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February 5, 2024

Mr. Chris Elliott
EX5 Management
7353 S. Alton Way, Suite A-100
Englewood, CO 80112

Re: Parkdale North
Erie, CO
LSC #221090

Dear Mr. Elliott:

In response to your request, LSC Transportation Consultants, Inc. has prepared this updated traffic impact analysis for the proposed Parkdale North development to address Town comments. This development is also referred to as Parkdale Preliminary Plat #4. As shown on Figure 1, the site is located south of Arapahoe Road and east of N. 119th Street in Erie, Colorado.

REPORT CONTENTS

The report contains the following: the existing roadway and traffic conditions in the vicinity of the site including the lane geometries, traffic controls, posted speed limits, etc.; the existing weekday peak-hour traffic volumes; the existing daily traffic volumes in the area; the typical weekday site-generated traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways; the projected short-term and long-term background and resulting total traffic volumes on the area roadways; the site's projected traffic impacts; and any recommended roadway improvements to mitigate the site's traffic impacts.

LAND USE AND ACCESS

The Parkdale North site (Parkdale Preliminary Plat #4) is proposed to include about 399 single-family detached dwelling units, about 145 multi-family dwelling units, and a 500-student elementary school. Access is proposed from various locations as shown in the overall Parkdale site plan in Figure 2a and the Parkdale North (Parkdale Preliminary Plat #4) site plan in Figure 2b. The future school ingress should be located relatively far from Coal Creek Boulevard to reduce the likelihood of backup/queuing issues.

The roadways within the site will have sidewalks on both sides and a network of trails is shown in Figures 2a and 2b including a proposed underpass of Coal Creek Boulevard just south of the proposed roundabout at Intersection #6.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

The major roadways in the site's vicinity are shown on Figure 1 and are described below.

- **Baseline Road (SH 7)** is an east-west, two-lane state highway south of the site and is classified as a Non-Rural Principal Highway (NR-A) by CDOT. At the time of the traffic counts, both the intersections with N. 119th Street and County Line Road were signalized with auxiliary turn lanes. The posted speed limit in the vicinity of N. 119th Street is 45 mph and in the vicinity of Coal Creek Boulevard and County Line Road is 55 mph. The *Erie Transportation Master Plan* shows a four-lane cross-section by 2040. A four-lane cross-section is assumed to be constructed between 2030 and 2043. The City of Lafayette has plans to make interim improvements to the intersection with N. 119th Street in the near future.

- **Arapahoe Road** is an east-west, two-lane arterial roadway north of the site. The intersections with N. 119th Street and E. County Line Road are signalized with auxiliary turn lanes and the intersection with Quest Drive is stop-sign controlled.. The posted speed limit in the vicinity of the site is 40 mph.

- **E. County Line Road** is a north-south, two-lane minor arterial roadway east of the site. The intersection with SH 7 (Baseline Road) was signalized with auxiliary turn lanes at the time of the traffic counts. The posted speed limit in the vicinity of the site is 50 mph. The intersection with SH 7 (Baseline Road) was recently converted to right-in/right-out because the SH 7 (Baseline Road)/ Coal Creek Boulevard intersection to the west (#17) was recently signalized.

- **N. 119th Street** is a north-south, two-lane arterial roadway west of the site. The intersection with Baseline Road (SH 7) is signalized with auxiliary turn lanes. The posted speed limit in the vicinity of the site is 40 mph. The *Erie Transportation Master Plan* assumes a two-lane principal arterial in 2030 and a six-lane principal arterial for buildout conditions.

- **Coal Creek Boulevard** is a north-south arterial that recently replaced E. County Line Road as the primary north-south arterial roadway in the area. Currently it extends north from Baseline Road (SH 7) to Monroe Street and will be extended north to Arapahoe Road with development of the site.

Existing Traffic Conditions

Figure 3a shows the existing traffic volumes in the site's vicinity on a typical weekday. The weekday peak-hour traffic volumes and daily traffic counts are from the attached traffic counts conducted by Counter Measures in November, 2022. Figure 3b shows the existing lane geometries, traffic controls, and posted speed limits.

2030 and 2043 Background Traffic

Figure 4a shows the estimated 2030 background traffic and Figure 5a shows the estimated 2043 background traffic. The background traffic assumes a 3.3 percent annual growth rate on SH 7 to be consistent with the Town of Erie TMP long-term projections less overall Parkdale North trips. They also assume a one percent annual growth rate on Coal Creek Boulevard and

Arapahoe Road and five percent annual growth on N. 119th Street, again to be consistent with the TMP. Figures 4b and 5b show the 2030 and 2043 recommended lane geometry and traffic control. Table A-1 shows the future commercial trips assumed in 2043 for the site north of Intersection #16.

Existing, 2030, and 2043 Background Levels of Service

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A is indicative of little congestion or delay and LOS F is indicative of a high level of congestion or delay. Attached are specific level of service definitions for signalized and unsignalized intersections.

The intersections in Figures 3a through 5b were analyzed as appropriate to determine the existing, 2030, and 2043 background levels of service using Synchro. Table 1 shows the level of service analysis results. The level of service reports are attached.

1. **Arapahoe Road/N. 119th Street:** This signalized intersection currently operates at an overall LOS "C" during both morning and afternoon peak-hours and is expected to do so through 2043.

2. **Arapahoe Road/Quest Drive/Site Access:** All movements at this unsignalized intersection currently operate at LOS "C" or better during both morning and afternoon peak-hours and are expected to do so through 2043.

3. **Arapahoe Road/E. County Line Road/Coal Creek Boulevard:** This signalized intersection currently operates at an overall LOS "A" during the morning peak-hour and LOS "B" during the afternoon peak-hour and is expected to operate at LOS "B" through 2043.

4. **Coal Creek Boulevard/Old County Line Road:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2043.

5. **Coal Creek Boulevard/Filing 4 North Access:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2043.

6. **Coal Creek Boulevard/Filing 4 South Access:** This roundabout controlled intersection is expected to operate at an overall LOS "A" during both morning and afternoon peak-hours through 2043.

7. **N. 119th Street/West Full Movement Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "D" or better during both morning and afternoon peak-hours through 2043.

8. **West FMA/Local Road:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2043.

9. **Main Site Access/Local Road:** All movements at this unsignalized intersection are expected to operate at LOS "A" during both morning and afternoon peak-hours through 2043.

10. **Coal Creek Boulevard/Monroe Street:** This signalized intersection is expected to operate at an overall LOS "B" or better during both morning and afternoon peak-hours through 2043.

11. **Old County Line Road/West Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "A" during both morning and afternoon peak-hours through 2043.

12. **Old County Line Road/East Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "A" during both morning and afternoon peak-hours through 2043.

13. **Coal Creek Boulevard/Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "C" or better during both morning and afternoon peak-hours through 2043 with the following exception: The eastbound left-turn movement is expected to operate at LOS "E" during the 2043 afternoon peak-hour.

14. **N. 119th Street/Three-Quarter Movement Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "A" during both morning and afternoon peak-hours through 2030 and LOS "B" or better through 2043.

15. **SH 7 (Baseline Road)N. 119th Street:** This signalized intersection currently operates at an overall LOS "D" during the morning peak-hour and LOS "F" during the afternoon peak-hour. With the improvements planned by the City of Lafayette in the near term plus future recommended improvements, the intersection is expected to operate at LOS "C" during the morning peak-hour and LOS "D" during the afternoon peak-hour through 2043. There are individual left-turn movements that could operate at LOS "E" at peak times which is somewhat typical for the intersection of busy roads.

16. **SH 7 (Baseline Road)/Future Commercial RIRO:** All movements at this unsignalized intersection are expected to operate at LOS "A" during both morning and afternoon peak-hours through 2043.

17. **SH 7 (Baseline Road)/Coal Creek Boulevard:** This signalized intersection is expected to operate at an overall LOS "B" during the morning peak-hour and LOS "C" during the afternoon peak-hour through 2043. There are individual left-turn movements that could operate at LOS "E" at peak times which is somewhat typical for the intersection of busy roads.

18. **SH 7 (Baseline Road)/E. County Line Road:** Prior to traffic signal removal, this intersection operated at an overall LOS "B" during the morning peak-hour and LOS "C" during the afternoon peak-hour.

TRIP GENERATION

Table 2 shows the estimated average weekday, morning peak-hour, and afternoon peak-hour trip generation for the proposed site based on the rates from *Trip Generation, 11th Edition, 2021* by the Institute of Transportation Engineers (ITE) for the proposed land use.

The proposed land use is projected to generate about 5,942 vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 290 vehicles would enter and about 429 vehicles would exit the site. During the afternoon peak-hour, which generally occurs for one hour between 4:00 and 6:00 p.m., about 322 vehicles would enter and about 216 vehicles would exit.

TRIP DISTRIBUTION

Figure 6 shows the estimated directional distribution of the site-generated traffic volumes on the area roadways. The estimates were based on the location of the site with respect to the regional population, employment, and activity centers; and the site's proposed land use.

TRIP ASSIGNMENT

Figure 7 shows the estimated assignment of site-generated traffic volumes based on the directional distribution (from Figure 6) and the trip generation estimate in Table 2.

2030 AND 2043 TOTAL TRAFFIC

Figure 8a shows the estimated 2030 total traffic which is the sum of the 2030 background traffic volumes (from Figure 4a) and the site-generated traffic volumes (from Figure 7). Figure 8b shows the recommended 2030 lane geometry and traffic control.

Figure 9a shows the estimated 2043 total traffic which is the sum of 2043 background traffic volumes (from Figure 5a) and the site-generated traffic volumes (from Figure 7). Figure 9b shows the recommended 2043 lane geometry and traffic control.

PROJECTED LEVELS OF SERVICE

The intersections in Figures 8a through 9b were analyzed to determine the 2030 and 2043 total levels of service. Table 1 shows the level of service analysis results. The level of service reports are attached.

1. **Arapahoe Road/N. 119th Street:** This signalized intersection is expected to operate at an overall LOS "D" or better during both morning and afternoon peak-hours through 2043.

2. **Arapahoe Road/Quest Drive/Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "C" or better during both morning and afternoon peak-hours through 2043.

3. **Arapahoe Road/E. County Line Road/Coal Creek Boulevard:** This signalized intersection is expected to operate at an overall LOS "B" during both morning and afternoon peak-hours through 2043.

4. **Coal Creek Boulevard/Old County Line Road:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2043.

5. **Coal Creek Boulevard/Filing 4 North Access:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2043.

6. **Coal Creek Boulevard/Filing 4 South Access:** This roundabout controlled intersection is expected to operate at an overall LOS "B" or better during both morning and afternoon peak-hours through 2043.

7. **N. 119th Street/West Full Movement Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "D" or better during both morning and afternoon peak-hours through 2030. By 2043 this intersection is expected to be signalized and operate at an overall LOS "A" during both peak-hours.

8. **West FMA/Local Road:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2043.

9. **Main Site Access/Local Road:** All movements at this unsignalized intersection are expected to operate at LOS "A" during both morning and afternoon peak-hours through 2043.

10. **Coal Creek Boulevard/Monroe Street:** This signalized intersection is expected to operate at an overall LOS "B" or better during both morning and afternoon peak-hours through 2043.

11. **Old County Line Road/West Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "A" during both morning and afternoon peak-hours through 2043.

12. **Old County Line Road/East Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "A" during both morning and afternoon peak-hours through 2043.

13. **Coal Creek Boulevard/Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "D" or better during both morning and afternoon peak-hours through 2030. By 2043 this intersection is expected to be signalized and operate at an overall LOS "A" during both peak-hours.

14. **N. 119th Street/Three-Quarter Movement Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2043.

15. **SH 7 (Baseline Road)/N. 119th Street:** This signalized intersection is expected to operate at an overall LOS "D" or better during both morning and afternoon peak-hours through 2043. There are individual left-turn movements that could operate at LOS "E" at peak times which is somewhat typical for the intersection of busy roads.

16. **SH 7 (Baseline Road)/Future Commercial RIRO:** All movements at this unsignalized intersection are expected to operate at LOS "A" during both morning and afternoon peak-hours through 2043.

17. **SH 7 (Baseline Road)/Coal Creek Boulevard:** This signalized intersection is expected to operate at an overall LOS "D" or better during both morning and afternoon peak-hours through 2043. There are individual left-turn movements that could operate at LOS "E" at peak times which is somewhat typical for the intersection of busy roads.

18. **SH 7 (Baseline Road)/E. County Line Road:** This signalized intersection was analyzed only for the existing scenario when the traffic counts were conducted.

QUEUING ANALYSIS

Table 3 shows the projected 2030 and 2043 95th percentile queue lengths for the signalized intersections analyzed. Table 3 also shows the existing and proposed turn lane lengths.

RECOMMENDED IMPROVEMENTS

The recommended improvements are detailed in Table 4.

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

1. The site is projected to generate about 5,942 vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, about 290 vehicles would enter and about 429 vehicles would exit the site. During the afternoon peak-hour, about 322 vehicles would enter and about 216 vehicles would exit.

Projected Levels of Service

2. All movements at the unsignalized intersections analyzed are expected to operate at LOS "D" or better during both morning and afternoon peak-hours in 2043 assuming the planned and recommended improvements are implemented.

3. All of the signalized intersections analyzed are expected to operate at LOS "D" or better during both morning and afternoon peak-hours in 2043 assuming the planned and recommended improvements are implemented. There are individual left-turn movements that could operate at LOS "E" at peak times which is somewhat typical for the intersection of busy roads.

Conclusions

4. The impact of the Parkdale North development site can be accommodated by the existing and proposed roadway network with the planned and recommended improvements.

Recommended Improvements

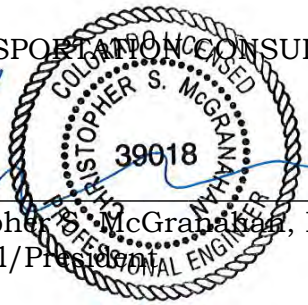
5. The recommended improvements are shown in Figures 8a through 9b and detailed in Tables 3 and 4.

* * * * *

We trust our findings will assist you in gaining approval of the proposed Parkdale North development. Please contact me if you have any questions or need further assistance.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.



By _____
Christopher S. McGranahan, PE
Principal/President

CSM/wc

Enclosures: Tables 1 - 4
Figures 1 - 9b
Traffic Count Reports
Level of Service Definitions
Level of Service Reports

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Table 1 (Page 1 of 4)
Intersection Levels of Service Analysis
Parkdale North
Erie, CO
LSC #221090; February, 2024

Intersection No. and Location	Traffic Control	Existing Traffic Level of Service AM	Existing Traffic Level of Service PM	2030 Background Traffic Level of Service AM	2030 Background Traffic Level of Service PM	2030 Total Traffic Level of Service AM	2030 Total Traffic Level of Service PM	2043 Background Traffic Level of Service AM	2043 Background Traffic Level of Service PM	2043 Total Traffic Level of Service AM	2043 Total Traffic Level of Service PM
1) Arapahoe Road/N. 119th Street	Signalized										
EB Left		C	C	C	B	C	B	C	C	C	C
EB Through/Right		C	D	C	D	C	D	--	--	--	--
EB Through		--	--	--	--	--	--	C	C	C	C
EB Right		--	--	--	--	--	--	D	D	D	D
WB Left		C	D	C	C	C	C	C	C	C	C
WB Through/Right		D	C	D	B	D	B	--	--	--	--
WB Through		--	--	--	--	--	--	D	C	D	C
WB Right		--	--	--	--	--	--	C	C	C	C
NB Left		B	B	B	C	B	D	B	C	C	C
NB Through/Right		B	B	B	D	C	D	--	--	--	--
NB Through		--	--	--	--	--	--	B	C	C	C
NB Right		--	--	--	--	--	--	B	C	C	C
SB Left		B	B	B	C	B	C	B	C	B	C
SB Through		B	B	C	D	C	D	B	C	B	C
SB Right		B	B	C	C	C	C	B	C	B	C
Entire Intersection Delay (sec /veh)		29.1	31.1	30.7	34.2	33.3	38.5	25.8	30.4	27.8	33.2
Entire Intersection LOS		C	C	C	C	C	D	C	C	C	C
2) Arapahoe Road/Quest Drive/Site Access	TWSC										
NB Left		--	--	--	--	C	C	--	--	C	C
NB Through/Right		--	--	--	--	A	A	--	--	A	A
EB Left		A	A	A	A	A	A	A	A	A	A
WB Left		--	--	--	--	A	A	--	--	A	A
SB Left		C	C	B	C	C	C	C	C	C	C
SB Through/Right		B	A	B	A	B	A	B	A	B	A
Critical Movement Delay (sec./veh)		15.2	16.3	14.6	15.3	16.8	20.2	15.3	16.6	17.8	22.8
3) Arapahoe Road/E. County Line Road/Coal Creek Boulevard	Signalized										
EB Left		C	C	D	D	D	D	D	D	D	D
EB Through/Right		C	B	D	C	D	C	D	D	D	D
WB Left/Through/Right		B	B	D	D	D	D	D	D	D	D
NB Left		A	A	A	A	A	A	A	A	A	A
NB Through/Right		A	A	A	A	A	A	A	A	A	A
SB Left		--	--	--	--	A	B	A	A	A	A
SB Left/Through		A	A	B	B	--	--	--	--	--	--
SB Through		--	--	--	--	A	B	A	A	A	B
SB Right		A	A	A	B	A	B	A	A	A	A
Entire Intersection Delay (sec /veh)		7.2	10.7	13.4	16.8	13.0	15.8	12.1	15.5	12.4	15.8
Entire Intersection LOS		A	B	B	B	B	B	B	B	B	B
4) Coal Creek Boulevard/Old County Line Road	TWSC										
NB Left		--	--	--	--	A	A	--	--	A	A
NWB Approach		--	--	B	B	B	B	B	B	B	B
SEB Approach		--	--	--	--	B	B	--	--	B	B
SB Left		--	--	A	A	A	A	A	A	A	A
Critical Movement Delay (sec./veh)		--	--	10.7	11.8	12.2	13.3	11.3	13.0	13.2	14.3

Table 1 (Page 2 of 4)
Intersection Levels of Service Analysis
Parkdale North
Erie, CO
LSC #221090; February, 2024

Intersection Location	Traffic Control	Existing Traffic Level of Service AM	Existing Traffic Level of Service PM	2030 Background Traffic Level of Service AM	2030 Background Traffic Level of Service PM	2030 Total Traffic Level of Service AM	2030 Total Traffic Level of Service PM	2043 Background Traffic Level of Service AM	2043 Background Traffic Level of Service PM	2043 Total Traffic Level of Service AM	2043 Total Traffic Level of Service PM
5) Coal Creek Boulevard/Filing 4 North Access	TWSC										
NB Right		--	--	B	B	B	B	B	B	B	B
SB Right		--	--	--	--	B	B	--	--	B	B
Critical Movement Delay (sec./veh)		--	--	10.0	10.4	10.3	10.6	10.3	10.9	10.6	11.2
6) Coal Creek Boulevard/Filing 4 South Access	Roundabout										
EB Approach		--	--	--	--	A	A	A	A	A	A
WB Approach		--	--	A	A	A	A	A	A	A	A
NB Approach		--	--	A	A	A	A	A	A	A	B
SB Approach		--	--	A	A	A	A	A	A	A	B
Entire Intersection Delay (sec /veh)		--	--	5.8	6.7	7.1	8.9	6.5	8.2	8.1	11.3
Entire Intersection LOS		--	--	A	A	A	A	A	A	A	B
7) N. 119th Street/West Full Movement Site Access	TWSC										
WB Left		--	--	C	C	D	D	B	D	--	--
WB Right		--	--	B	A	B	B	B	B	--	--
SB Left		--	--	A	A	A	A	A	B	--	--
Critical Movement Delay (sec./veh)		--	--	22.1	22.0	26.3	25.6	13.0	31.9	--	--
	Signalized										
WB Left		--	--	--	--	--	--	--	--	D	D
WB Right		--	--	--	--	--	--	--	--	D	D
NB Through		--	--	--	--	--	--	--	--	A	A
NB Right		--	--	--	--	--	--	--	--	A	A
SB Left		--	--	--	--	--	--	--	--	A	A
SB Through		--	--	--	--	--	--	--	--	A	A
Entire Intersection Delay (sec /veh)		--	--	--	--	--	--	--	--	7.9	8.5
Entire Intersection LOS		--	--	--	--	--	--	--	--	A	A
8) West FMA/Local Road	TWSC										
NB Approach		--	--	A	B	B	B	A	B	B	B
EB Approach		--	--	A	A	A	A	A	A	A	A
WB Approach		--	--	A	A	A	A	A	A	A	A
SB Approach		--	--	A	A	A	A	A	A	A	A
Critical Movement Delay (sec./veh)		--	--	9.7	10.7	10.2	11.3	9.7	10.7	10.1	11.3
9) Main Site Access/Local Road	TWSC										
NB Approach		--	--	A	A	A	A	A	A	A	A
EB Approach		--	--	A	A	A	A	A	A	A	A
WB Approach		--	--	A	A	A	A	A	A	A	A
SB Approach		--	--	A	A	A	A	A	A	A	A
Critical Movement Delay (sec./veh)		--	--	9.1	9.6	9.8	9.8	9.1	9.6	9.8	9.8

