Summary

Area Type: Other



Lane Group	SWR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	

Intersection Summary

HCM 7th Roundabout
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	6.2					
Intersection LOS	A					
Approach	WB	NB		SE		SW
Entry Lanes	1	2		2		1
Conflicting Circle Lanes	2	2		2		2
Adj Approach Flow, veh/h	392	598		528		2
Demand Flow Rate, veh/h	400	610		539		2
Vehicles Circulating, veh/h	329	245		265		727
Vehicles Exiting, veh/h	526	559		464		2
Ped Vol Crossing Leg, #/h	0	0		0		0
Ped Cap Adj	1.000	1.000		1.000		1.000
Approach Delay, s/veh	7.3	5.9		5.7		4.7
Approach LOS	A	A		A		A
Lane	Left	Left	Right	Left	Right	Left
Designated Moves	LR	L	LTR	LTR	R	LR
Assumed Moves	LR	L	TR	LTR	R	LR
RT Channelized						
Lane Util	1.000	0.495	0.505	0.469	0.531	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1420	1350	1420	1350	1420	1420
B (Slope)	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	400	302	308	253	286	2
Cap Entry Lane, veh/h	1074	1077	1153	1058	1134	765
Entry HV Adj Factor	0.980	0.981	0.981	0.982	0.979	1.000
Flow Entry, veh/h	392	296	302	248	280	2
Cap Entry, veh/h	1052	1058	1131	1039	1110	765
V/C Ratio	0.373	0.280	0.267	0.239	0.252	0.003
Control Delay, s/veh	7.3	6.1	5.7	5.7	5.6	4.7
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	1	1	1	1	0

Lanes and Geometrics

RidgeView

2: Access A/Enderud Blvd. & N. Ridge Rd.

10/01/2024

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.991			0.951			0.958				0.850
Flt Protected		0.977			0.991			0.967			0.950	
Satd. Flow (prot)	0	3427	0	0	3336	0	0	1726	0	0	1770	1583
Flt Permitted		0.977			0.991			0.967			0.950	
Satd. Flow (perm)	0	3427	0	0	3336	0	0	1726	0	0	1770	1583
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		3366			1847			417			1714	
Travel Time (s)		76.5			42.0			0.0			39.0	
Intersection Summary												
Area Type:	Other											

Intersection								
Intersection Delay, s/veh	8.0							
Intersection LOS	A							
Approach	SE		NW		NE		SW	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	1011		552		123		426	
Demand Flow Rate, veh/h	1031		563		126		434	
Vehicles Circulating, veh/h	214		574		1083		464	
Vehicles Exiting, veh/h	684		635		162		673	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	8.0		8.3		9.5		6.9	
Approach LOS	A		A		A		A	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.470	0.530	0.471	0.529	1.000	0.267	0.733	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	9.199e-4	8.501e-4	
Entry Flow, veh/h	485	546	265	298	126	116	318	
Cap Entry Lane, veh/h	1109	1184	796	872	566	881	957	
Entry HV Adj Factor	0.979	0.981	0.978	0.981	0.976	0.983	0.981	
Flow Entry, veh/h	475	536	259	292	123	114	312	
Cap Entry, veh/h	1086	1161	779	855	552	866	939	
V/C Ratio	0.437	0.461	0.333	0.342	0.223	0.132	0.332	
Control Delay, s/veh	8.1	8.0	8.6	8.1	9.5	5.4	7.4	
LOS	A	A	A	A	A	A	A	
95th %tile Queue, veh	2	2	1	2	1	0	1	

Lanes and Geometrics
3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
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)	350		400	600		800	400		350	650		300
Storage Lanes	1		1	1		1	2		1	2		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	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			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	3539	1583	3433	3539	1583
Flt Permitted	0.575			0.465			0.950			0.950		
Satd. Flow (perm)	1071	3539	1583	866	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes				Yes		Yes		Yes	
Satd. Flow (RTOR)			397				360				164	
Link Speed (mph)	45				45				45		50	
Link Distance (ft)	1219				1546				3366		989	
Travel Time (s)	18.5				23.4				51.0		13.5	

Intersection Summary

Area Type: Other

Timings 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	411	365	105	221	331	178	313	67	544	456	108
Future Volume (vph)	119	411	365	105	221	331	178	313	67	544	456	108
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2		2	6		6			4			8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
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	5.0
Minimum Split (s)	10.0	25.5	25.5	10.0	26.5	26.5	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (s)	10.0	30.0	30.0	10.0	30.0	30.0	24.0	24.0	24.0	26.0	26.0	26.0
Total Split (%)	11.1%	33.3%	33.3%	11.1%	33.3%	33.3%	26.7%	26.7%	26.7%	28.9%	28.9%	28.9%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	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	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	0.0
Total Lost Time (s)	5.0	6.5	6.5	5.0	6.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	35.4	29.0	29.0	34.2	26.6	26.6	14.5	14.5	14.5	21.1	21.1	21.1
Actuated g/C Ratio	0.39	0.32	0.32	0.38	0.30	0.30	0.16	0.16	0.16	0.23	0.23	0.23
v/c Ratio	0.27	0.39	0.51	0.29	0.22	0.49	0.34	0.59	0.18	0.73	0.59	0.23
Control Delay (s/veh)	19.5	26.9	5.5	19.7	25.8	5.7	34.4	38.9	1.0	37.7	33.7	3.0
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)	19.5	26.9	5.5	19.7	25.8	5.7	34.4	38.9	1.0	37.7	33.7	3.0
LOS	B	C	A	B	C	A	C	D	A	D	C	A
Approach Delay (s/veh)		17.3			14.8			33.0			32.7	
Approach LOS		B			B			C			C	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 24.8