Table 1 (Page 3 of 4)
Intersection Levels of Service Analysis
Parkdale North
Erie, CO
LSC #221090; February, 2024

Intersection Location	Traffic Control	Existing Traffic Level of Service AM	Existing Traffic Level of Service PM	2030 Background Traffic Level of Service AM	2030 Background Traffic Level of Service PM	2030 Total Traffic Level of Service AM	2030 Total Traffic Level of Service PM	2043 Background Traffic Level of Service AM	2043 Background Traffic Level of Service PM	2043 Total Traffic Level of Service AM	2043 Total Traffic Level of Service PM
10) Coal Creek Boulevard/Monroe Street	Signalized										
EB Left		--	--	D	D	D	D	D	D	D	D
EB Through		--	--	D	D	D	D	D	D	D	D
EB Right		--	--	D	D	D	D	D	D	D	D
WB Left		--	--	D	D	D	D	D	D	D	D
WB Through/Right		--	--	D	D	D	D	D	D	D	D
NB Left		--	--	A	A	A	A	A	A	A	A
NB Through		--	--	A	A	A	A	A	A	A	A
NB Right		--	--	A	A	A	A	A	A	A	A
SB Left		--	--	A	A	A	A	A	A	A	A
SB Through		--	--	A	A	A	A	A	A	A	A
SB Right		--	--	A	A	A	A	A	A	A	A
Entire Intersection Delay (sec /veh)		--	--	10.7	8.9	10.3	8.7	10.5	9.0	8.1	6.1
Entire Intersection LOS		--	--	B	A	B	A	B	A	A	A
11) Old County Line Road/West Site Access	TWSC										
EB Left		--	--	A	A	A	A	A	A	A	A
SB Approach		--	--	A	A	A	A	A	A	A	A
Critical Movement Delay (sec./veh)		--	--	8.6	8.6	8.6	8.6	8.7	8.7	8.7	8.7
12) Old County Line Road/East Site Access	TWSC										
EB Left		--	--	A	A	A	A	A	A	A	A
SB Approach		--	--	A	A	A	A	A	A	A	A
Critical Movement Delay (sec./veh)		--	--	8.5	8.5	8.5	8.5	8.5	8.6	8.5	8.6
13) Coal Creek Boulevard/Site Access	TWSC										
NB Left		--	--	A	A	A	A	A	A	--	--
EB Left		--	--	C	C	C	D	C	E	--	--
EB Right		--	--	A	A	A	A	A	B	--	--
Critical Movement Delay (sec./veh)		--	--	16.2	20.5	21.7	27.2	19.4	44.4	--	--
	Signalized										
EB Left		--	--	--	--	--	--	--	--	D	D
EB Right		--	--	--	--	--	--	--	--	D	D
NB Left		--	--	--	--	--	--	--	--	A	A
NB Through		--	--	--	--	--	--	--	--	A	A
SB Through		--	--	--	--	--	--	--	--	A	A
SB Right		--	--	--	--	--	--	--	--	A	A
Entire Intersection Delay (sec /veh)		--	--	--	--	--	--	--	--	4.4	6.7
Entire Intersection LOS		--	--	--	--	--	--	--	--	A	A
14) N. 119th Street/Three-Quarter Movement Site Access	TWSC										
WB Left	Three-	--	--	A	A	A	A	A	B	A	B
SB Right	Quarter	--	--	A	A	A	A	A	A	A	A
Critical Movement Delay (sec./veh)		--	--	8.9	9.1	8.9	9.1	9.3	10.6	9.3	10.6

Table 1 (Page 4 of 4)
Intersection Levels of Service Analysis
Parkdale North
Erie, CO
LSC #221090; February, 2024

Intersection Location	Traffic Control	Existing Traffic Level of Service AM	Existing Traffic Level of Service PM	2030 Background Traffic Level of Service AM	2030 Background Traffic Level of Service PM	2030 Total Traffic Level of Service AM	2030 Total Traffic Level of Service PM	2043 Background Traffic Level of Service AM	2043 Background Traffic Level of Service PM	2043 Total Traffic Level of Service AM	2043 Total Traffic Level of Service PM
15) SH 7 (Baseline Road)/N. 119th Street	Signalized										
EB Left		C	B	B	D	B	E	D	E	D	E
EB Through/Right		C	C	--	--	--	--	--	--	--	--
EB Through		--	--	B	C	C	C	C	C	C	C
EB Right		--	--	B	B	B	B	C	C	C	C
WB Left		C	C	D	D	D	E	D	D	E	D
WB Through/Right		D	C	--	--	--	--	--	--	--	--
WB Through		--	--	C	D	C	D	B	D	B	D
WB Right		--	--	B	B	B	B	B	C	B	C
NB Left/Through		D	F	--	--	--	--	--	--	--	--
NB Left		--	--	C	C	C	C	D	D	D	D
NB Through		--	--	D	D	D	D	D	D	D	D
NB Right		D	F	A	A	A	A	A	A	A	A
SB Left/Through/Right		D	D	--	--	--	--	--	--	--	--
SB Left		--	--	C	E	C	E	D	E	D	E
SB Through		--	--	D	C	D	C	D	C	D	C
SB Right		--	--	A	A	A	A	A	A	A	A
Entire Intersection Delay (sec /veh)		38.2	103.6	32.5	39.5	33.8	44.7	33.9	43.2	35.9	45.6
Entire Intersection LOS		D	F	C	D	C	D	C	D	D	D
16) SH 7 (Baseline Road)/Future Commercial RIRO	TWSC										
SB Right		--	--	A	A	A	A	A	A	A	A
Critical Movement Delay (sec./veh)		--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17) SH 7 (Baseline Road)/Coal Creek Boulevard	Signalized										
EB Left		--	--	D	D	D	E	D	D	D	E
EB Through		--	--	A	A	A	A	A	A	A	A
WB Through		--	--	B	D	C	D	B	D	B	D
WB Right		--	--	B	B	B	B	B	C	B	C
SB Left		--	--	D	D	D	E	D	D	D	D
SB Right		--	--	A	A	A	A	A	A	A	A
Entire Intersection Delay (sec /veh)		--	--	19.5	30.4	23.6	35.7	17.0	28.3	20.6	33.0
Entire Intersection LOS		--	--	B	C	C	D	B	C	C	C
18) SH 7 (Baseline Road)/E. County Line Road	Signalized										
EB Left		A	C	--	--	--	--	--	--	--	--
EB Through		A	B	--	--	--	--	--	--	--	--
WB Through		B	C	--	--	--	--	--	--	--	--
WB Right		A	B	--	--	--	--	--	--	--	--
SB Left		D	D	--	--	--	--	--	--	--	--
SB Right		D	D	--	--	--	--	--	--	--	--
Entire Intersection Delay (sec /veh)		17.2	22.5	--	--	--	--	--	--	--	--
Entire Intersection LOS		B	C	--	--	--	--	--	--	--	--

Table 2
ESTIMATED TRAFFIC GENERATION
Parkdale North
Erie, CO
LSC #221090; February, 2024

Traffic Analysis Zone	Trip Generating Category	Quantity	Trip Generation Rates [1] Average Weekday	AM Peak-Hour In	AM Peak-Hour Out	PM Peak-Hour In	PM Peak-Hour Out	Vehicle-Trips Generated Average Weekday	AM Peak-Hour In	AM Peak-Hour Out	PM Peak-Hour In	PM Peak-Hour Out
PREVIOUSLY PROPOSED LAND USE												
Parkdale Preliminary Plat #1 (Trips captured in existing traffic and background traffic)												
1	Paired Homes [2]	114 DU [3]	7.20	0.120	0.360	0.336	0.234	821	14	41	38	27
2	Single-Family Detached Housing [4]	64 DU [3]	9.43	0.182	0.518	0.592	0.348	604	12	33	38	22
3	Single-Family Detached Housing [4]	116 DU [3]	9.43	0.182	0.518	0.592	0.348	1,094	21	60	69	40
4	Single-Family Detached Housing [4]	161 DU [3]	9.43	0.182	0.518	0.592	0.348	1,518	29	83	95	56
5	Single-Family Detached Housing [4]	34 DU [3]	9.43	0.182	0.518	0.592	0.348	321	6	18	20	12
6	Single-Family Detached Housing [4]	106 DU [3]	9.43	0.182	0.518	0.592	0.348	1,000	19	55	63	37
		595 DU [3]	**Total Parkdale Preliminary Plat #1 =**					**5,358**	**101**	**290**	**323**	**194**
Parkdale Preliminary Plat #2 (Trips captured in existing traffic and background traffic)												
7	Single-Family Attached Housing [2]	96 DU [3]	7.20	0.120	0.360	0.336	0.234	691	12	35	32	22
8	Single-Family Detached Housing [4]	107 DU [3]	9.43	0.182	0.518	0.592	0.348	1,009	19	55	63	37
		203 DU [3]	**Total Parkdale Preliminary Plat #2 =**					**1,700**	**31**	**90**	**95**	**59**
Parkdale Preliminary Plat #3 (Trips captured in background traffic)												
9	Single-Family Detached Housing [4]	94 DU [3]	9.43	0.182	0.518	0.592	0.348	**886**	**17**	**49**	**56**	**33**
CURRENTLY PROPOSED LAND USE												
Parkdale Preliminary Plat #4 (Trips captured in site-generated traffic)												
10	Single-Family Detached Housing [4]	399 DU [3]	9.43	0.182	0.518	0.592	0.348	3,763	73	207	236	139
11	Multifamily Residential [2]	145 DU [3]	7.20	0.120	0.360	0.336	0.234	1,044	17	52	49	34
12	Elementary School [5]	500 Students	2.27	0.400	0.340	0.074	0.086	1,135	200	170	37	43
		544 DU [3]	**Total Parkdale Preliminary Plat #4 =**					**5,942**	**290**	**429**	**322**	**216**
		1436 DU [3]					**TOTAL =**	**13,886**	**439**	**858**	**796**	**502**

Notes:

(1) Source: *Trip Generation*, Institute of Transportation Engineers, 11th Edition, 2021

(2) ITE Land Use No. 215 - Single-Family Attached Housing

(3) DU - Dwelling Units

(4) ITE Land Use No. 210 - Single-Family Detached Housing

(5) ITE Land Use No. 520 - Elementary School

Table 3 (Page 1 of 2)
95th Percentile Queue Lengths
Parkdale North
Erie, CO
LSC #221090; February, 2024

Intersection No. & Location	Existing Lane Lengths (feet)	Proposed Lane Lengths (feet)	95th Percentile Queue Length [1] 2030 Total AM Peak (feet)	95th Percentile Queue Length [1] 2030 Total PM Peak (feet)	95th Percentile Queue Length [1] 2043 Total AM Peak (feet)	95th Percentile Queue Length [1] 2043 Total PM Peak (feet)
1) Arapahoe Road/N. 119th Street						
EB Left	155	155	24	59	38	148
EB Through	--	--	221	764	80	181
EB Right	--	150	--	--	61	145
WB Left	105	105	53	30	72	52
WB Through	--	--	520	165	198	122
WB Right	--	100	--	--	0	0
NB Left	325	325	116	m175	211	67
NB Through	--	--	134	m300	87	210
NB Right	--	150	--	--	11	33
SB Left	90	90	26	46	26	40
SB Through	--	--	293	226	217	189
SB Right	125	125	43	35	55	57
3) Arapahoe Road/E. County Line Road/Coal Creek Boulevard						
EB Left	260	2 @ 200	127	m146	53	65
EB Through/Right	--	--	24	m14	3	2
WB Left/Through/Right	--	--	11	11	10	11
NB Left	550	200	99	51	98	57
NB Through/Right	--	--	56	90	66	112
SB Left	--	100	3	3	3	3
SB Through	--	--	96	108	118	135
SB Right	Continuous	150	18	34	22	19
7) N. 119th Street/West Full Movement Site Access						
WB Left	200	200	--	--	103	91
WB Right	--	--	--	--	41	35
NB Through	--	--	--	--	100	m126
NB Right	225	225	--	--	m10	m0
SB Left	325	325	--	--	5	m9
SB Through	--	--	--	--	26	37
10) Coal Creek Boulevard/Monroe Street						
EB Left	200	200	25	20	25	20
EB Through	--	--	6	6	6	6
EB Right	200	200	5	0	5	0
WB Left	575		62	59	69	69
WB Through/Right	--	--	14	14	14	14
NB Left	275	275	15	m14	12	12
NB Through	--	--	73	m82	55	81
NB Right	Free	Free	m0	m0	0	0
SB Left	275	275	4	4	4	4
SB Through	--	--	133	132	154	166
SB Right	Continuous	150	0	0	0	0

m = metered by adjacent signals

Table 3 (Page 2 of 2)
95th Percentile Queue Lengths
Parkdale North
Erie, CO
LSC #221090; February, 2024

Intersection No. & Location	Existing Lane Lengths (feet)	Proposed Lane Lengths (feet)	95th Percentile Queue Length (1) 2030 Total AM Peak (feet)	95th Percentile Queue Length (1) 2030 Total PM Peak (feet)	95th Percentile Queue Length (1) 2043 Total AM Peak (feet)	95th Percentile Queue Length (1) 2043 Total PM Peak (feet)
13) Coal Creek Boulevard/Site Access						
EB Left	--	150	--	--	48	106
EB Right	--	--	--	--	43	51
NB Left	275	275	--	--	m2	m5
NB Through	--	--	--	--	36	m54
SB Through	--	--	--	--	55	52
SB Right	250	250	--	--	m1	0
15) SH 7 (Baseline Road)/N. 119th Street (1)						
EB Left	250	2 @ 400	42	145	74	171
EB Through	--	--	111	514	177	375
EB Right	--	380	0	0	0	0
WB Left	225	2 @ 400	m173	m96	267	m138
WB Through	--	--	m534	m670	71	m583
WB Right	--	380	m0	m7	m0	m106
NB Left	--	2 @ 150	37	48	50	62
NB Through	--	--	148	298	101	257
NB Right	100	150	0	0	0	0
SB Left	--	2 @ 380	107	m251	95	277
SB Through	--	--	327	m152	247	112
SB Right	--	380	0	m0	0	0
17) SH 7 (Baseline Road)/Coal Creek Boulevard						
EB Left	1 @ 220; 1 @ 600	1 @ 220; 1 @ 600	53	m174	m65	m215
EB Through	--	--	229	m453	25	m413
WB Through	--	--	777	1000	440	802
WB Right	375	375	50	39	53	51
SB Left	2 @ 335	2 @ 335	195	271	229	310
SB Right	335	335	3	0	4	0

m = metered by adjacent signals

(1) The 2030 recommended improvements for Intersection #15 are based on the proposed improvements provided by the City of Lafayette.

Table 4 (Page 1 of 2)
Recommended Improvements to Public Street Network
Parkdale North
Erie, CO
LSC #221090; February, 2024

Inter-section No.	Intersection Location	2030 Recommended Improvements [1]	Responsibility	2043 Recommended Improvements [1]	Responsibility
#1	Arapahoe Road/N. 119th Street	None		EB and WB lanes through intersection - add one lane in each direction	Others
				EB RT = construct lane - 150 feet + 12:1 transition taper	Others
				WB RT = construct lane - 100 feet + 12:1 transition taper	Others
				NB and SB lanes through intersection - add one lane in each direction	Others
				NB RT = construct lane - 150 feet + 12:1 transition taper	Others
#2	Arapahoe Road/Quest Drive/Site Access	Add EB through lane adjacent to site	Applicant	None	
		WB LT = construct lane - 100 feet + 12:1 transition taper	Applicant		
		NB LT = construct lane - 100 feet + 12:1 transition taper	Applicant		
#3	Arapahoe Road/E. County Line Road/Coal Creek Boulevard	Potentially stripe SB LT lane within existing painted median	Others	EB LT = add second lane - 2 @ 200 feet + 12:1 transition taper	Applicant/Others
		NB LT = construct lane - 200 feet + 12:1 transition taper	Applicant	SB RT = construct lane = 150 feet + 12:1 transition taper	Applicant/Others
				NB and SB lanes through intersection - add one lane in each direction	Applicant/Others
#4	Coal Creek Boulevard/Old County Line Road	NB LT = construct lane - 150 feet + 12:1 transition taper	Applicant	None	
		SB LT = construct lane - 150 feet + 12:1 transition taper	Applicant		
#5	Coal Creek Boulevard/Filing 4 North Access	EB RT = construct lane - 150 feet + 12:1 transition taper	Applicant	None	
#6	Coal Creek Boulevard/Filing 4 South Access	Construct modern roundabout with 2 north-south lanes and 1 east-west lane	Applicant	None	
#7	N. 119th Street/West Full Movement Site Access	NB RT = construct lane - 225 feet + 12:1 transition taper	Completed	Traffic signal control when warranted	Applicant
		SB LT = construct lane - 325 feet + 12:1 transition taper	Completed		
		WB LT = construct lane - 200 feet + 12:1 transition taper	Completed		
#8	West FMA/Local Road	None		None	
#9	Main Site Access/Local Road	None		None	
#10	Coal Creek Boulevard/Monroe Street	EB LT = 200 feet + 10:1 transition taper	Completed	None	
		EB RT = 200 feet + 10:1 transition taper	Completed		
		WB LT = 150 feet + 10:1 transition taper (modified after CCB completion)	Others		
		NB LT = 275 feet + 12:1 transition taper	Completed		
		NB RT = Free Right	Completed		
		SB LT = 275 feet + 12:1 transition taper	Completed		
		SB RT = 150 feet + 12:1 transition taper	Completed		
		Traffic signal control	Completed		
		Traffic signal modification after CCB completion to north	Applicant		

(1) A transition taper of 18.5:1 is recommended for SH 7 (Baseline Road) based on a posted speed limit of 55 mph. An appropriate redirect taper for 55 mph is 55:1
A transition taper of 12:1 is recommended for N. 119th Street, Coal Creek Boulevard, and Arapahoe Road based on Town requirements. An appropriate redirect taper for 45 mph is 45:1 and for 40 mph is 40:1.
A transition taper of 10:1 is recommended for all other roadways (collector and local roads). An appropriate redirect taper for 35 mph is 20:1
Some of the right-turn deceleration and acceleration lane termini are close enough that a continuous right-turn lane may be appropriate between intersections.

Table 4 (Page 2 of 2)
Recommended Improvements to Public Street Network
Parkdale North
Erie, CO
LSC #221090; February, 2024

Inter-section No.	Intersection Location	2030 Recommended Improvements [1]	Responsibility	2043 Recommended Improvements [1]	Responsibility
#11	Old County Line Road/West Site Access	Potentially convert to full movement once Coal Creek Boulevard is completed between SH 7 (Baseline Road) and Arapahoe Road	Applicant	None	
		EB LT = construct lane - 100 feet + 10:1 transition taper	Applicant		
#12	Old County Line Road//East Site Access	EB LT = construct lane - 350 feet + 12:1 transistion taper	Completed	None	
#13	Coal Creek Boulevard/Site Access	NB LT = construct lane - 300 feet + 12:1 transition taper	Completed	Traffic signal control when warranted	Applicant
		SB RT = construct lane - 250 feet + 12:1 transition taper	Completed		
		EB LT = construct lane - 150 feet + 10:1 transistion taper	Applicant		
#14	N. 119th Street/Three-Quarter Movement Site Access	NB RT = construct lane - 150 feet + 12:1 transition taper	Applicant	None	
		SB LT = construct lane - 150 feet + 12:1 transition taper	Applicant		
#15	SH 7 (Baseline Road)/N. 119th Street	EB RT = construct lane - 380 feet + 18.5:1 transition taper	Lafayette	EB LT - add second lane	Others
		WB LT - add second lane - 2 @ 400 feet + 18.5:1 transition taper	Lafayette	NB LT - add second lane	Others
		WB RT = construct lane - 380 feet + 18.5:1 transition taper	Lafayette	SB LT - add second lane	Others
		NB LT = construct lane - 150 feet + 12:1 transition taper	Lafayette	Traffic signal modification	Others
		Traffic signal modification	Lafayette		
		SB LT = construct lane - 380 feet + 12:1 transition taper	Lafayette		
		SB RT = construct lane - 380 feet + 12:1 transition taper	Lafayette		
		NB to EB Accel lane = construct lane - 740 feet + 18.5:1 transition taper	Lafayette		
		SB to WB Accel lane = construct lane - 740 feet + 18.5:1 transition taper	Lafayette		
#16	SH 7 (Baseline Road)/Future Commercial RIRO	None		WB RT = construct lane - 380 feet + 18.5:1 transition taper	Commercial Developer
				SB to WB Accel lane - 740 feet + 18.5:1 transition taper	Commercial Developer
#17	SH 7 (Baseline Road)/Coal Creek Boulevard	All improvements are currently made			
#18	SH 7 (Baseline Road)/E. County Line Road	All improvements are currently made			

(1) A transition taper of 18.5:1 is recommended for SH 7 (Baseline Road) based on a posted speed limit of 55 mph. An appropriate redirect taper for 55 mph is 55:1
A transition taper of 12:1 is recommended for N. 119th Street, Coal Creek Boulevard, and Arapahoe Road based on Town requirements. An appropriate redirect taper for 45 mph is 45:1 and for 40 mph is 40:1.
A transition taper of 10:1 is recommended for all other roadways (collector and local roads). An appropriate redirect taper for 35 mph is 20:1
Some of the right-turn deceleration and acceleration lane termini are close enough that a continuous right-turn lane may be appropriate between intersections.

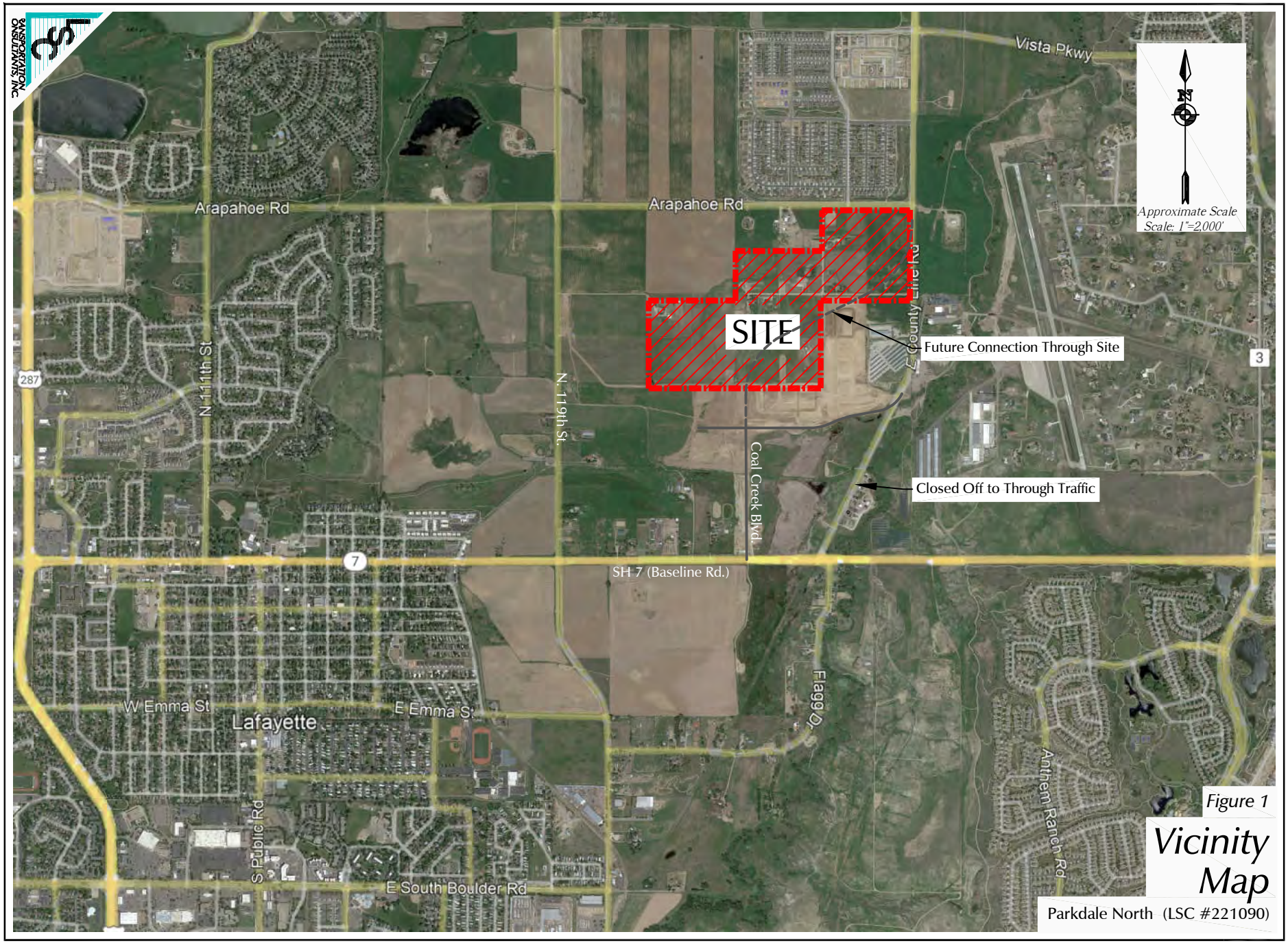


Figure 1

Vicinity Map

Parkdale North (LSC #221090)

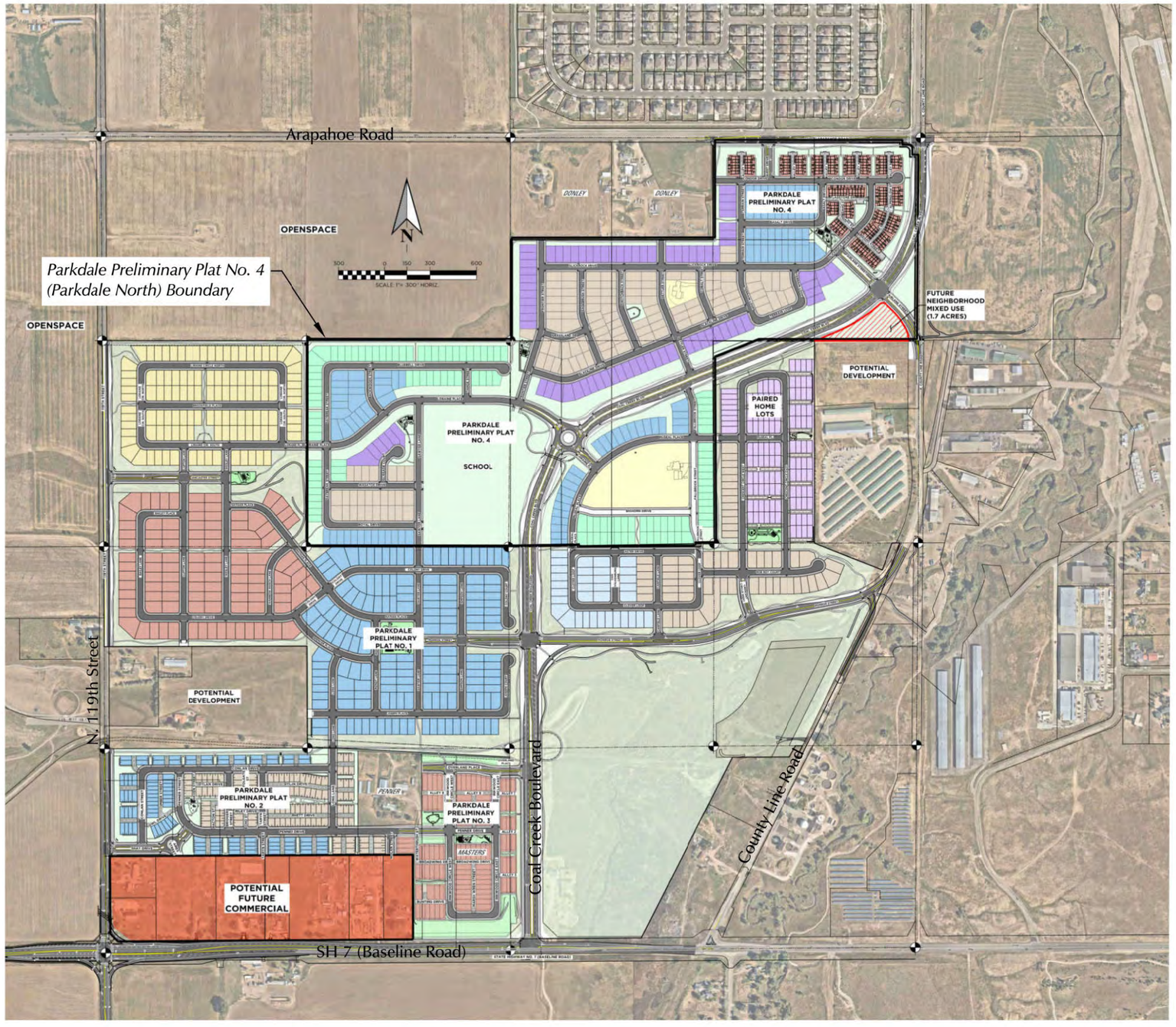


Figure 2a

Overall Parkdale Site Plan

Parkdale North (LSC #221090)

LSC TRANSPORTATION CONSULTANTS, INC.

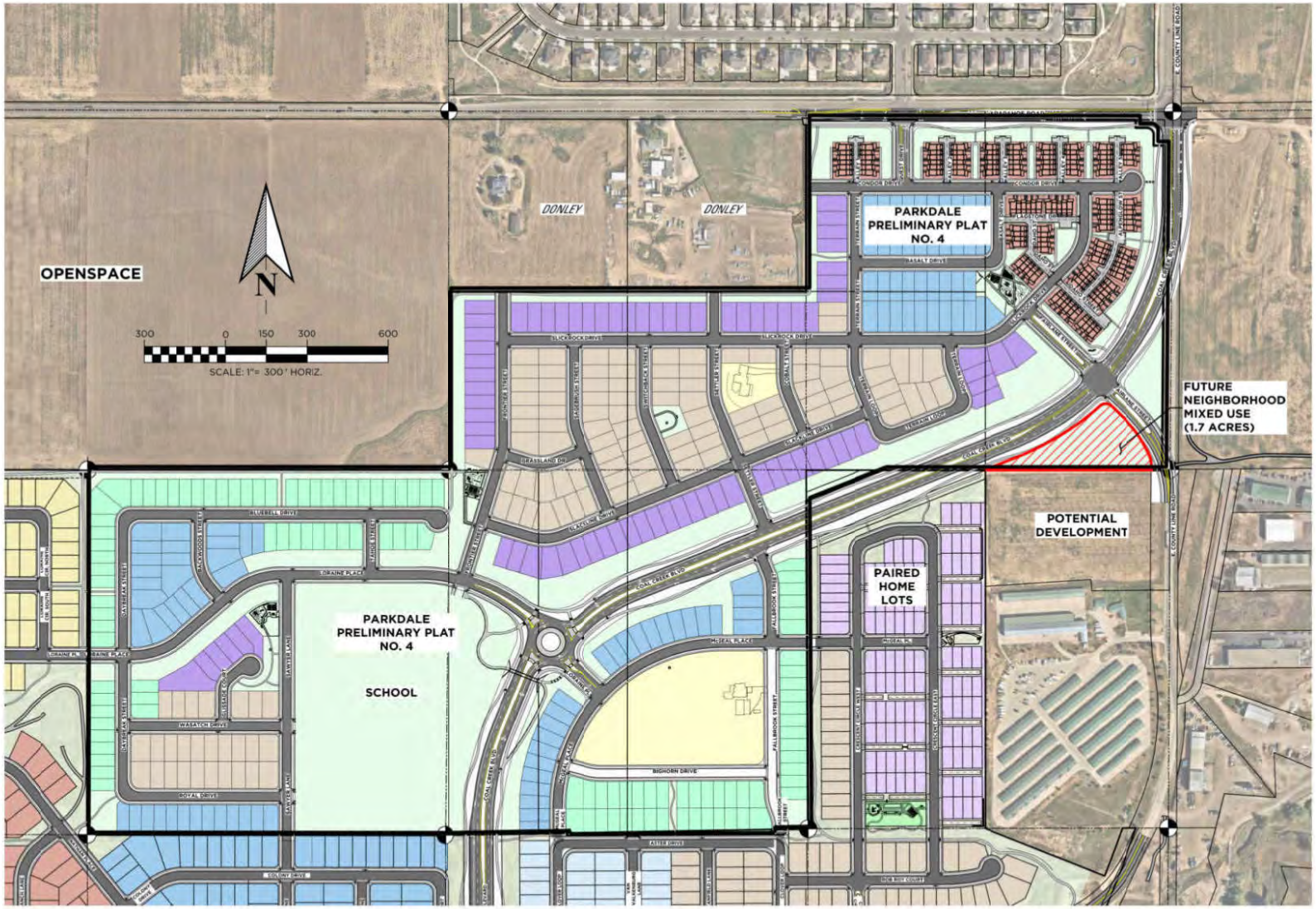
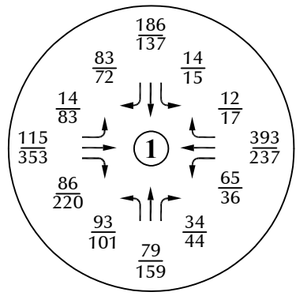
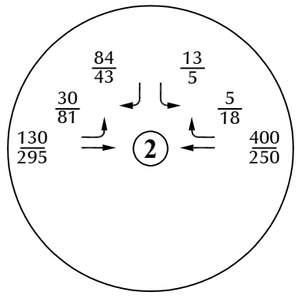


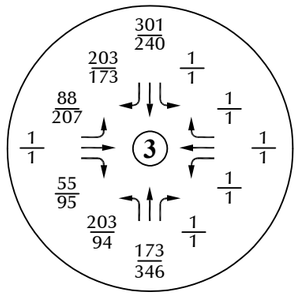
Figure 2b

Parkdake Preliminary Plat No. 4 (Parkdale North) Site Plan

Parkdale North (LSC #221090)







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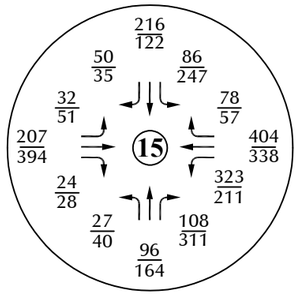

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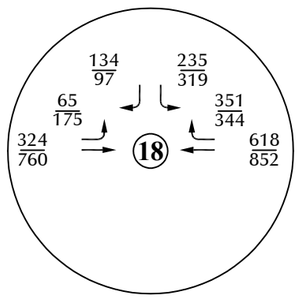


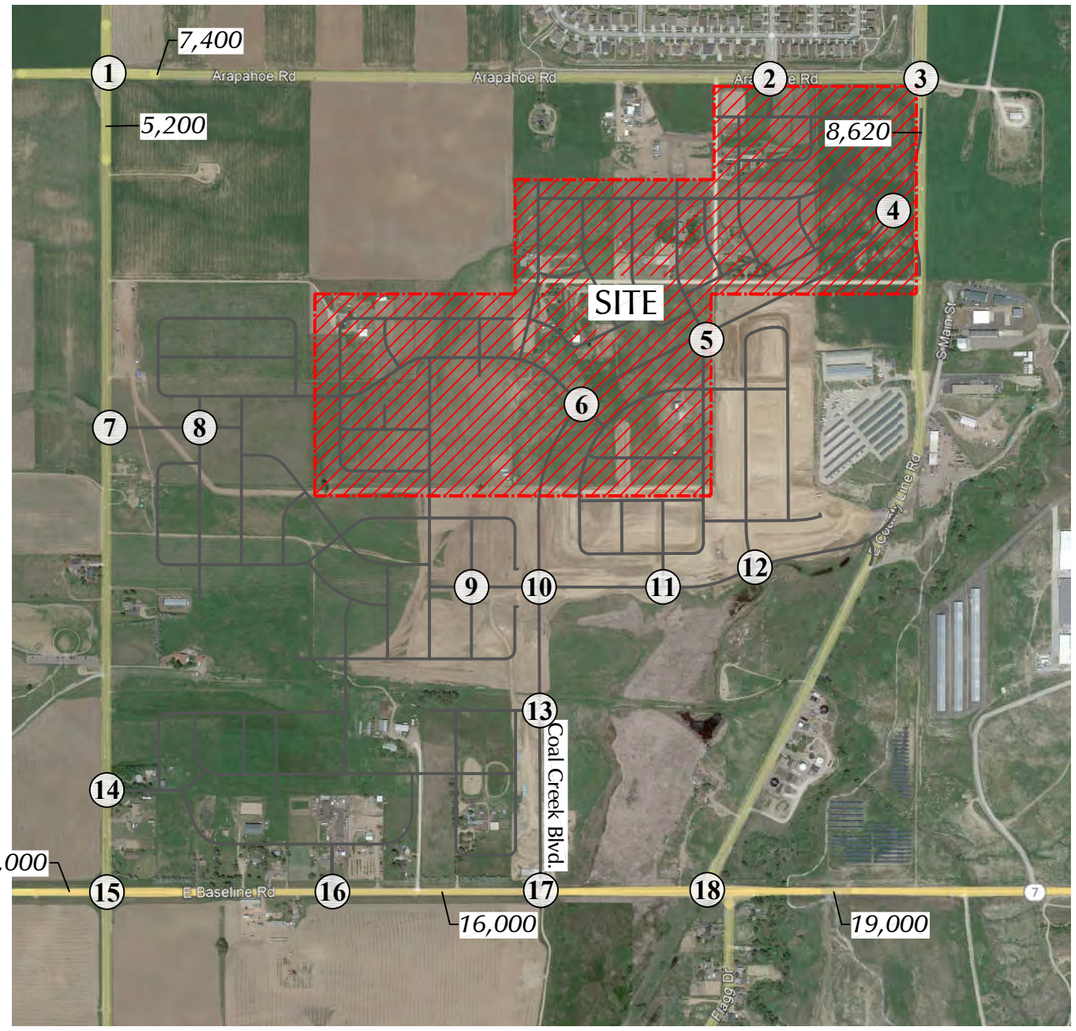
LEGEND:

$\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$

1,000 = Average Daily Traffic

N

Approximate Scale
Scale: 1"=1,000'



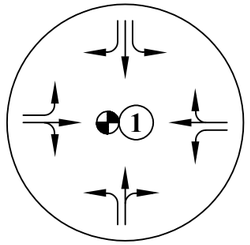
Notes:
1. Daily volumes on SH 7 are from the attached CDOT SH 7 Straight Line Diagram. The traffic count at Intersection #18 was taken prior to the opening of Intersection #17.
2. The bold dashed line shows the recently opened roadway section which include traffic signal control at Intersections #10 and #17.