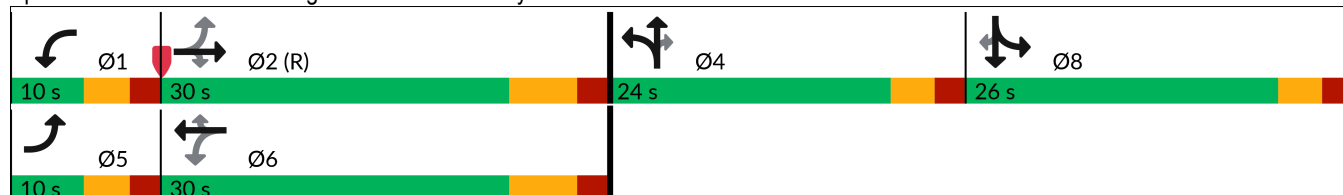
Intersection LOS: C

Intersection Capacity Utilization 59.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86



Queues

RidgeView

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	129	447	397	114	240	360	193	340	73	591	496	117
v/c Ratio	0.27	0.39	0.51	0.29	0.22	0.49	0.34	0.59	0.18	0.73	0.59	0.23
Control Delay (s/veh)	19.5	26.9	5.5	19.7	25.8	5.7	34.4	38.9	1.0	37.7	33.7	3.0
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)	19.5	26.9	5.5	19.7	25.8	5.7	34.4	38.9	1.0	37.7	33.7	3.0
Queue Length 50th (ft)	46	113	0	40	56	0	50	95	0	154	127	0
Queue Length 95th (ft)	86	160	69	78	88	65	77	131	0	220	184	19
Internal Link Dist (ft)	1139			1466			3286			909		
Turn Bay Length (ft)	350		400	600		800	400		350	650		300
Base Capacity (vph)	469	1139	778	390	1047	722	724	747	463	841	867	512
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	0.39	0.51	0.29	0.23	0.50	0.27	0.46	0.16	0.70	0.57	0.23
Intersection Summary												

HCM 7th Signalized Intersection Summary

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

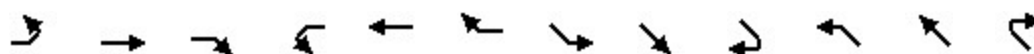
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	411	365	105	221	331	178	313	67	544	456	108
Future Volume (veh/h)	119	411	365	105	221	331	178	313	67	544	456	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	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	129	447	0	114	240	0	193	340	0	591	496	0
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	541	1292		435	1292		461	474		720	741	
Arrive On Green	0.06	0.36	0.00	0.06	0.36	0.00	0.13	0.13	0.00	0.21	0.21	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	129	447	0	114	240	0	193	340	0	591	496	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	4.1	8.2	0.0	3.6	4.1	0.0	4.6	8.3	0.0	14.7	11.6	0.0
Cycle Q Clear(g_c), s	4.1	8.2	0.0	3.6	4.1	0.0	4.6	8.3	0.0	14.7	11.6	0.0
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	541	1292		435	1292		461	474		720	741	
V/C Ratio(X)	0.24	0.35		0.26	0.19		0.42	0.72		0.82	0.67	
Avail Cap(c_a), veh/h	541	1292		435	1292		730	750		806	829	
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.5	20.8	0.0	16.7	19.5	0.0	35.8	37.4	0.0	34.0	32.8	0.0
Incr Delay (d2), s/veh	0.2	0.7	0.0	0.3	0.3	0.0	0.6	2.0	0.0	6.2	1.8	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	3.3	0.0	1.4	1.6	0.0	1.9	3.5	0.0	6.3	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.7	21.6	0.0	17.0	19.9	0.0	36.4	39.4	0.0	40.2	34.6	0.0
LnGrp LOS	B	C		B	B		D	D		D	C	
Approach Vol, veh/h	576			354			533			1087		
Approach Delay, s/veh	20.5			18.9			38.3			37.6		
Approach LOS	C			B			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	39.2		17.0	10.0	39.2		23.8				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	5.0	23.5		19.0	5.0	23.5		21.0				
Max Q Clear Time (g_c+l1), s	5.6	10.2		10.3	6.1	6.1		16.7				
Green Ext Time (p_c), s	0.0	2.2		1.8	0.0	1.2		2.1				

Intersection Summary

HCM 7th Control Delay, s/veh 31.3
HCM 7th LOS C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.939			0.988			0.962			0.975	
Flt Protected		0.996			0.987			0.989			0.975	
Satd. Flow (prot)	0	3310	0	0	3451	0	0	1772	0	0	1771	0
Flt Permitted		0.996			0.987			0.989			0.975	
Satd. Flow (perm)	0	3310	0	0	3451	0	0	1772	0	0	1771	0
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		824			7080			1214			1006	
Travel Time (s)		18.7			161.7			27.6			22.9	