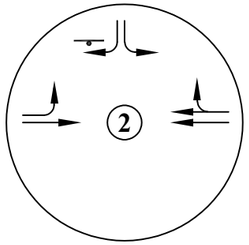
Figure 3a

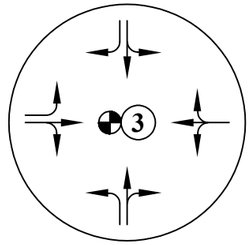
Existing Traffic

Parkdale North (LSC #221090)

TRANSPORTATION CONSULTANTS, INC.







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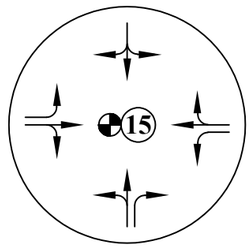

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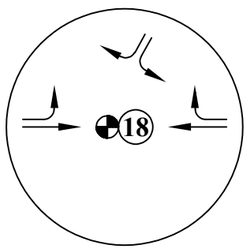
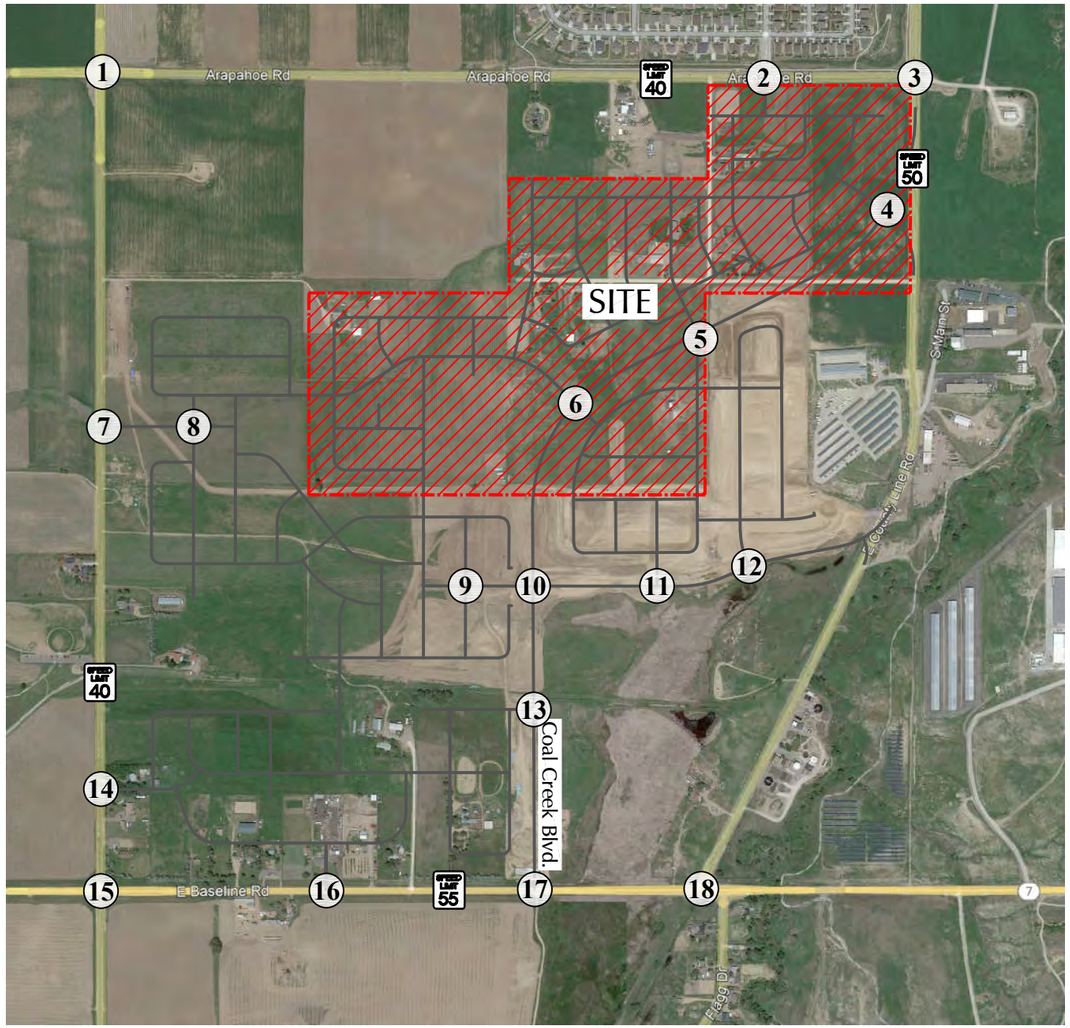


LEGEND:
= Stop Sign
= Traffic Signal
= Speed Limit

Approximate Scale
Scale: 1"=1,000'



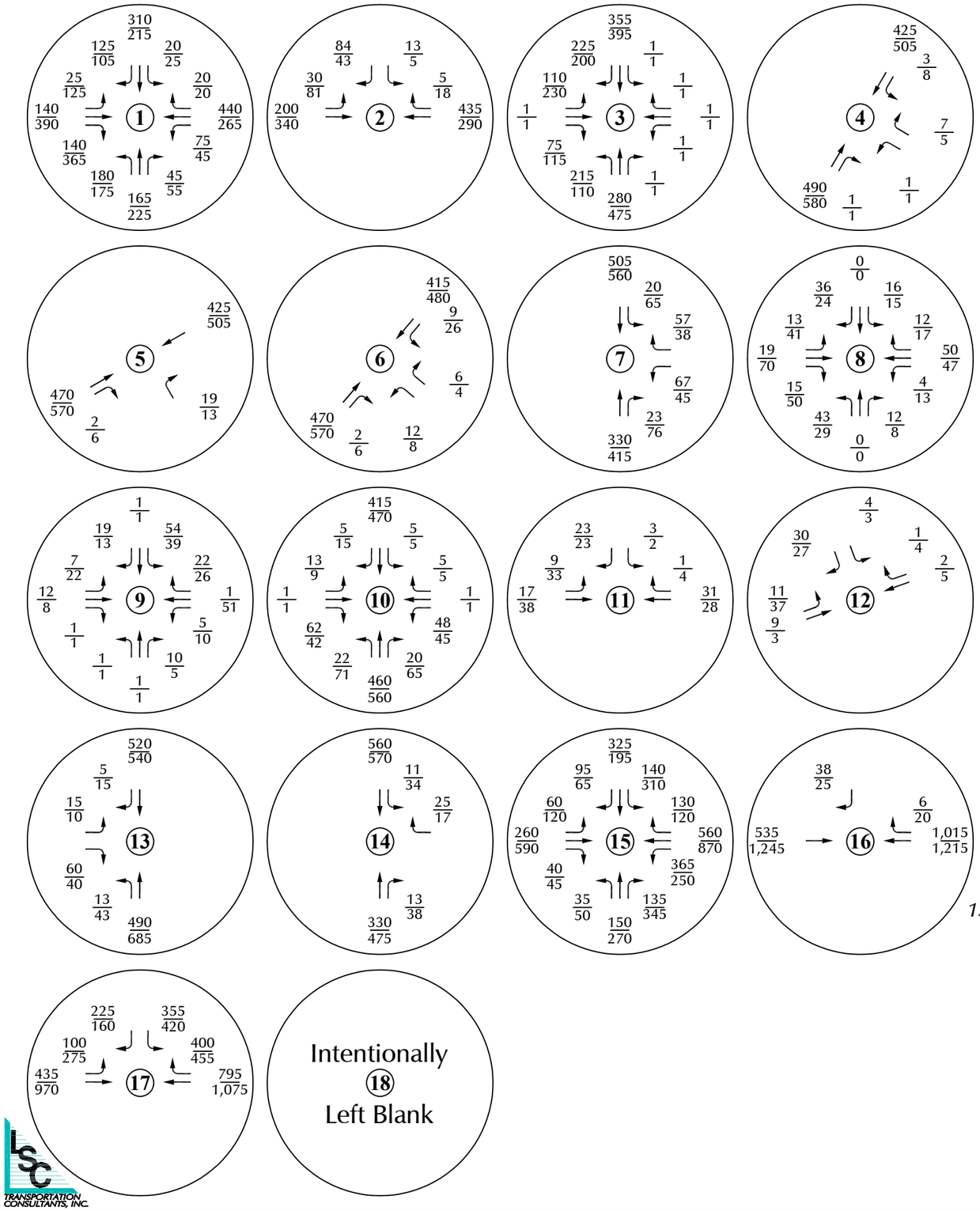
Note: The bold dashed line shows the recently opened roadway section which include traffic signal control at Intersections #10 and #17.

Figure 3b

Existing Lane Geometry and Traffic Control

Parkdale North (LSC #221090)

LSC TRANSPORTATION CONSULTANTS, INC.



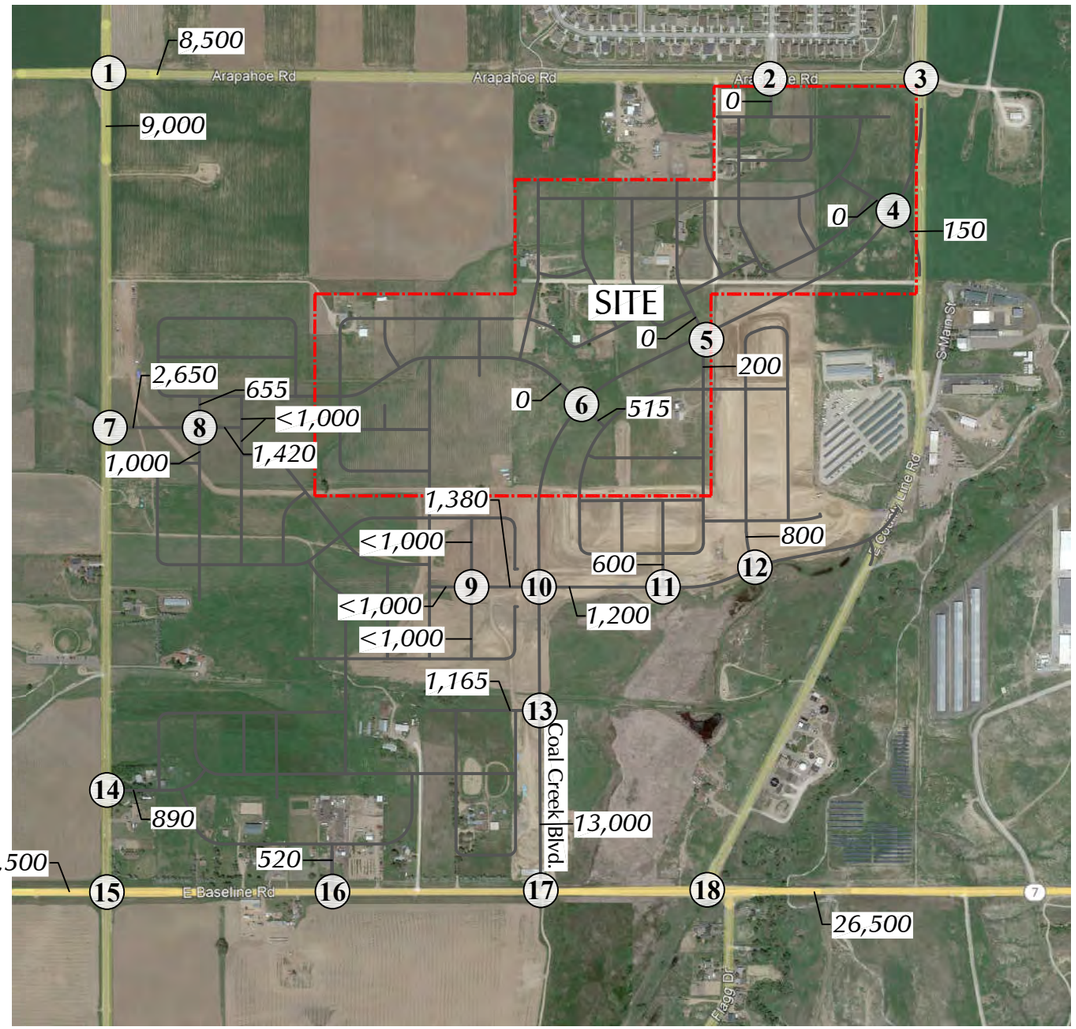
LEGEND:

$\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$

1,000 = Average Daily Traffic

N

Approximate Scale
Scale: 1"=1,000'



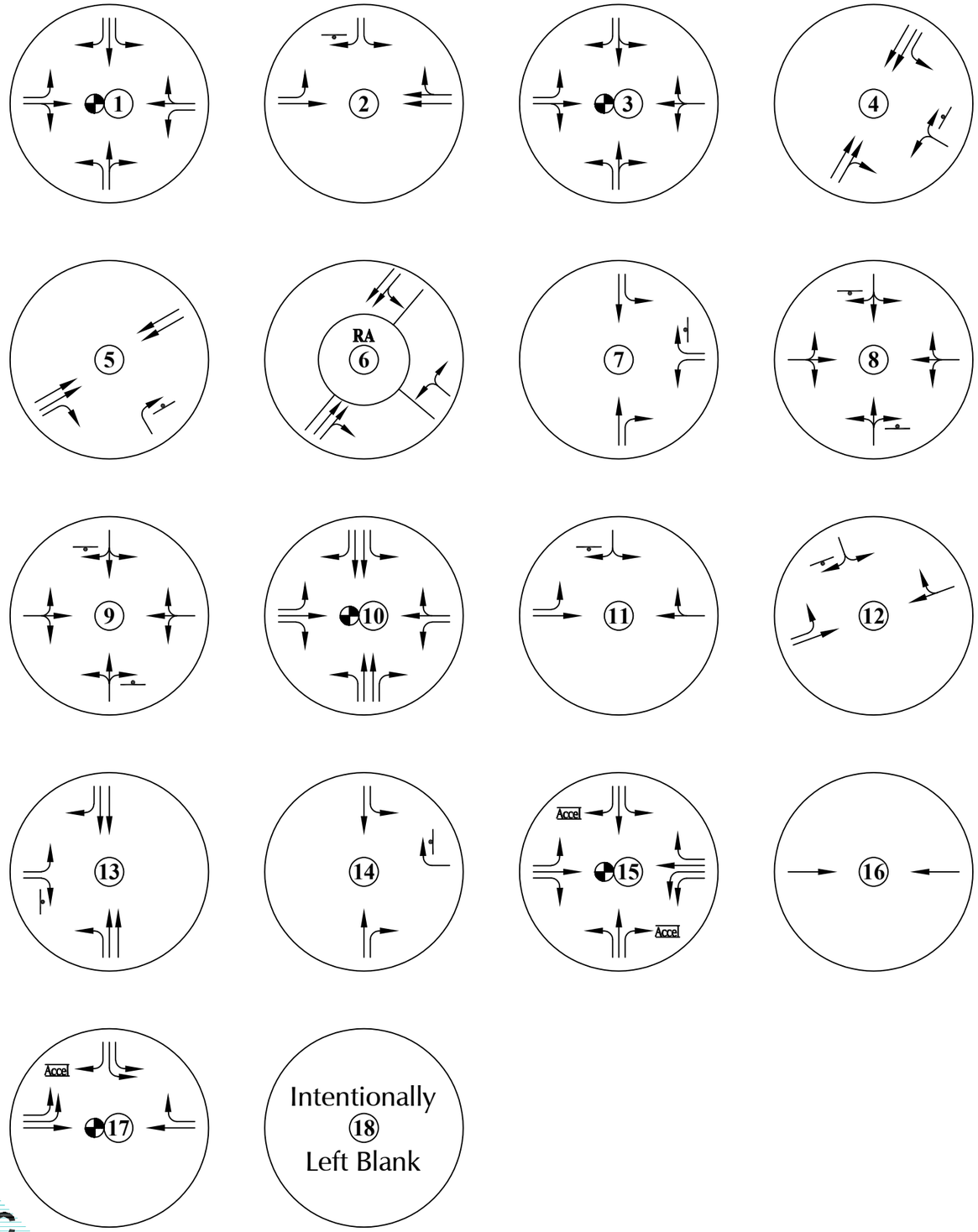
Note: Assumes 3.3 percent annual growth rate on SH 7 to be consistent with the Town of Erie TMP long-term projections less overall Parkdale trips. Assumes one percent annual growth rate on Coal Creek Boulevard and Arapahoe Road and five percent annual growth on N. 119th Street again to be consistent with the TMP.

Figure 4a

Year 2030 Background Traffic

Parkdale North (LSC #221090)

LSC TRANSPORTATION CONSULTANTS, INC.