Intersection Summary

Area Type: Other

HCM 7th Roundabout
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	14.5					
Intersection LOS	B					
Approach	EB		WB		SE	NW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	1038		582		453	557
Demand Flow Rate, veh/h	1059		594		463	568
Vehicles Circulating, veh/h	489		556		842	726
Vehicles Exiting, veh/h	816		738		308	822
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	12.7		8.4		18.6	20.9
Approach LOS	B		A		C	C
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	498	561	279	315	463	568
Cap Entry Lane, veh/h	861	937	809	885	694	766
Entry HV Adj Factor	0.979	0.980	0.981	0.980	0.979	0.980
Flow Entry, veh/h	488	550	274	309	453	557
Cap Entry, veh/h	843	919	794	867	680	751
V/C Ratio	0.578	0.599	0.345	0.356	0.667	0.741
Control Delay, s/veh	12.9	12.6	8.6	8.2	18.6	20.9
LOS	B	B	A	A	C	C
95th %tile Queue, veh	4	4	2	2	5	7

Lanes and Geometrics
5: Plum Creek Pkwy. & South Site Access

RidgeView
10/01/2024



Lane Group	SEL	SER	NEL	NET	SWT	SWR
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	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor						
Frt		0.865			0.992	
Flt Protected						
Satd. Flow (prot)	0	1611	0	3539	3511	0
Flt Permitted						
Satd. Flow (perm)	0	1611	0	3539	3511	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	232			7080	406	
Travel Time (s)	6.3			161.7	9.2	

Intersection Summary

Area Type: Other

HCM 7th TWSC
5: Plum Creek Pkwy. & South Site Access

RidgeView
10/01/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↗		↕↕	↕↗	
Traffic Vol, veh/h	0	19	0	552	477	28
Future Vol, veh/h	0	19	0	552	477	28
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	0	21	0	600	518	30
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	274	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	723	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	723	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s/v10.13		0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR		
Capacity (veh/h)	-	723	-	-		
HCM Lane V/C Ratio	-	0.029	-	-		
HCM Control Delay (s/veh)	-	10.1	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0.1	-	-		

Lanes and Geometrics
6: N. Ridge Rd. & North Site Access

RidgeView
10/01/2024



Lane Group	EBL	EBR	SET	SER	NWL	NWT
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	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.865	0.991			
Flt Protected						
Satd. Flow (prot)	0	1611	3507	0	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1611	3507	0	0	3539
Link Speed (mph)	30		45			45
Link Distance (ft)	492		1847			481
Travel Time (s)	11.2		42.0			10.9

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		↗	↕↗			↕↗
Traffic Vol, veh/h	0	20	481	29	0	423
Future Vol, veh/h	0	20	481	29	0	423
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	0	22	523	32	0	460

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	277	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	720	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	720	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s/v10.15		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NWT EBLn1	SET	SER
Capacity (veh/h)	- 720	-	-
HCM Lane V/C Ratio	- 0.03	-	-
HCM Control Delay (s/veh)	- 10.2	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q(veh)	- 0.1	-	-

											
Lane Group	WBL	WBR	NBU	NBL	NBR	NBR2	SEU	SEL	SER	SWL	SWR
Lane Configurations											
Ideal Flow (vphpl)	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
Grade (%)	0%			0%				0%		0%	
Storage Length (ft)	0	0		0	0			0	0	0	0
Storage Lanes	0	0		1	1			0	0	1	0
Taper Length (ft)	25			25				25		25	
Lane Util. Factor	1.00	1.00	0.95	0.97	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor											
Frt	0.939			0.929				0.963	0.850		
Flt Protected	0.973			0.974				0.964			
Satd. Flow (prot)	1702	0	0	3270	0	0	0	1729	1504	1863	0
Flt Permitted	0.973			0.974				0.964			
Satd. Flow (perm)	1702	0	0	3270	0	0	0	1729	1504	1863	0
Link Speed (mph)	45			40				45		25	
Link Distance (ft)	1387			406				481		223	
Travel Time (s)	31.5			9.2				10.9		4.6	
Intersection Summary											
Area Type:	Other										

HCM 7th Roundabout
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	14.4					
Intersection LOS	B					
Approach	WB	NB		SE		SW
Entry Lanes	1	2		2		1
Conflicting Circle Lanes	2	2		2		2
Adj Approach Flow, veh/h	932	449		371		0
Demand Flow Rate, veh/h	950	458		379		0
Vehicles Circulating, veh/h	276	149		529		1226
Vehicles Exiting, veh/h	331	759		697		0
Ped Vol Crossing Leg, #/h	0	0		0		0
Ped Cap Adj	1.000	1.000		1.000		1.000
Approach Delay, s/veh	22.3	4.7		6.5		0.0
Approach LOS	C	A		A		-
Lane	Left	Left	Right	Left	Right	Left
Designated Moves	LR	L	LTR	LTR	R	LR
Assumed Moves	LR	L	LTR	LTR	R	LR
RT Channelized						
Lane Util	1.000	0.531	0.469	0.470	0.530	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1420	1350	1420	1350	1420	1420
B (Slope)	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	950	243	215	178	201	0
Cap Entry Lane, veh/h	1123	1177	1251	830	906	501
Entry HV Adj Factor	0.981	0.979	0.981	0.980	0.979	1.000
Flow Entry, veh/h	932	238	211	175	197	0
Cap Entry, veh/h	1102	1152	1228	814	887	501
V/C Ratio	0.846	0.206	0.172	0.215	0.222	0.000
Control Delay, s/veh	22.3	5.0	4.4	6.7	6.3	7.2
LOS	C	A	A	A	A	A
95th %tile Queue, veh	11	1	1	1	1	0



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.993			0.974			0.958				0.850
Flt Protected		0.979			0.998			0.967			0.950	
Satd. Flow (prot)	0	3441	0	0	3440	0	0	1726	0	0	1770	1583
Flt Permitted		0.979			0.998			0.967			0.950	
Satd. Flow (perm)	0	3441	0	0	3440	0	0	1726	0	0	1770	1583
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		3366			1847			417			1714	
Travel Time (s)		76.5			42.0			0.0			39.0	

Intersection Summary

Area Type: Other

HCM 7th Roundabout
2: Access A/Enderud Blvd. & N. Ridge Rd.