LEGEND:

= Stop Sign

= Traffic Signal

N

Approximate Scale
Scale: 1"=1,000'

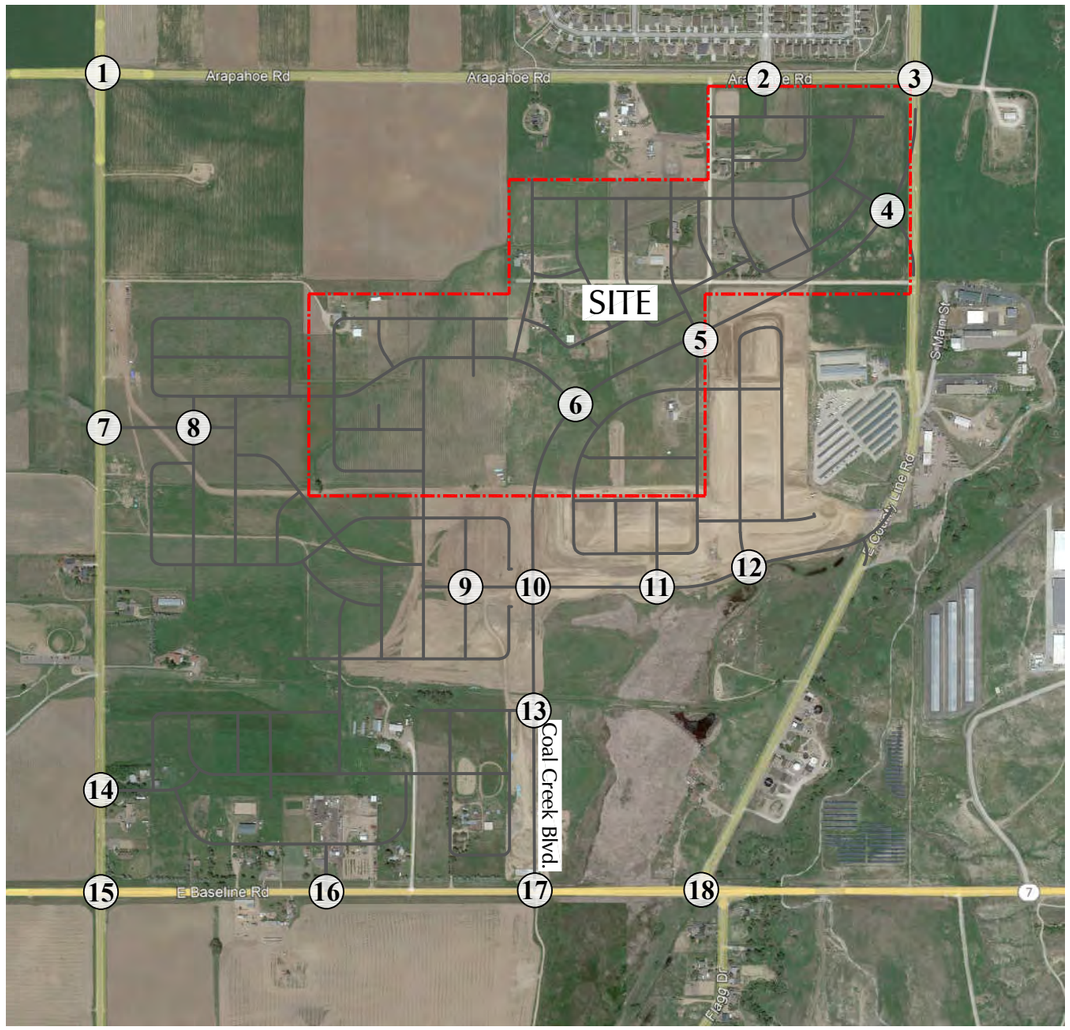
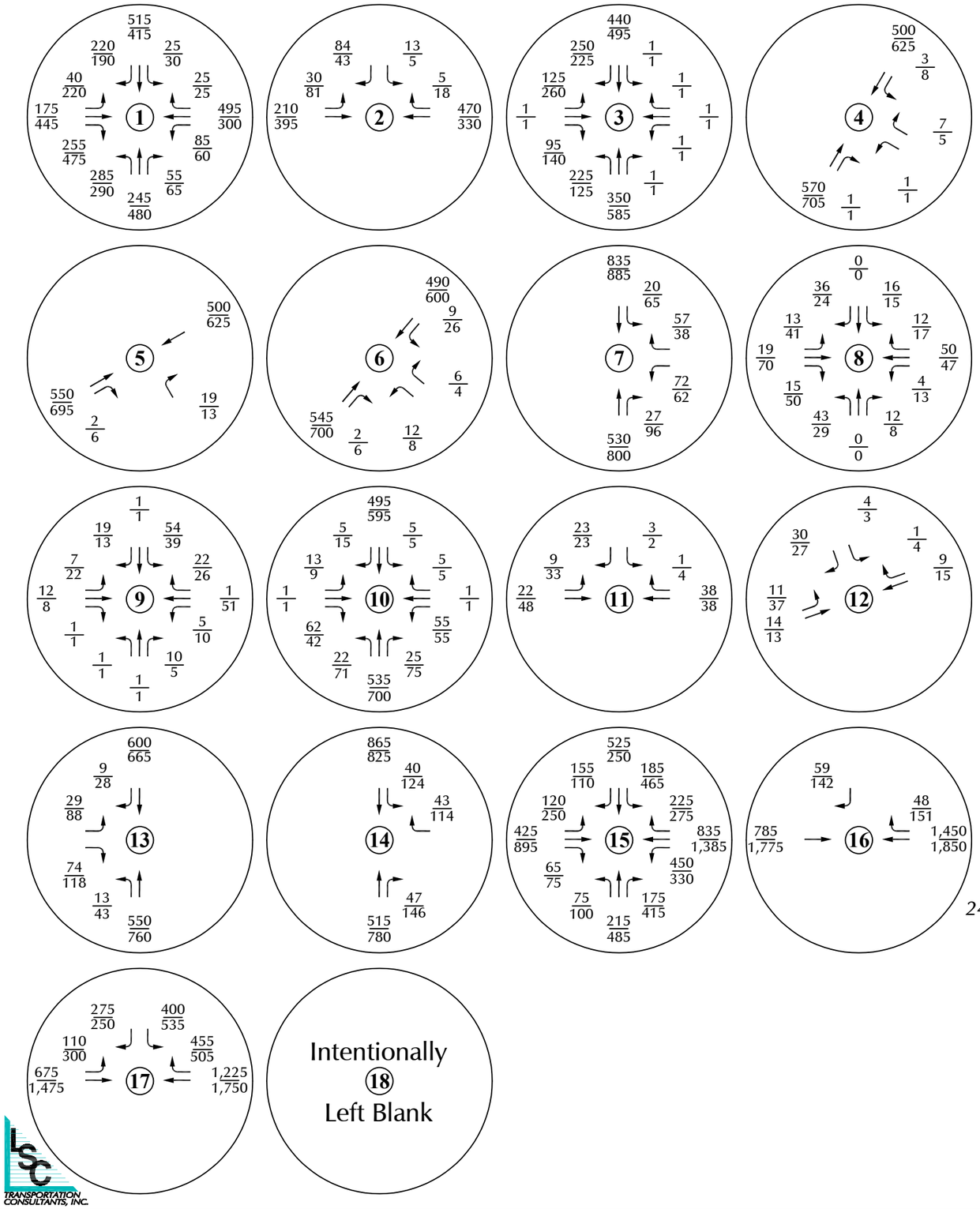


Figure 4b

Year 2030 Background Lane Geometry and Traffic Control

Parkdale North (LSC #221090)

LSC TRANSPORTATION CONSULTANTS, INC.



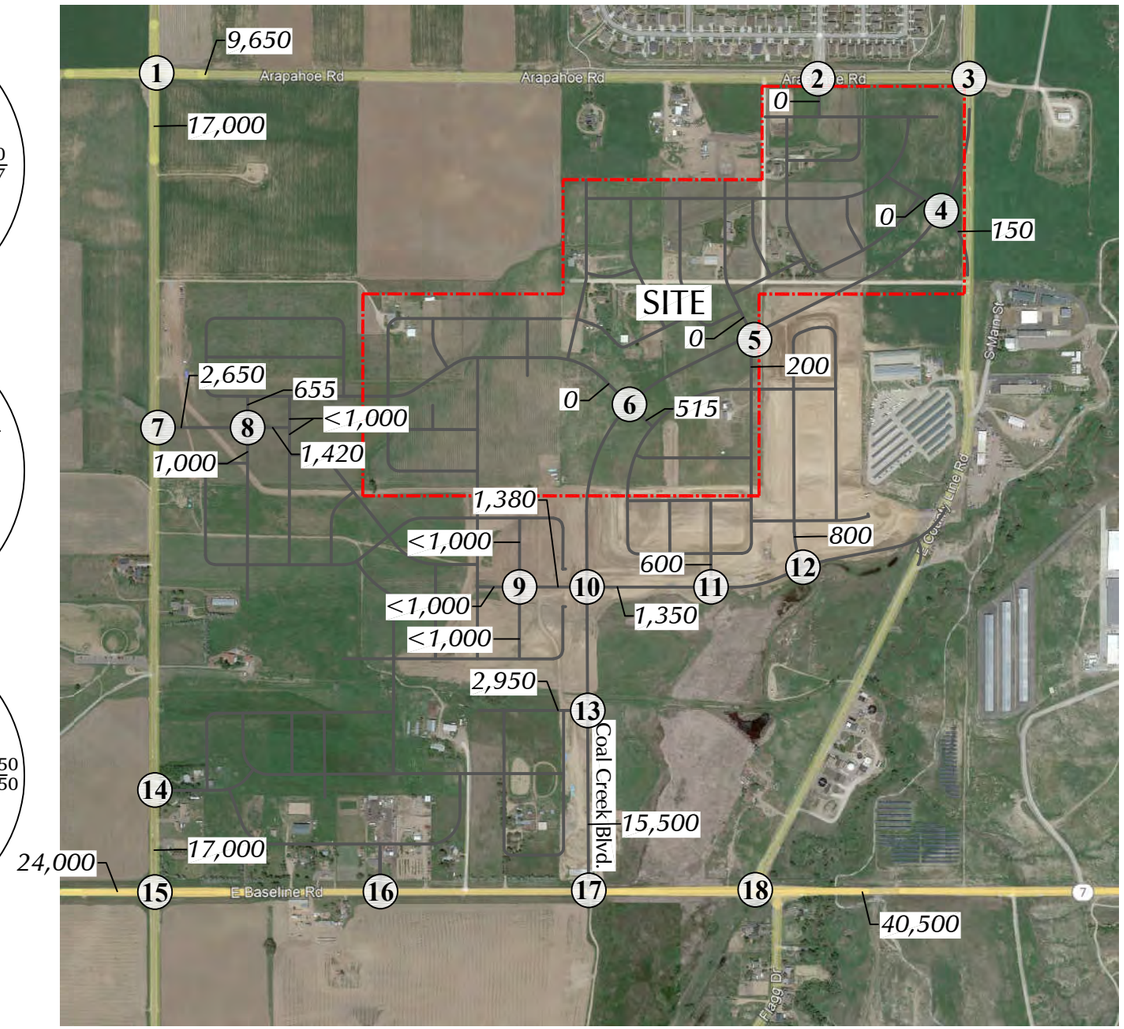
LEGEND:

$\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$

1,000 = Average Daily Traffic

N

Approximate Scale
Scale: 1"=1,000'



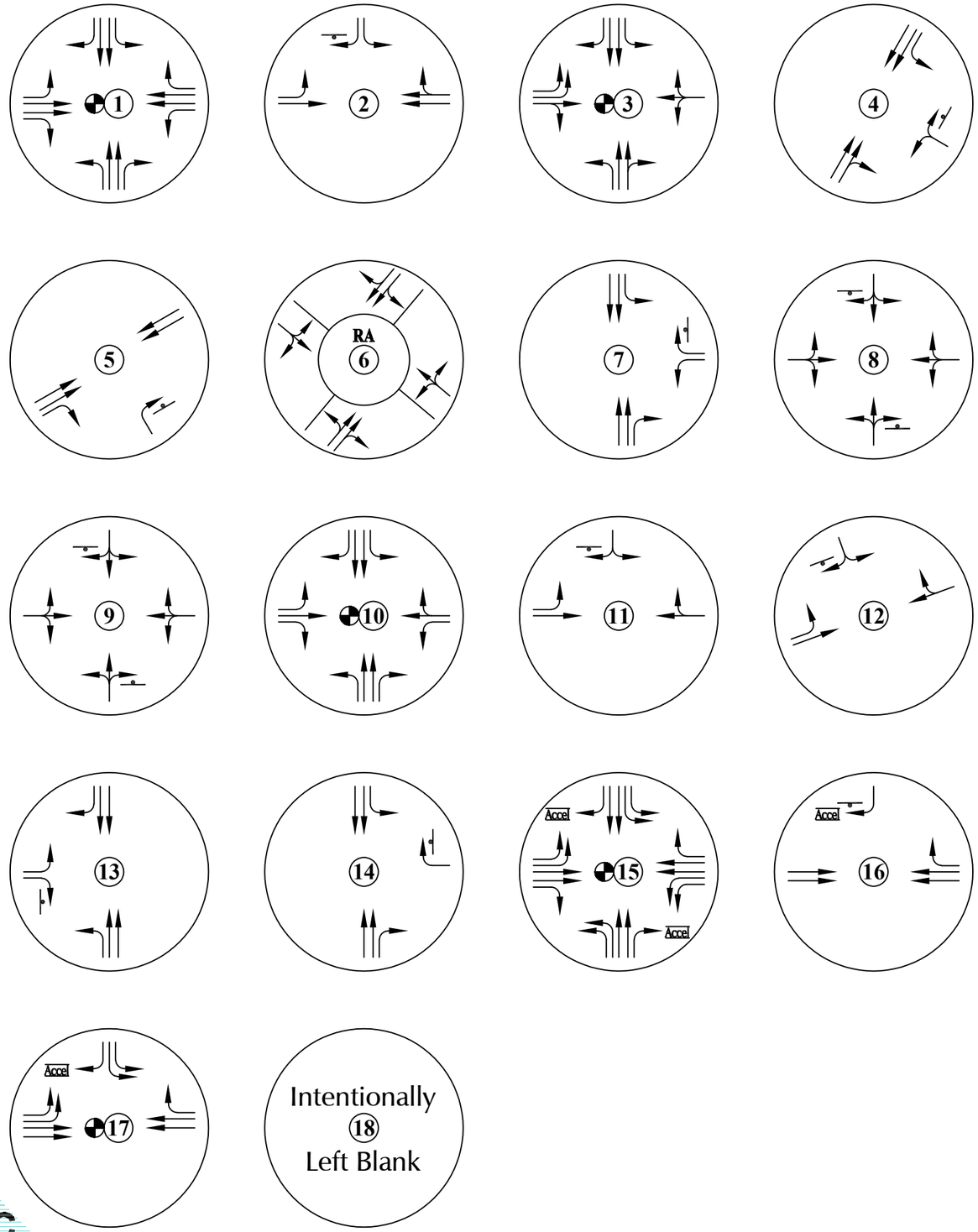
Note: Assumes 3.3 percent annual growth rate on SH 7 to be consistent with the Town of Erie TMP long-term projections less overall Parkdale trips. Assumes one percent annual growth rate on Coal Creek Boulevard and Arapahoe Road and five percent annual growth on N. 119th Street again to be consistent with the TMP.

Figure 5a

Year 2043 Background Traffic

Parkdale North (LSC #221090)

LSC TRANSPORTATION CONSULTANTS, INC.



LEGEND:

= Stop Sign

= Traffic Signal

N

Approximate Scale
Scale: 1"=1,000'

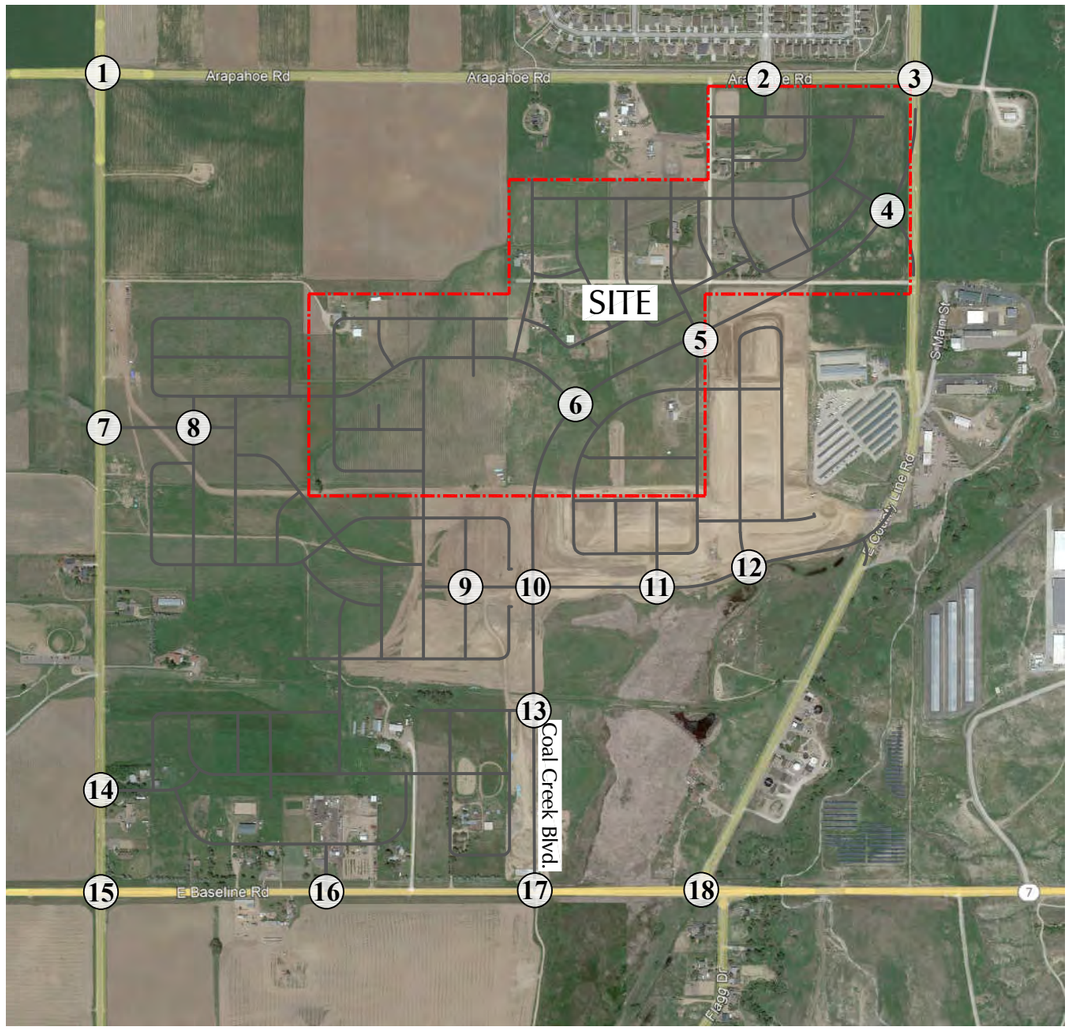


Figure 5b

Year 2043 Background Lane Geometry and Traffic Control

Parkdale North (LSC #221090)

LSC TRANSPORTATION CONSULTANTS, INC.