RidgeView
10/01/2024

Intersection								
Intersection Delay, s/veh	30.1							
Intersection LOS	D							
Approach	SE		NW		NE		SW	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	424		724		193		922	
Demand Flow Rate, veh/h	433		739		197		941	
Vehicles Circulating, veh/h	169		318		553		746	
Vehicles Exiting, veh/h	1518		432		49		311	
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		7.2		6.4		64.6	
Approach LOS	A		A		A		F	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.471	0.529	0.470	0.530	1.000	0.149	0.851	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	9.199e-4	8.501e-4	
Entry Flow, veh/h	204	229	347	392	197	140	801	
Cap Entry Lane, veh/h	1155	1230	1007	1084	887	680	753	
Entry HV Adj Factor	0.978	0.982	0.980	0.978	0.980	0.979	0.980	
Flow Entry, veh/h	200	225	340	384	193	137	785	
Cap Entry, veh/h	1130	1208	987	1060	869	665	738	
V/C Ratio	0.177	0.186	0.344	0.362	0.222	0.206	1.064	
Control Delay, s/veh	4.8	4.6	7.3	7.1	6.4	7.8	74.5	
LOS	A	A	A	A	A	A	F	
95th %tile Queue, veh	1	1	2	2	1	1	20	

Lanes and Geometrics
3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
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)	350		400	600		800	400		350	650		300
Storage Lanes	1		1	1		1	2		1	2		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	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			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	3539	1583	3433	3539	1583
Flt Permitted	0.447			0.564			0.950			0.950		
Satd. Flow (perm)	833	3539	1583	1051	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes				Yes		Yes		Yes	
Satd. Flow (RTOR)			145				587				164	
Link Speed (mph)	45				45				45		50	
Link Distance (ft)	1219				1546				3366		989	
Travel Time (s)	18.5				23.4				51.0		13.5	

Intersection Summary

Area Type: Other

Timings 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	205	117	111	460	835	316	528	73	280	156	120
Future Volume (vph)	60	205	117	111	460	835	316	528	73	280	156	120
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2		2	6		6			4			8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
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	5.0
Minimum Split (s)	10.0	25.5	25.5	10.0	26.5	26.5	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (s)	10.0	30.0	30.0	11.0	31.0	31.0	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (%)	11.1%	33.3%	33.3%	12.2%	34.4%	34.4%	26.7%	26.7%	26.7%	27.8%	27.8%	27.8%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	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	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	0.0
Total Lost Time (s)	5.0	6.5	6.5	5.0	6.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	36.4	28.1	28.1	39.9	31.5	31.5	18.4	18.4	18.4	13.9	13.9	13.9
Actuated g/C Ratio	0.40	0.31	0.31	0.44	0.35	0.35	0.20	0.20	0.20	0.15	0.15	0.15
v/c Ratio	0.15	0.20	0.21	0.22	0.40	0.97	0.49	0.79	0.17	0.57	0.31	0.33
Control Delay (s/veh)	15.8	24.8	4.5	15.9	25.3	36.4	34.1	43.0	0.8	39.1	34.4	5.2
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)	15.8	24.8	4.5	15.9	25.3	36.4	34.1	43.0	0.8	39.1	34.4	5.2
LOS	B	C	A	B	C	D	C	D	A	D	C	A
Approach Delay (s/veh)		17.2			31.2			36.7			30.5	
Approach LOS		B			C			D			C	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay (s/veh): 31.0

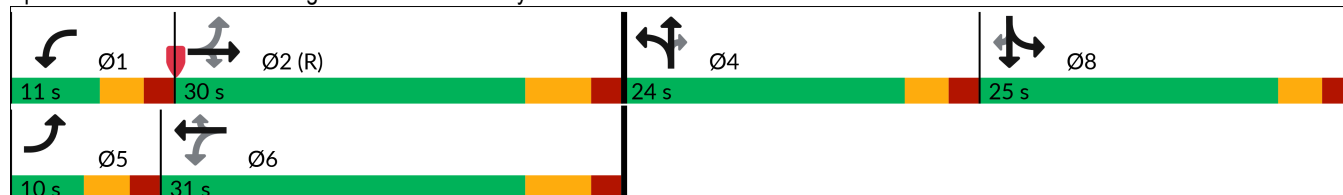
Intersection LOS: C

Intersection Capacity Utilization 84.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86



Queues

RidgeView

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

10/01/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Group Flow (vph)	65	223	127	121	500	908	343	574	79	304	170	130		
v/c Ratio	0.15	0.20	0.21	0.22	0.40	0.97	0.49	0.79	0.17	0.57	0.31	0.33		
Control Delay (s/veh)	15.8	24.8	4.5	15.9	25.3	36.4	34.1	43.0	0.8	39.1	34.4	5.2		
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)	15.8	24.8	4.5	15.9	25.3	36.4	34.1	43.0	0.8	39.1	34.4	5.2		
Queue Length 50th (ft)	20	50	0	38	118	~251	88	163	0	83	45	0		
Queue Length 95th (ft)	47	83	33	78	176	#542	130	222	0	117	71	28		
Internal Link Dist (ft)	1139				1466				3286		909			
Turn Bay Length (ft)	350			400	600			800	400			350	650	300
Base Capacity (vph)	407	1104	593	531	1239	935	724	747	463	762	786	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	0.16	0.20	0.21	0.23	0.40	0.97	0.47	0.77	0.17	0.40	0.22	0.27		

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.