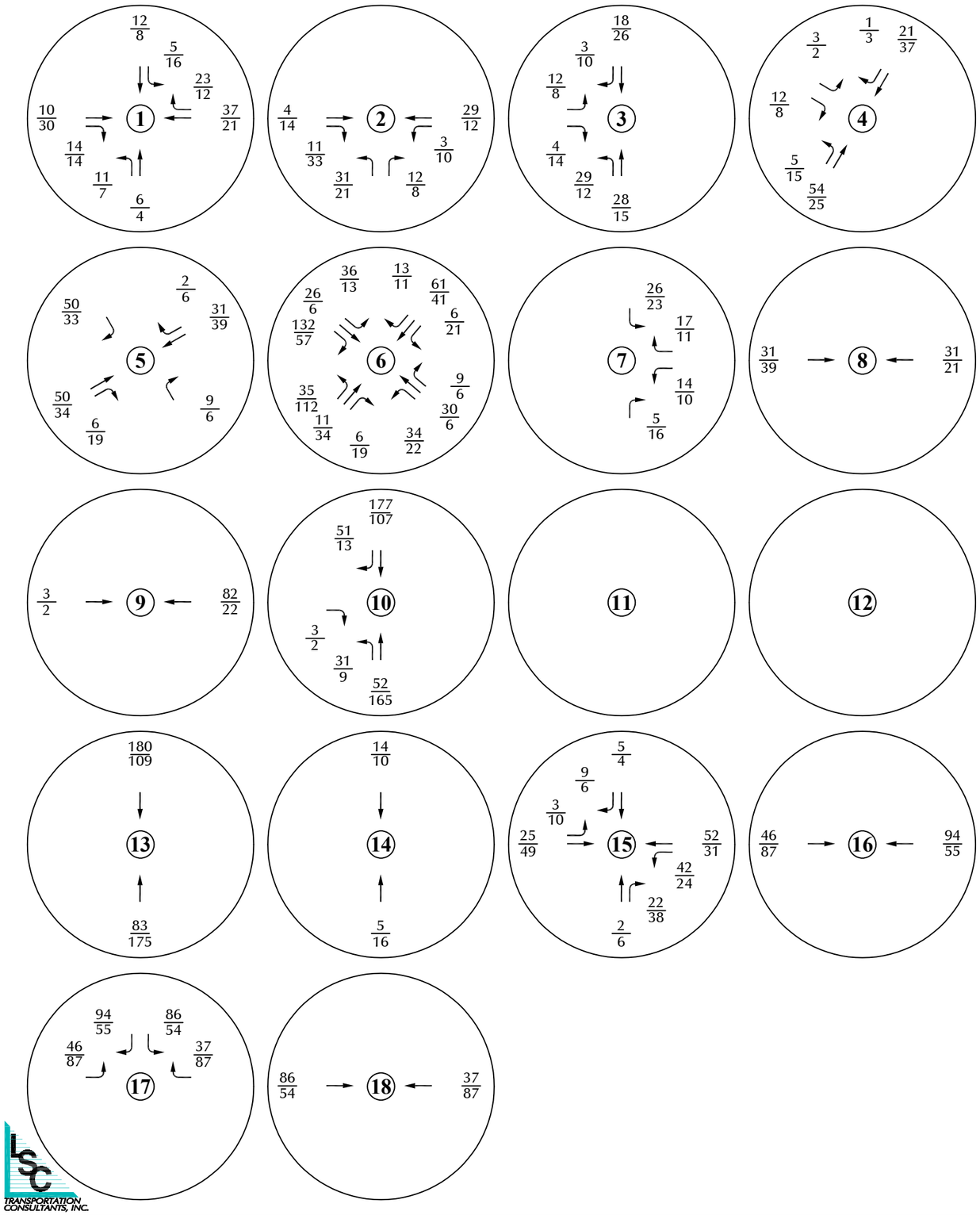
LEGEND:

5% = Percent Directional Distribution

Figure 6

Directional Distribution of Site-Generated Traffic

Parkdale North (LSC #221090)



LEGEND:

26/35 = AM Peak Hour Traffic / PM Peak Hour Traffic

1,000 = Average Daily Traffic

N

Approximate Scale
Scale: 1"=1,000'

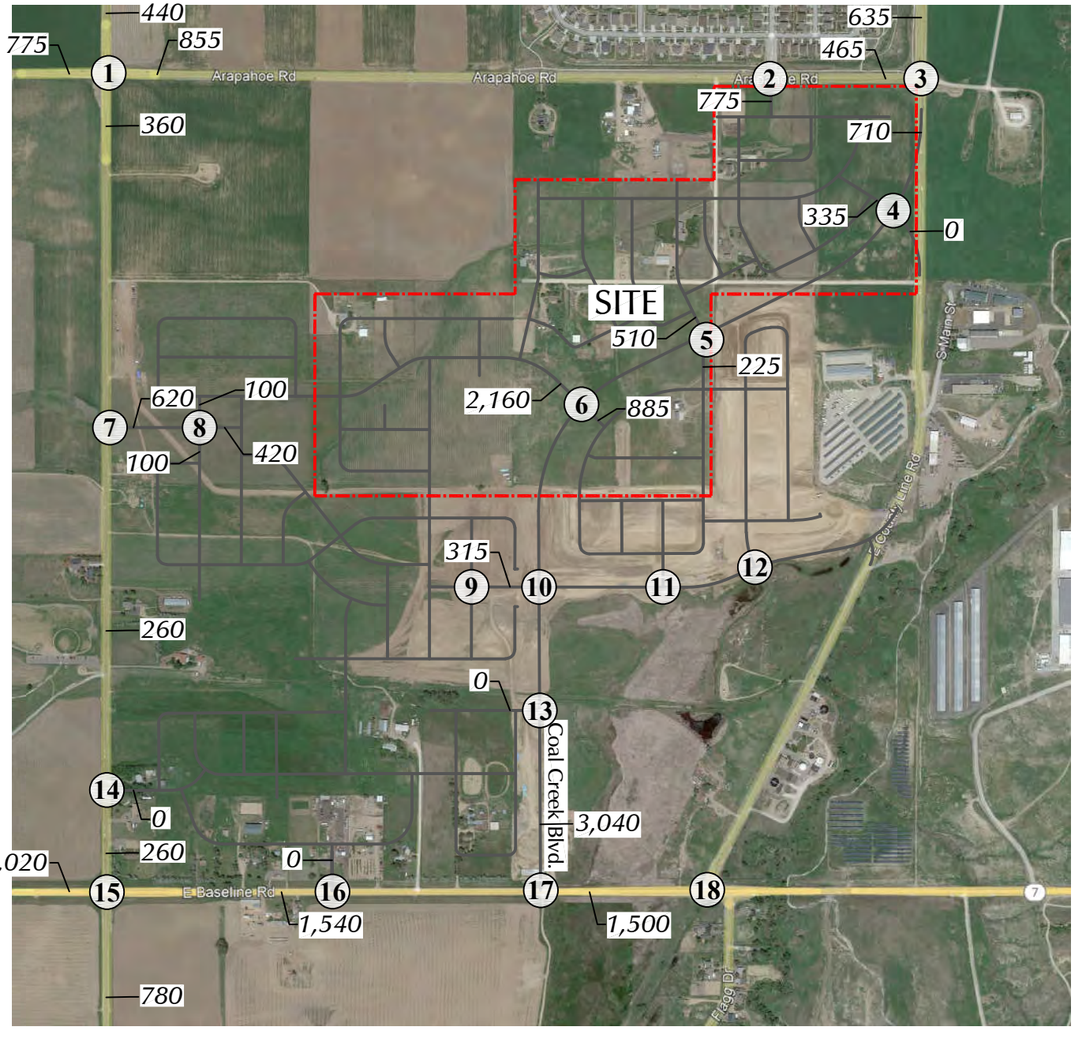
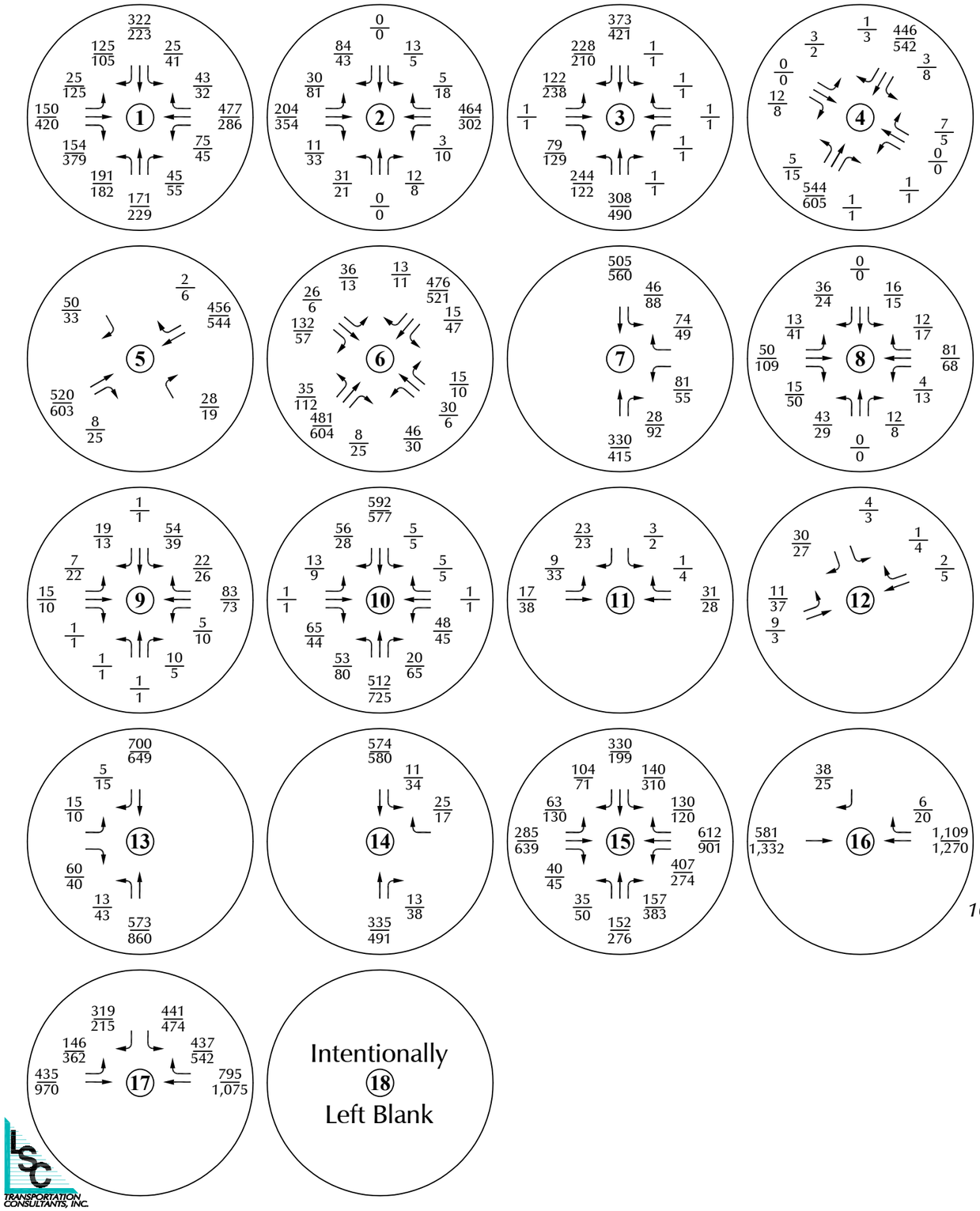


Figure 7

Assignment of Site-Generated Traffic

Parkdale North (LSC #221090)

LSC TRANSPORTATION CONSULTANTS, INC.



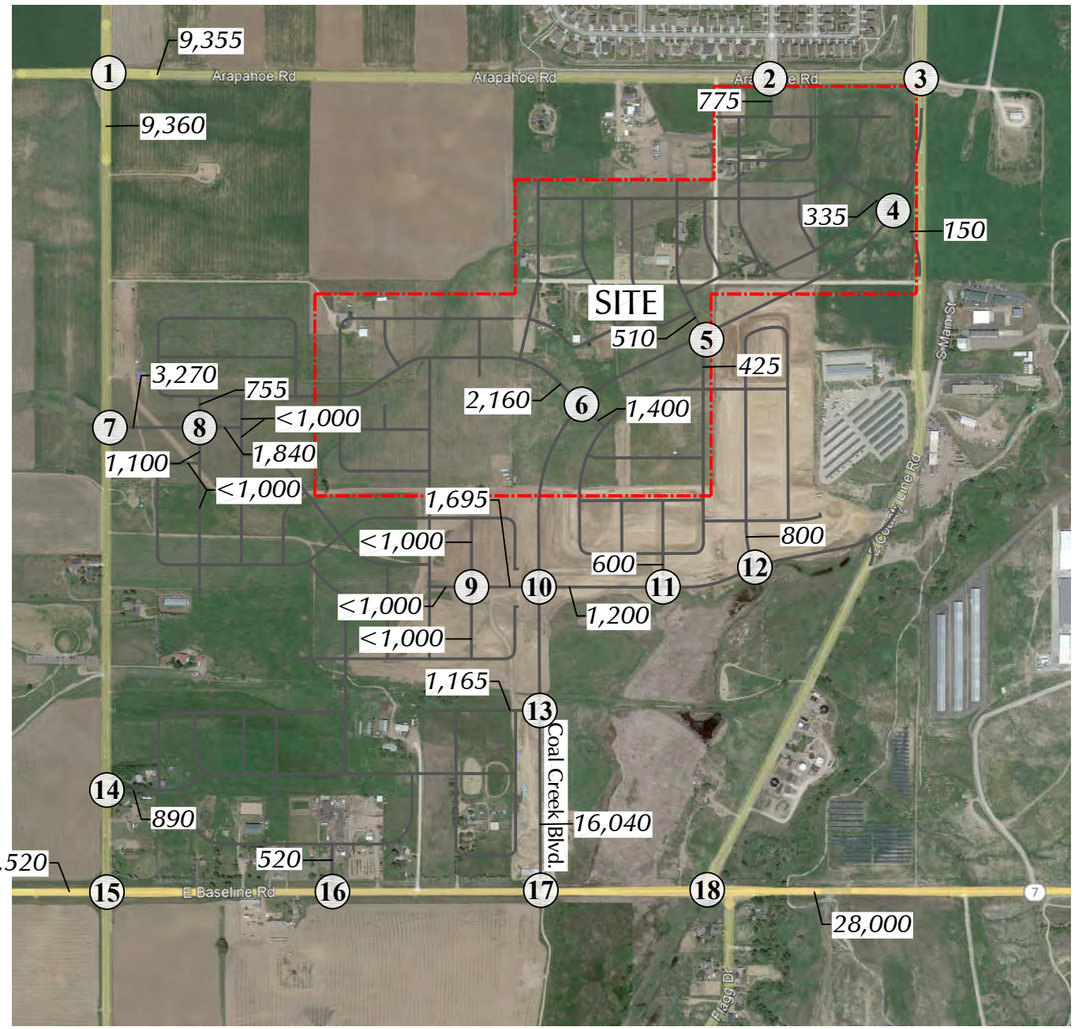
LEGEND:

26/35 = AM Peak Hour Traffic / PM Peak Hour Traffic

1,000 = Average Daily Traffic

N

Approximate Scale
Scale: 1"=1,000'



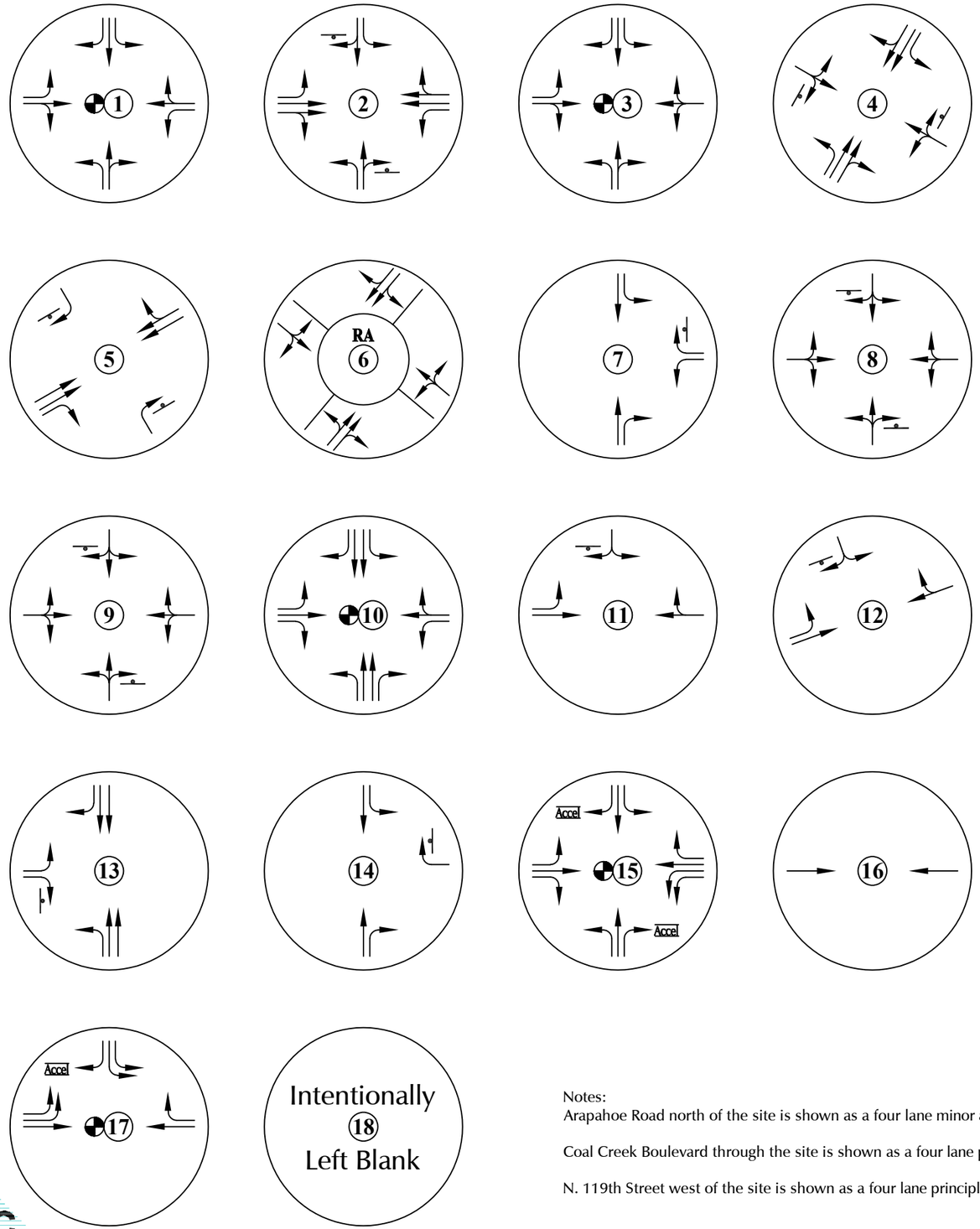
Note: These volumes are the sum of the volumes in Figures 4a and 7.

Figure 8a

Year 2030 Total Traffic

Parkdale North (LSC #221090)

LSC TRANSPORTATION CONSULTANTS, INC.



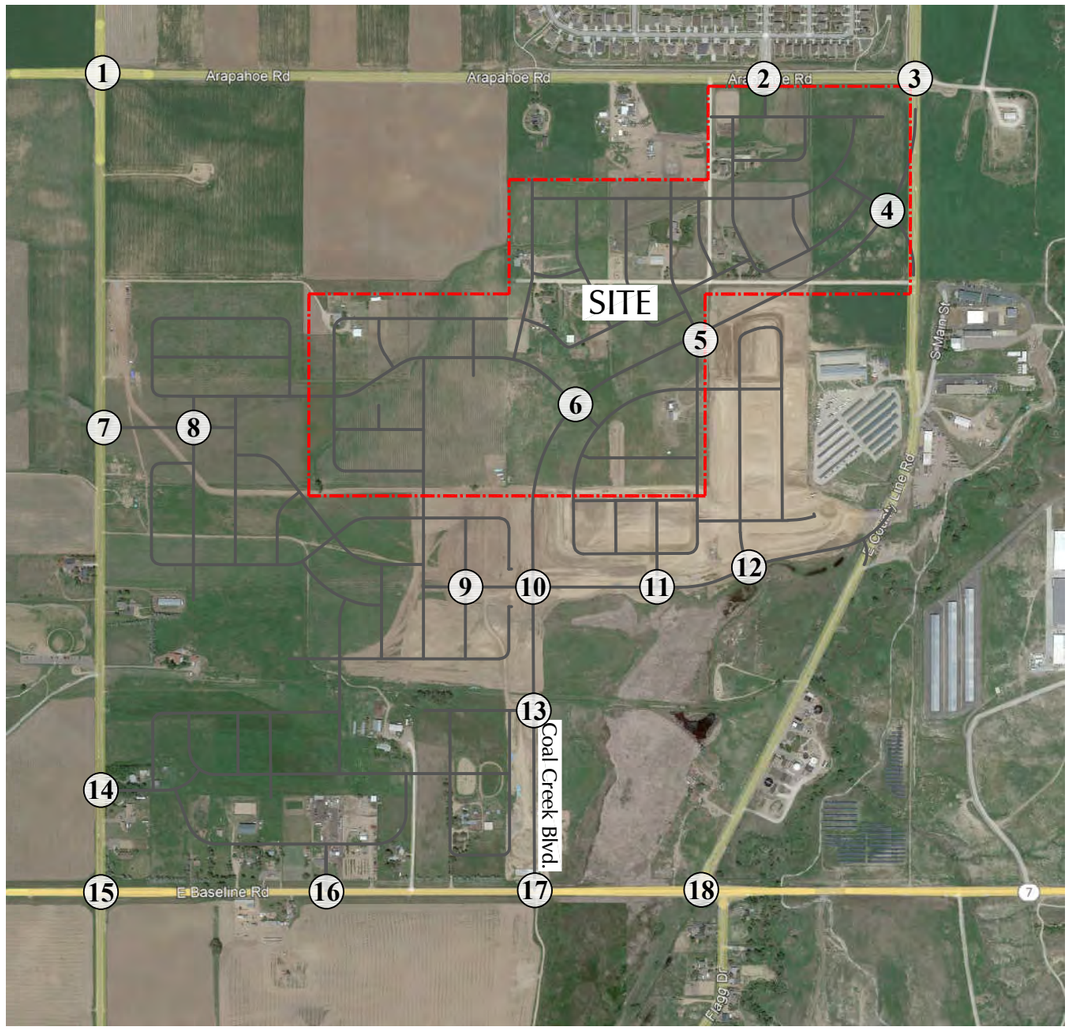
LEGEND:

= Stop Sign

= Traffic Signal

N

Approximate Scale
Scale: 1"=1,000'



Notes:
Arapahoe Road north of the site is shown as a four lane minor arterial in the Erie TMP by 2040.