HCM 7th Signalized Intersection Summary

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

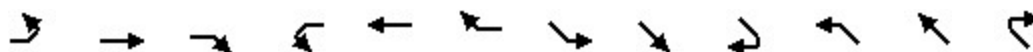
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	205	117	111	460	835	316	528	73	280	156	120
Future Volume (veh/h)	60	205	117	111	460	835	316	528	73	280	156	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	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	65	223	0	121	500	0	343	574	0	304	170	0
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	431	1368		585	1422		668	687		425	437	
Arrive On Green	0.04	0.39	0.00	0.06	0.40	0.00	0.19	0.19	0.00	0.12	0.12	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	65	223	0	121	500	0	343	574	0	304	170	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.9	3.7	0.0	3.6	8.8	0.0	8.0	14.0	0.0	7.6	4.0	0.0
Cycle Q Clear(g_c), s	1.9	3.7	0.0	3.6	8.8	0.0	8.0	14.0	0.0	7.6	4.0	0.0
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	431	1368		585	1422		668	687		425	437	
V/C Ratio(X)	0.15	0.16		0.21	0.35		0.51	0.84		0.72	0.39	
Avail Cap(c_a), veh/h	450	1368		597	1422		730	750		768	790	
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.5	18.2	0.0	15.0	18.8	0.0	32.5	34.9	0.0	38.0	36.4	0.0
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.2	0.7	0.0	0.6	7.6	0.0	2.3	0.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.5	0.0	1.4	3.5	0.0	3.2	6.4	0.0	3.2	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.7	18.4	0.0	15.1	19.5	0.0	33.1	42.5	0.0	40.2	36.9	0.0
LnGrp LOS	B	B		B	B		C	D		D	D	
Approach Vol, veh/h	288			621			917			474		
Approach Delay, s/veh	17.8			18.7			39.0			39.0		
Approach LOS	B			B			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.4	41.2		22.4	9.0	42.5		16.1				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	6.0	23.5		19.0	5.0	24.5		20.0				
Max Q Clear Time (g_c+I1), s	5.6	5.7		16.0	3.9	10.8		9.6				
Green Ext Time (p_c), s	0.0	1.1		1.4	0.0	2.5		1.5				

Intersection Summary

HCM 7th Control Delay, s/veh 30.9
HCM 7th LOS C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.948			0.981			0.934			0.994	
Flt Protected		0.991			0.995			0.990			0.971	
Satd. Flow (prot)	0	3325	0	0	3455	0	0	1722	0	0	1798	0
Flt Permitted		0.991			0.995			0.990			0.971	
Satd. Flow (perm)	0	3325	0	0	3455	0	0	1722	0	0	1798	0
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		824			7080			1214			1006	
Travel Time (s)		18.7			161.7			27.6			22.9	

Intersection Summary

Area Type: Other

HCM 7th Roundabout
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	66.2					
Intersection LOS	F					
Approach	EB		WB		SE	NW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	576		954		290	1107
Demand Flow Rate, veh/h	587		973		296	1129
Vehicles Circulating, veh/h	242		1185		1528	442
Vehicles Exiting, veh/h	1582		386		630	387
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	5.8		71.0		38.2	101.0
Approach LOS	A		F		E	F
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	276	311	457	516	296	1129
Cap Entry Lane, veh/h	1080	1156	454	519	387	975
Entry HV Adj Factor	0.980	0.981	0.981	0.980	0.980	0.981
Flow Entry, veh/h	271	305	448	506	290	1107
Cap Entry, veh/h	1059	1134	445	508	380	956
V/C Ratio	0.255	0.269	1.007	0.995	0.764	1.158
Control Delay, s/veh	5.8	5.7	75.2	67.3	38.2	101.0
LOS	A	A	F	F	E	F
95th %tile Queue, veh	1	1	13	14	6	32

Lanes and Geometrics
5: Plum Creek Pkwy. & South Site Access

RidgeView
10/01/2024



Lane Group	SEL	SER	NEL	NET	SWT	SWR
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	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor						
Frt		0.865			0.998	
Flt Protected						
Satd. Flow (prot)	0	1611	0	3539	3532	0
Flt Permitted						
Satd. Flow (perm)	0	1611	0	3539	3532	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	232			7080	406	
Travel Time (s)	6.3			161.7	9.2	

Intersection Summary

Area Type: Other

HCM 7th TWSC
5: Plum Creek Pkwy. & South Site Access

RidgeView
10/01/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↗		↕↕	↕↗	
Traffic Vol, veh/h	0	28	0	419	676	10
Future Vol, veh/h	0	28	0	419	676	10
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	0	30	0	455	735	11
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	373	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	625	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	625	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s/v11.06		0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR		
Capacity (veh/h)	-	625	-	-		
HCM Lane V/C Ratio	-	0.049	-	-		
HCM Control Delay (s/veh)	-	11.1	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0.2	-	-		