Coal Creek Boulevard through the site is shown as a four lane principle arterial in the Erie TMP by 2040.

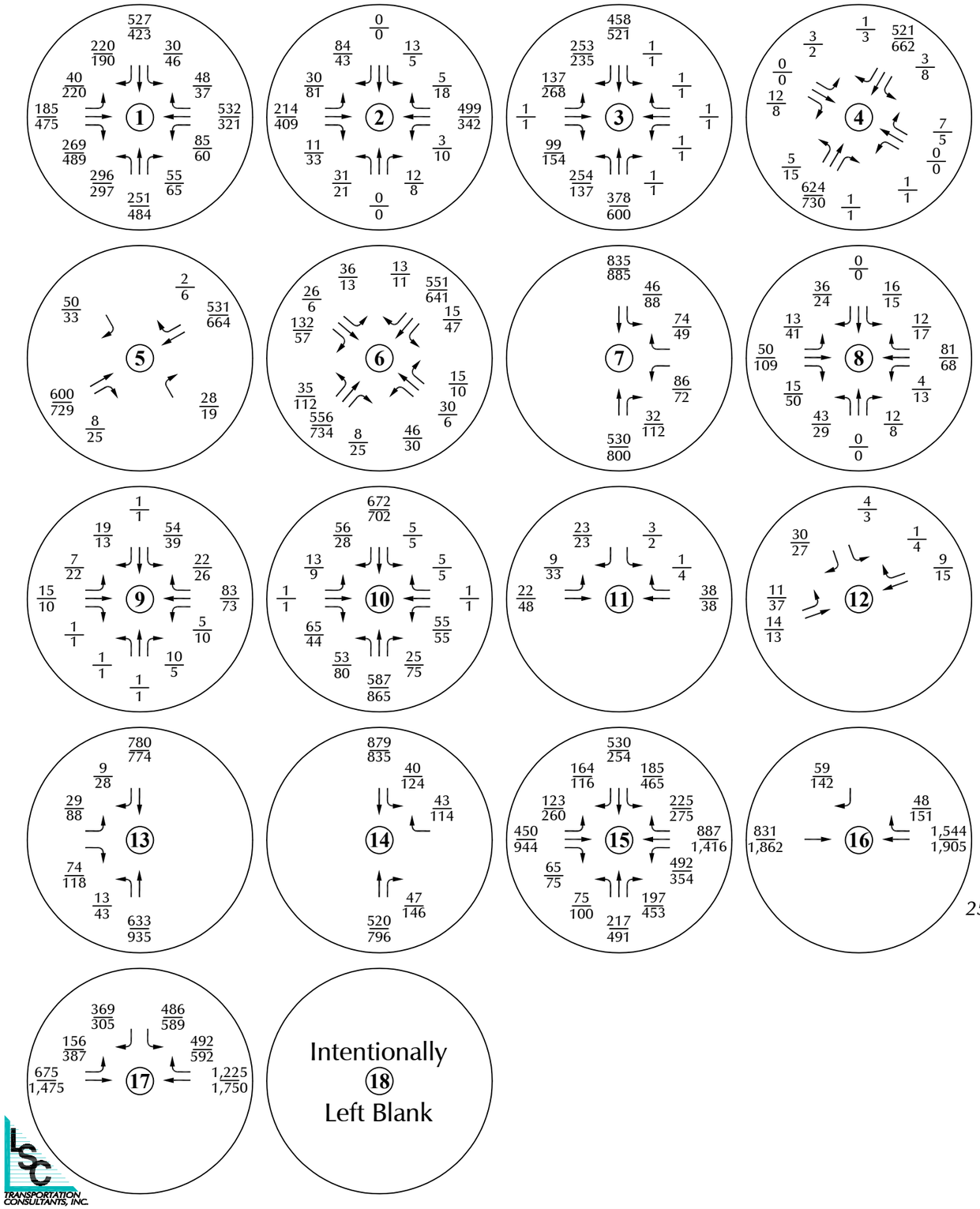
N. 119th Street west of the site is shown as a four lane principle arterial in the Erie TMP by 2040.

Figure 8b

Year 2030 Total Lane Geometry and Traffic Control

Parkdale North (LSC #221090)

LSC TRANSPORTATION CONSULTANTS, INC.



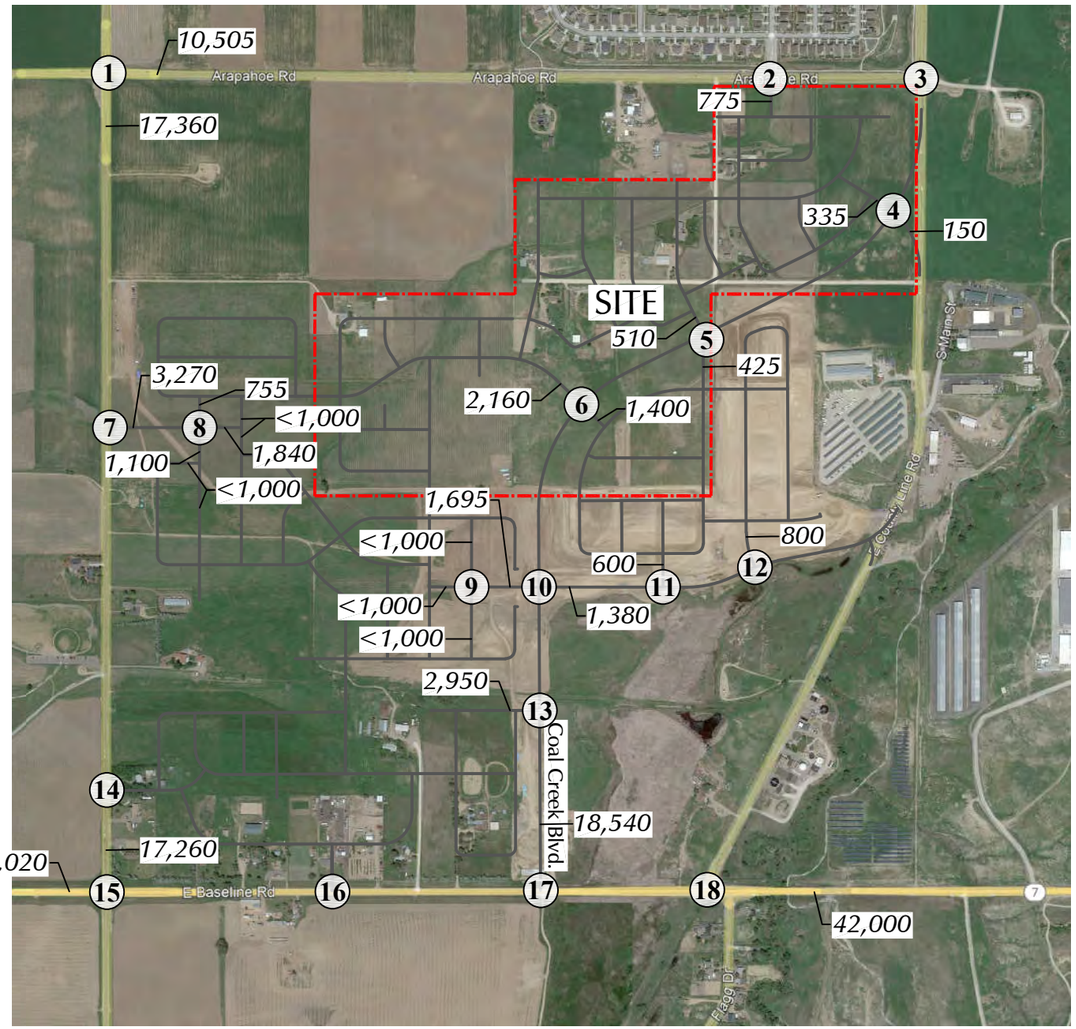
LEGEND:

26/35 = AM Peak Hour Traffic / PM Peak Hour Traffic

1,000 = Average Daily Traffic

N

Approximate Scale
Scale: 1"=1,000'



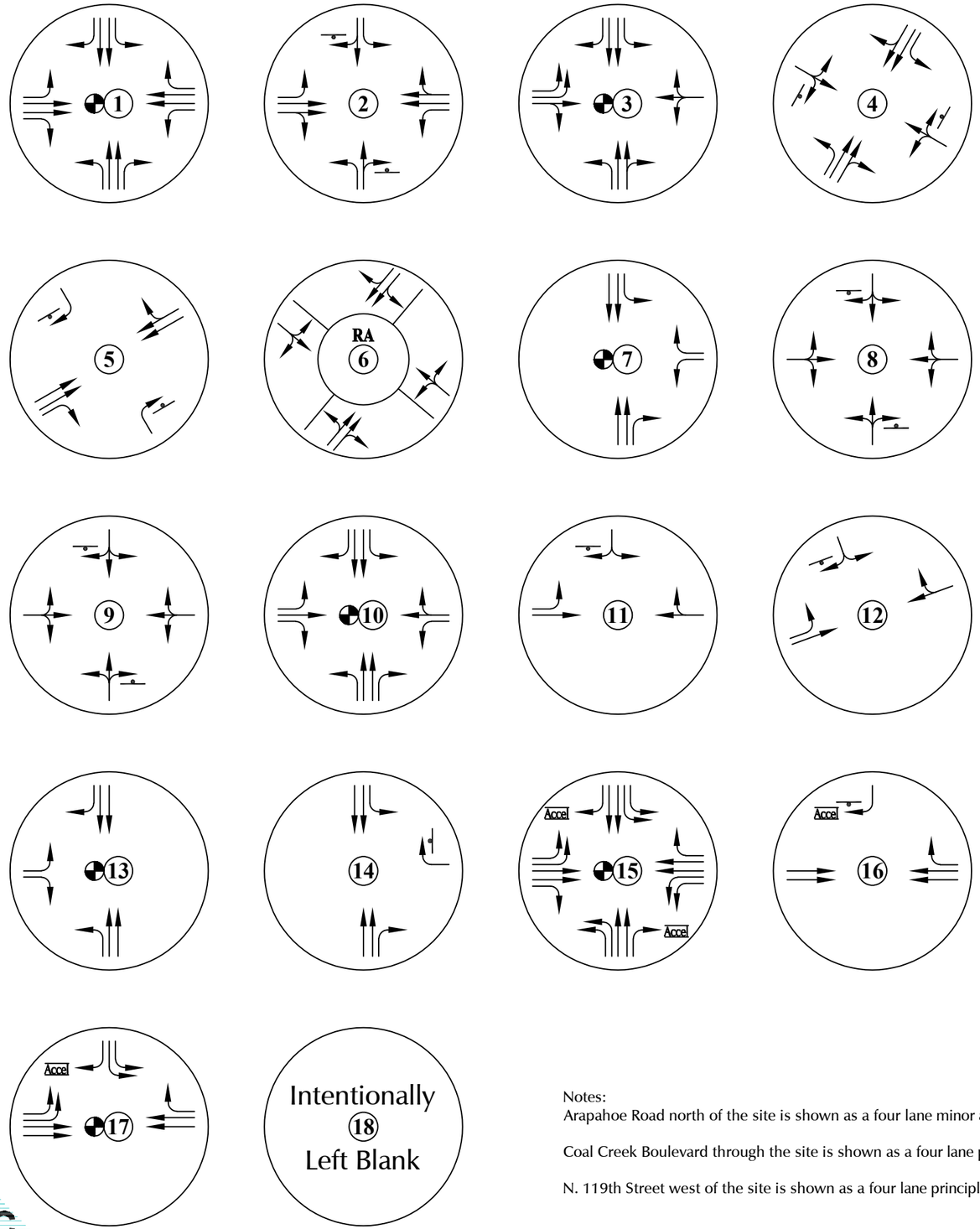
Note: These volumes are the sum of the volumes in Figures 5a and 7.

Figure 9a

Year 2043 Total Traffic

Parkdale North (LSC #221090)

LSC TRANSPORTATION CONSULTANTS, INC.



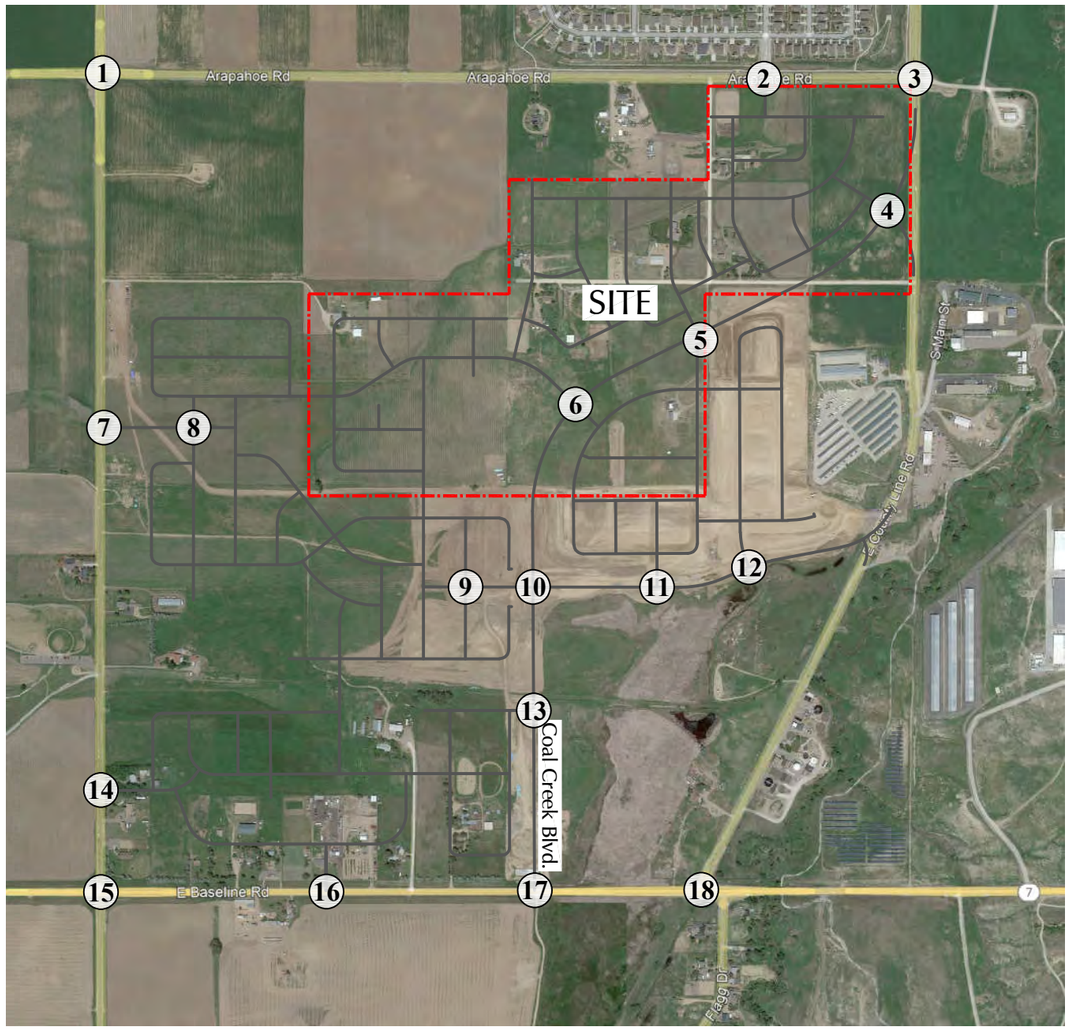
LEGEND:

= Stop Sign

= Traffic Signal

N

Approximate Scale
Scale: 1"=1,000'



Notes:
Arapahoe Road north of the site is shown as a four lane minor arterial in the Erie TMP by 2040.

Coal Creek Boulevard through the site is shown as a four lane principle arterial in the Erie TMP by 2040.

N. 119th Street west of the site is shown as a four lane principle arterial in the Erie TMP by 2040.

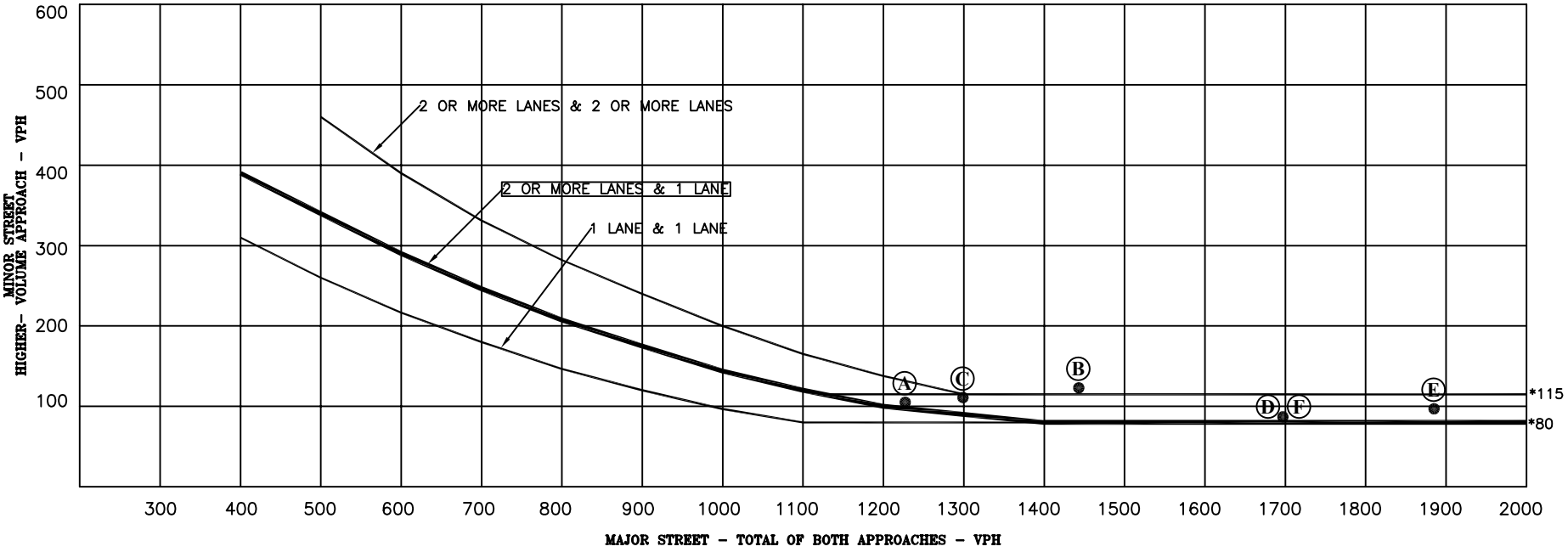
Figure 9b

Year 2043 Total Lane Geometry and Traffic Control

Parkdale North (LSC #221090)

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



* Note: 115 vph applies as the lower threshold volume for a minor–street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor–street approach with one lane.