Lanes and Geometrics
6: N. Ridge Rd. & North Site Access

RidgeView
10/01/2024



Lane Group	EBL	EBR	SET	SER	NWL	NWT
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	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.865	0.995			
Flt Protected						
Satd. Flow (prot)	0	1611	3522	0	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1611	3522	0	0	3539
Link Speed (mph)	30		45			45
Link Distance (ft)	492		1847			481
Travel Time (s)	11.2		42.0			10.9

Intersection Summary

Area Type: Other

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	31	306	10	0	629
Future Vol, veh/h	0	31	306	10	0	629
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	0	34	333	11	0	684

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	172	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	842	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	842	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s/v	9.45	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT EBLn1	SET	SER
Capacity (veh/h)	- 842	-	-
HCM Lane V/C Ratio	- 0.04	-	-
HCM Control Delay (s/veh)	- 9.5	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q(veh)	- 0.1	-	-

Lanes and Geometrics
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

												
Lane Group	WBL	WBR	WBR2	NBU	NBL	NBR	NBR2	SEU	SEL2	SEL	SER	SWL
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
Storage Lanes	0	0			1	1				0	0	1
Taper Length (ft)	25				25					25		25
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	0.95	0.95	1.00	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt	0.944				0.923					0.978	0.850	0.865
Flt Protected	0.971				0.976					0.959		
Satd. Flow (prot)	1707	0	0	0	3255	0	0	0	0	1747	1504	1611
Flt Permitted	0.971				0.976					0.959		
Satd. Flow (perm)	1707	0	0	0	3255	0	0	0	0	1747	1504	1611
Link Speed (mph)	45				40					45		25
Link Distance (ft)	1387				406					481		223
Travel Time (s)	31.5				9.2					10.9		4.6

Intersection Summary

Area Type: Other



Lane Group	SWR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	

Intersection Summary

HCM 7th Roundabout
1: Plum Creek Pkwy. & N. Ridge Rd. & Driveway

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	7.8					
Intersection LOS	A					
Approach	WB	NB		SE		SW
Entry Lanes	1	2		2		1
Conflicting Circle Lanes	2	2		2		2
Adj Approach Flow, veh/h	499	755		667		3
Demand Flow Rate, veh/h	509	771		680		3
Vehicles Circulating, veh/h	405	306		329		911
Vehicles Exiting, veh/h	672	703		585		3
Ped Vol Crossing Leg, #/h	0	0		0		0
Ped Cap Adj	1.000	1.000		1.000		1.000
Approach Delay, s/veh	9.8	7.3		6.9		5.5
Approach LOS	A	A		A		A
Lane	Left	Left	Right	Left	Right	Left
Designated Moves	LR	L	LTR	LTR	R	LR
Assumed Moves	LR	L	TR	LTR	R	LR
RT Channelized						
Lane Util	1.000	0.489	0.511	0.471	0.529	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1420	1350	1420	1350	1420	1420
B (Slope)	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	509	377	394	320	360	3
Cap Entry Lane, veh/h	1006	1019	1095	997	1074	655
Entry HV Adj Factor	0.980	0.980	0.980	0.980	0.983	1.000
Flow Entry, veh/h	499	369	386	314	354	3
Cap Entry, veh/h	987	998	1073	978	1055	655
V/C Ratio	0.506	0.370	0.360	0.321	0.335	0.005
Control Delay, s/veh	9.8	7.6	7.0	7.0	6.8	5.5
LOS	A	A	A	A	A	A
95th %tile Queue, veh	3	2	2	1	1	0

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.993			0.948			0.958				0.850
Flt Protected		0.976			0.993			0.967			0.950	
Satd. Flow (prot)	0	3430	0	0	3332	0	0	1726	0	0	1770	1583
Flt Permitted		0.976			0.993			0.967			0.950	
Satd. Flow (perm)	0	3430	0	0	3332	0	0	1726	0	0	1770	1583
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		3366			1847			417			1714	
Travel Time (s)		76.5			42.0			0.0			39.0	

Intersection Summary

Area Type: Other

HCM 7th Roundabout
2: Access A/Enderud Blvd. & N. Ridge Rd.

RidgeView
10/01/2024

Intersection								
Intersection Delay, s/veh	10.5							
Intersection LOS	B							
Approach	SE		NW		NE		SW	
Entry Lanes	2		2		1		2	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	1263		671		123		542	
Demand Flow Rate, veh/h	1288		685		126		553	
Vehicles Circulating, veh/h	246		707		1372		535	
Vehicles Exiting, veh/h	842		791		162		857	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	10.6		11.4		13.0		8.7	
Approach LOS	B		B		B		A	
Lane	Left	Right	Left	Right	Left	Left	Right	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	1.000	0.268	0.732	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.645	4.328	
A (Intercept)	1350	1420	1350	1420	1420	1350	1420	
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	9.199e-4	8.501e-4	
Entry Flow, veh/h	605	683	322	363	126	148	405	
Cap Entry Lane, veh/h	1076	1152	704	779	442	825	901	
Entry HV Adj Factor	0.981	0.980	0.980	0.980	0.976	0.980	0.980	
Flow Entry, veh/h	594	669	315	356	123	145	397	
Cap Entry, veh/h	1056	1129	690	763	432	808	883	
V/C Ratio	0.562	0.593	0.457	0.466	0.285	0.179	0.449	
Control Delay, s/veh	10.5	10.7	11.8	11.1	13.0	6.3	9.6	
LOS	B	B	B	B	B	A	A	
95th %tile Queue, veh	4	4	2	2	1	1	2	

Lanes and Geometrics
3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
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)	350		400	600		800	400		350	650		300
Storage Lanes	1		1	1		1	2		1	2		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	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			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	3539	1583	3433	3539	1583
Flt Permitted	0.539			0.256			0.950			0.950		
Satd. Flow (perm)	1004	3539	1583	477	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			443			549			164			164
Link Speed (mph)		45			45			45			50	
Link Distance (ft)		1219			1546			3366			989	
Travel Time (s)		18.5			23.4			51.0			13.5	

Intersection Summary

Area Type: Other

Timings 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	550	466	163	295	505	224	452	102	830	657	135
Future Volume (vph)	150	550	466	163	295	505	224	452	102	830	657	135
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2		2	6		6			4			8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
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	5.0
Minimum Split (s)	10.0	25.5	25.5	10.0	26.5	26.5	23.0	23.0	23.0	25.0	25.0	25.0
Total Split (s)	10.0	27.0	27.0	10.0	27.0	27.0	23.0	23.0	23.0	30.0	30.0	30.0
Total Split (%)	11.1%	30.0%	30.0%	11.1%	30.0%	30.0%	25.6%	25.6%	25.6%	33.3%	33.3%	33.3%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	4.5	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	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	0.0
Total Lost Time (s)	5.0	6.5	6.5	5.0	6.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effct Green (s)	27.4	20.5	20.5	27.4	20.5	20.5	16.7	16.7	16.7	25.8	25.8	25.8
Actuated g/C Ratio	0.30	0.23	0.23	0.30	0.23	0.23	0.19	0.19	0.19	0.29	0.29	0.29
v/c Ratio	0.46	0.74	0.72	0.79	0.39	0.70	0.38	0.74	0.25	0.91	0.70	0.25
Control Delay (s/veh)	27.0	38.7	12.0	51.2	31.2	8.2	33.6	42.1	3.1	46.8	33.3	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.0	38.7	12.0	51.2	31.2	8.2	33.6	42.1	3.1	46.8	33.3	4.5
LOS	C	D	B	D	C	A	C	D	A	D	C	A
Approach Delay (s/veh)		26.6			22.6			34.6			37.9	
Approach LOS		C			C			C			D	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay (s/veh): 31.1

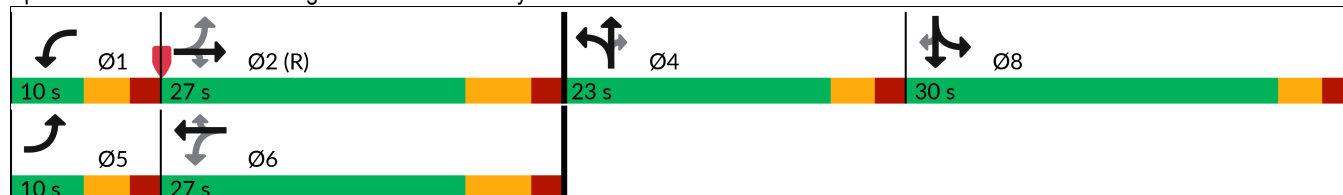
Intersection LOS: C

Intersection Capacity Utilization 78.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86



Queues

RidgeView

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

10/01/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	163	598	507	177	321	549	243	491	111	902	714	147
v/c Ratio	0.46	0.74	0.72	0.79	0.39	0.70	0.38	0.74	0.25	0.91	0.70	0.25
Control Delay (s/veh)	27.0	38.7	12.0	51.2	31.2	8.2	33.6	42.1	3.1	46.8	33.3	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.0	38.7	12.0	51.2	31.2	8.2	33.6	42.1	3.1	46.8	33.3	4.5
Queue Length 50th (ft)	65	167	29	71	82	0	61	137	0	258	193	0
Queue Length 95th (ft)	113	227	139	#168	121	91	96	192	16	#379	257	35
Internal Link Dist (ft)	1139				1466				3286		909	
Turn Bay Length (ft)	350	400		600	800		400	350		650	300	
Base Capacity (vph)	352	806	702	223	806	784	686	707	447	984	1015	571
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	0.46	0.74	0.72	0.79	0.40	0.70	0.35	0.69	0.25	0.92	0.70	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

3: N. Ridge Rd./Founders Pkwy. & Fifth St./SH 86

RidgeView
10/01/2024

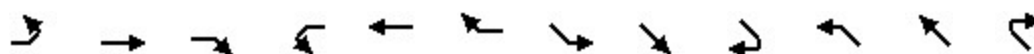
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	550	466	163	295	505	224	452	102	830	657	135
Future Volume (veh/h)	150	550	466	163	295	505	224	452	102	830	657	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	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	163	598	0	177	321	0	243	491	0	902	714	0
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	372	911		266	911		592	609		960	987	
Arrive On Green	0.06	0.26	0.00	0.06	0.26	0.00	0.17	0.17	0.00	0.28	0.28	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	163	598	0	177	321	0	243	491	0	902	714	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	5.0	13.5	0.0	5.0	6.6	0.0	5.6	12.0	0.0	23.0	16.3	0.0
Cycle Q Clear(g_c), s	5.0	13.5	0.0	5.0	6.6	0.0	5.6	12.0	0.0	23.0	16.3	0.0
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	372	911		266	911		592	609		960	987	
V/C Ratio(X)	0.44	0.66		0.67	0.35		0.41	0.81		0.94	0.72	
Avail Cap(c_a), veh/h	372	911		266	911		691	711		960	987	
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.9	29.9	0.0	28.4	27.3	0.0	33.2	35.8	0.0	31.8	29.4	0.0
Incr Delay (d2), s/veh	0.8	3.7	0.0	6.2	1.1	0.0	0.5	5.9	0.0	16.5	2.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	5.9	0.0	1.5	2.8	0.0	2.3	5.4	0.0	10.9	6.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.7	33.6	0.0	34.5	28.4	0.0	33.7	41.8	0.0	48.3	32.0	0.0
LnGrp LOS	C	C		C	C		C	D		D	C	
Approach Vol, veh/h	761			498			734			1616		
Approach Delay, s/veh	31.9			30.6			39.1			41.1		
Approach LOS	C			C			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	29.6		20.4	10.0	29.6		30.0				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	5.0	20.5		18.0	5.0	20.5		25.0				
Max Q Clear Time (g_c+l1), s	7.0	15.5		14.0	7.0	8.6		25.0				
Green Ext Time (p_c), s	0.0	1.6		1.5	0.0	1.4		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 37.3
HCM 7th LOS D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
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	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.938			0.988			0.962			0.975	
Flt Protected		0.996			0.987			0.989			0.975	
Satd. Flow (prot)	0	3307	0	0	3451	0	0	1772	0	0	1771	0
Flt Permitted		0.996			0.987			0.989			0.975	
Satd. Flow (perm)	0	3307	0	0	3451	0	0	1772	0	0	1771	0
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		824			7080			1214			1006	
Travel Time (s)		18.7			161.7			27.6			22.9	

Intersection Summary

Area Type: Other

HCM 7th Roundabout
4: Lake Gulch Rd./S. Gilbert St. & Plum Creek Pkwy.

RidgeView
10/01/2024

Intersection						
Intersection Delay, s/veh	47.5					
Intersection LOS	E					
Approach	EB		WB		SE	NW
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	1322		735		576	718
Demand Flow Rate, veh/h	1348		750		587	733
Vehicles Circulating, veh/h	620		714		1071	916
Vehicles Exiting, veh/h	1039		934		393	1052
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	28.0		12.6		72.4	99.0
Approach LOS	D		B		F	F
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.471	0.529	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	634	714	353	397	587	733
Cap Entry Lane, veh/h	763	838	700	774	571	652
Entry HV Adj Factor	0.980	0.981	0.979	0.982	0.982	0.979
Flow Entry, veh/h	621	701	346	390	576	718
Cap Entry, veh/h	748	823	685	760	561	638
V/C Ratio	0.831	0.852	0.504	0.513	1.027	1.125
Control Delay, s/veh	27.9	28.1	13.0	12.2	72.4	99.0
LOS	D	D	B	B	F	F
95th %tile Queue, veh	9	10	3	3	16	22

Lanes and Geometrics
5: Plum Creek Pkwy. & South Site Access

RidgeView
10/01/2024



Lane Group	SEL	SER	NEL	NET	SWT	SWR
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	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor						
Frt		0.865			0.993	
Flt Protected						
Satd. Flow (prot)	0	1611	0	3539	3514	0
Flt Permitted						
Satd. Flow (perm)	0	1611	0	3539	3514	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	232			7080	406	
Travel Time (s)	6.3			161.7	9.2	

Intersection Summary

Area Type: Other

HCM 7th TWSC
5: Plum Creek Pkwy. & South Site Access

RidgeView
10/01/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↗		↕↕	↕↗	
Traffic Vol, veh/h	0	19	0	697	608	28
Future Vol, veh/h	0	19	0	697	608	28
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	0	21	0	758	661	30
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	346	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	650	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	650	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE	NE	SW			
HCM Control Delay, s/v10.72		0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR		
Capacity (veh/h)	-	650	-	-		
HCM Lane V/C Ratio	-	0.032	-	-		
HCM Control Delay (s/veh)	-	10.7	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0.1	-	-		

Lanes and Geometrics
6: N. Ridge Rd. & North Site Access

RidgeView
10/01/2024



Lane Group	EBL	EBR	SET	SER	NWL	NWT
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	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.865	0.993			
Flt Protected						
Satd. Flow (prot)	0	1611	3514	0	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1611	3514	0	0	3539
Link Speed (mph)	30		45			45
Link Distance (ft)	492		1847			481
Travel Time (s)	11.2		42.0			10.9

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		↗	↕↕			↕↕
Traffic Vol, veh/h	0	20	614	29	0	534
Future Vol, veh/h	0	20	614	29	0	534
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	0	22	667	32	0	580

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	349	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	647	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	647	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s/v10.76		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NWT EBLn1	SET	SER
Capacity (veh/h)	- 647	-	-
HCM Lane V/C Ratio	- 0.034	-	-
HCM Control Delay (s/veh)	- 10.8	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q(veh)	- 0.1	-	-