2043 Total Traffic (Figures 9a and 9b)

Ⓐ Hour Before (85%) = (1227,105)
Ⓑ AM Peak Hour = (1443,123)
Ⓒ Hour After (90%) = (1299,111)
Ⓓ Hour Before (90%) = (1697,87)
Ⓔ PM Peak Hour = (1885,97)
Ⓕ Hour After (90%) = (1697,87)

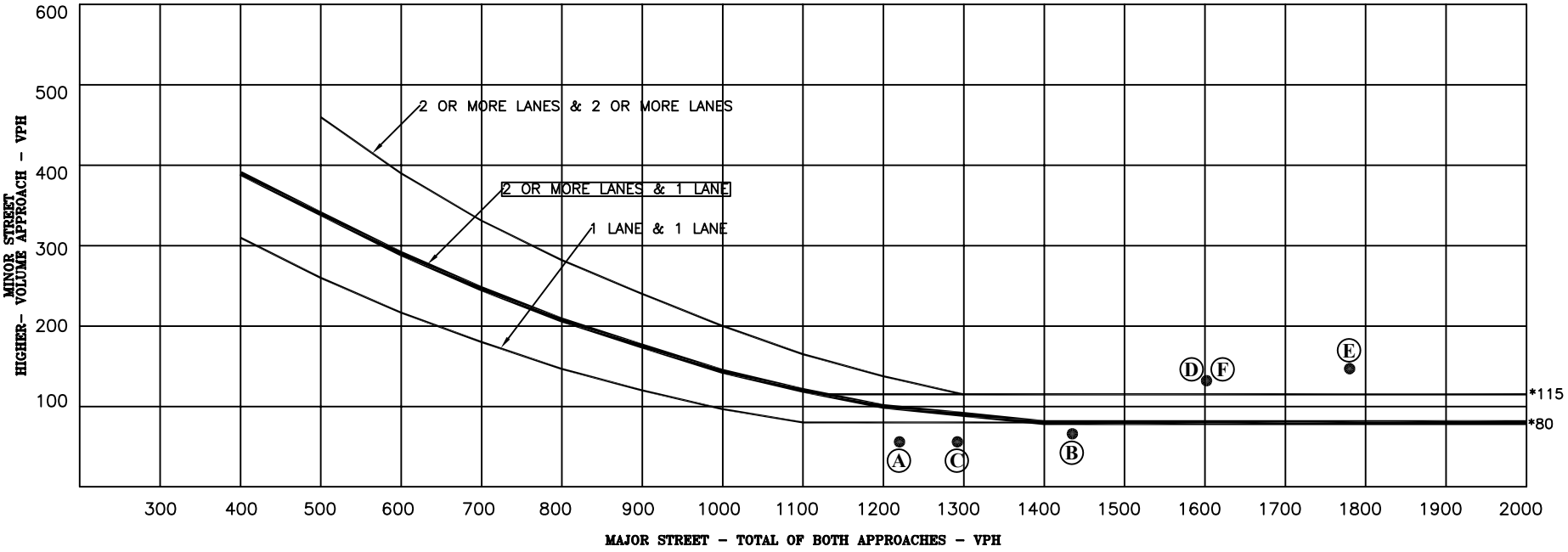
Note: Assumes all northbound and southbound traffic for the major street and WB LT movement and half of the WB RT movement for the minor street. This warrant is expected to be met in the long-term.

Figure 10

Warrant 2 - Four-Hour Vehicular Volume
N. 119th Street/West Access (#7)

Parkdale North (LSC #221090)

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



* Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

2043 Total Traffic (Figures 9a and 9b)

Ⓐ Hour Before (85%) = (1220,56)
Ⓑ AM Peak Hour = (1435,66)
Ⓒ Hour After (90%) = (1292,59)
Ⓓ Hour Before (90%) = (1602,132)
Ⓔ PM Peak Hour = (1,780,147)
Ⓕ Hour After (90%) = (1602,132)

Note: Assumes all northbound and southbound traffic for the major street and EB LT movement and half of the EB RT movement for the minor street. This warrant is expected to be met in the long-term.

Figure 11

Warrant 2 - Four-Hour Vehicular Volume Coal Creek Boulevard/West Access (#13)

Parkdale North (LSC #221090)

Table A-1
ESTIMATED TRAFFIC GENERATION
Parkdale North
Erie, CO
LSC #221090; February, 2024

Traffic Analysis Zone	Trip Generating Category	Quantity	Trip Generation Rates [1]					Vehicle-Trips Generated				
			Average	AM Peak-Hour		PM Peak-Hour		Average	AM Peak-Hour		PM Peak-Hour	
			Weekday	In	Out	In	Out	Weekday	In	Out	In	Out
12	Retail [2]	220.0 KSF [3]	37.01	0.521	0.319	1.632	1.768	8,142	115	70	359	389
						Passby Trips [4] =		**2,768**	**31**	**31**	**127**	**127**
						Primary Trips =		**5,374**	**84**	**39**	**232**	**262**

Notes:
(1) Source: *Trip Generation*, Institute of Transportation Engineers, 11th Edition, 2021
(2) ITE Land Use No. 820 - Shopping Plaza (>150k)
(3) KSF = 1,000 square feet
(4) Passby Trip percentage of 34% assumed based on the ITE *Trip Generation Handbook.*

COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: 119TH ST
E/W STREET: ARAPAHOE RD
CITY: ERIE
COUNTY: WELD

File Name : 119THARAPAHOE
Site Code : 00000015
Start Date : 11/30/2022
Page No : 1

Groups Printed- VEHICLES

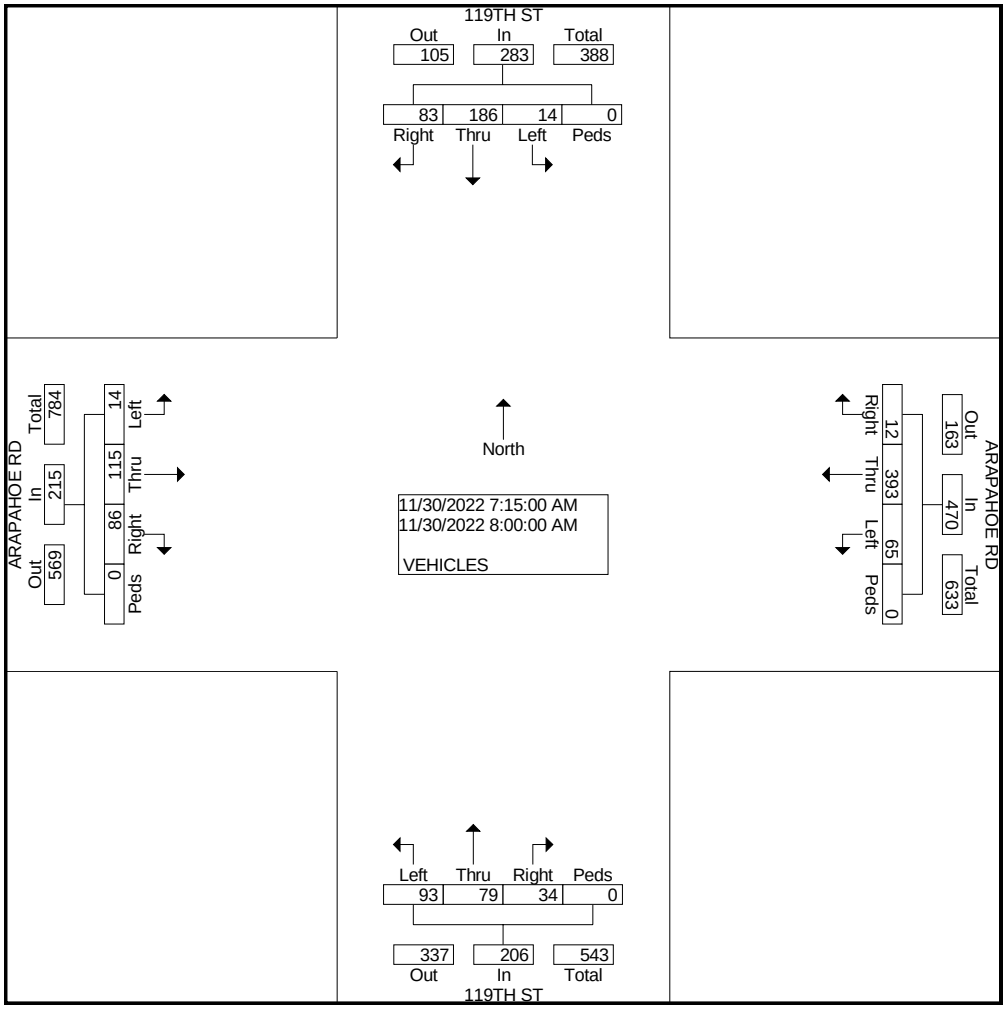
	119TH ST Southbound				ARAPAHOE RD Westbound				119TH ST Northbound				ARAPAHOE RD Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	0	12	9	0	3	47	2	0	22	4	0	0	1	18	9	0	127
06:45 AM	1	19	11	0	11	52	3	0	18	8	0	0	1	12	14	0	150
Total	1	31	20	0	14	99	5	0	40	12	0	0	2	30	23	0	277
07:00 AM	0	22	9	0	6	71	2	0	19	6	0	0	1	23	13	0	172
07:15 AM	4	45	18	0	17	80	4	0	12	10	4	0	3	30	17	0	244
07:30 AM	1	65	14	0	29	100	1	0	19	22	2	0	4	27	28	0	312
07:45 AM	4	39	29	0	11	95	2	0	33	33	13	0	5	34	19	0	317
Total	9	171	70	0	63	346	9	0	83	71	19	0	13	114	77	0	1045
08:00 AM	5	37	22	0	8	118	5	0	29	14	15	0	2	24	22	0	301
08:15 AM	2	30	28	0	9	110	2	0	37	14	9	0	5	30	14	0	290
Total	7	67	50	0	17	228	7	0	66	28	24	0	7	54	36	0	591
04:00 PM	4	43	15	0	11	63	4	0	14	38	16	0	22	108	50	0	388
04:15 PM	4	33	24	0	4	47	4	0	31	34	11	0	20	83	48	0	343
04:30 PM	4	27	9	0	9	62	4	0	29	42	11	0	20	75	59	0	351
04:45 PM	4	30	17	0	8	59	2	0	24	40	7	0	20	98	59	0	368
Total	16	133	65	0	32	231	14	0	98	154	45	0	82	364	216	0	1450
05:00 PM	3	47	22	0	15	69	7	0	17	43	15	0	23	97	54	0	412
05:15 PM	3	43	36	0	13	77	4	0	20	49	16	0	27	93	76	0	457
05:30 PM	2	49	19	0	5	51	3	0	19	35	16	0	32	99	61	0	391
05:45 PM	0	30	11	0	8	49	7	0	12	41	13	0	25	95	50	0	341
Total	8	169	88	0	41	246	21	0	68	168	60	0	107	384	241	0	1601
Grand Total	41	571	293	0	167	1150	56	0	355	433	148	0	211	946	593	0	4964
Apprch %	4.5	63.1	32.4	0.0	12.2	83.8	4.1	0.0	37.9	46.3	15.8	0.0	12.1	54.1	33.9	0.0	
Total %	0.8	11.5	5.9	0.0	3.4	23.2	1.1	0.0	7.2	8.7	3.0	0.0	4.3	19.1	11.9	0.0	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: 119TH ST
E/W STREET: ARAPAHOE RD
CITY: ERIE
COUNTY: WELD

File Name : 119THARAPAHOE
Site Code : 00000015
Start Date : 11/30/2022

	119TH ST Southbound					ARAPAHOE RD Westbound					119TH ST Northbound					ARAPAHOE RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:15 AM to 08:00 AM - Peak 1 of 1																					
Intersection	07:15 AM																				
Volume	14	186	83	0	283	65	393	12	0	470	93	79	34	0	206	14	115	86	0	215	1174
Percent	4.9	65.7	29.3	0.0		13.8	83.6	2.6	0.0		45.1	38.3	16.5	0.0		6.5	53.5	40.0	0.0		
07:45 Volume	4	39	29	0	72	11	95	2	0	108	33	33	13	0	79	5	34	19	0	58	317
Peak Factor																					0.926
High Int.	07:30 AM					08:00 AM					07:45 AM					07:30 AM					
Volume	1	65	14	0	80	8	118	5	0	131	33	33	13	0	79	4	27	28	0	59	
Peak Factor					0.884					0.897					0.652					0.911	

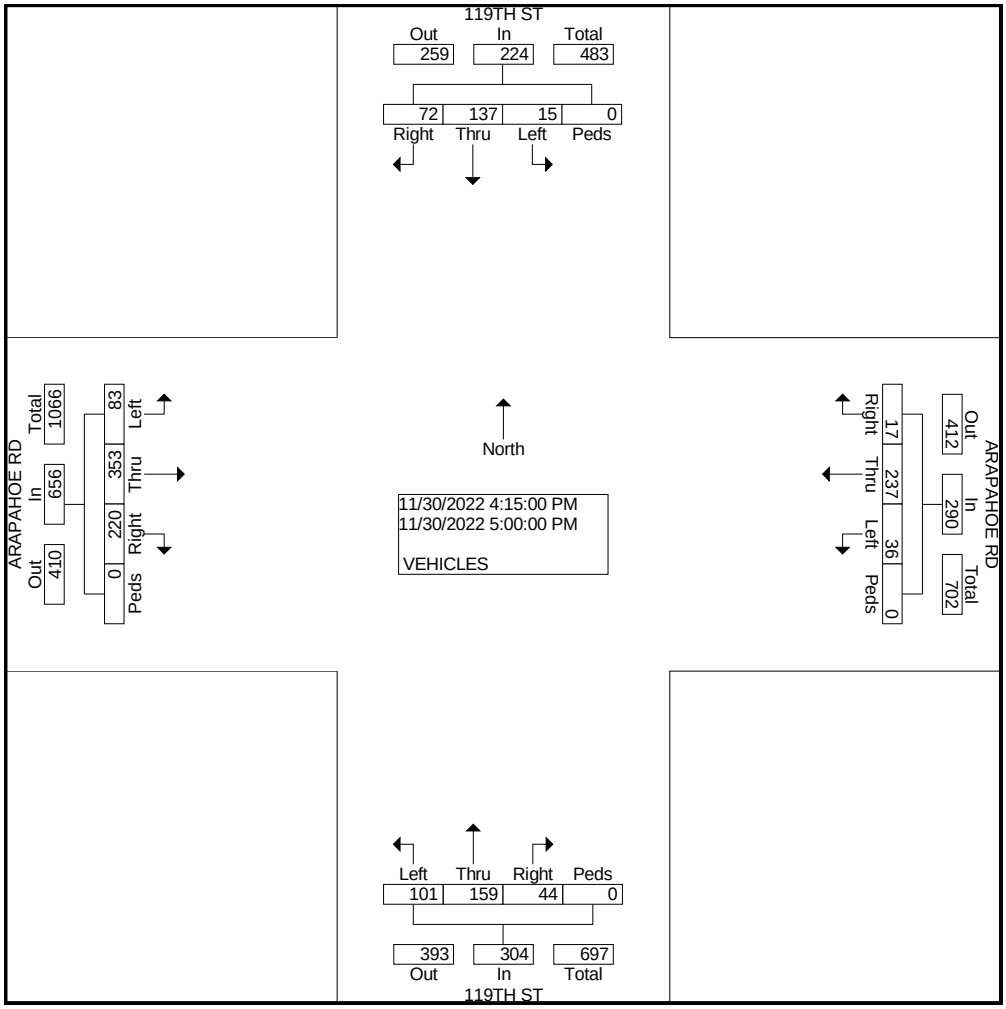


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: 119TH ST
E/W STREET: ARAPAHOE RD
CITY: ERIE
COUNTY: WELD

File Name : 119THARAPAHOE
Site Code : 00000015
Start Date : 11/30/2022
Page No : 3

	119TH ST Southbound					ARAPAHOE RD Westbound					119TH ST Northbound					ARAPAHOE RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Intersection	04:15 PM																				
Volume	15	137	72	0	224	36	237	17	0	290	101	159	44	0	304	83	353	220	0	656	1474
Percent	6.7	61.2	32.1	0.0		12.4	81.7	5.9	0.0		33.2	52.3	14.5	0.0		12.7	53.8	33.5	0.0		
05:00 Volume	3	47	22	0	72	15	69	7	0	91	17	43	15	0	75	23	97	54	0	174	412
Peak Factor																					0.894
High Int.	05:00 PM					05:00 PM					04:30 PM					04:45 PM					
Volume	3	47	22	0	72	15	69	7	0	91	29	42	11	0	82	20	98	59	0	177	
Peak Factor					0.778					0.797					0.927					0.927	



COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: COUNTY LINE RD
E/W STREET: ARAPAHOE
CITY: ERIE
COUNTY: WELD

File Name : COUNARAPAHOE
Site Code : 00000022
Start Date : 11/30/2022
Page No : 1

Groups Printed- VEHICLES

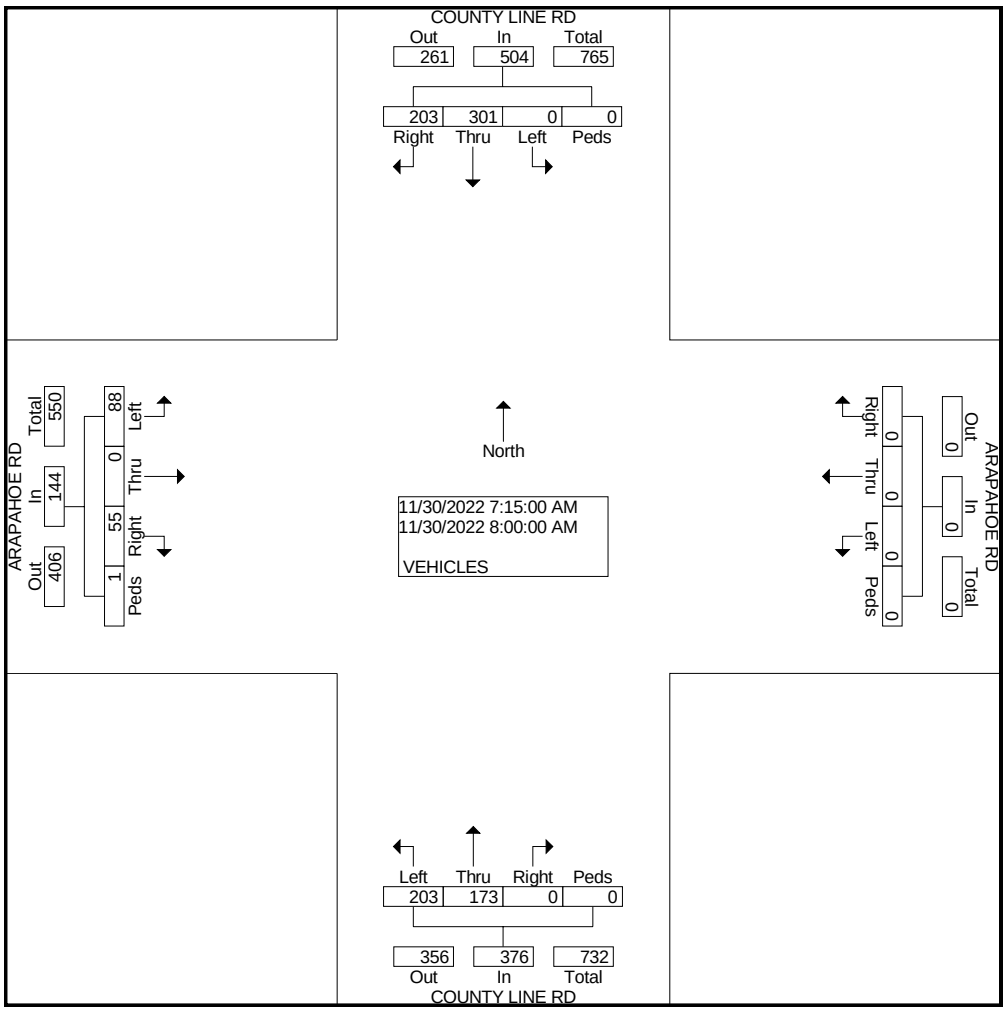
	COUNTY LINE RD Southbound				ARAPAHOE RD Westbound				COUNTY LINE RD Northbound				ARAPAHOE RD Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	0	45	28	0	0	0	0	0	24	20	0	0	11	0	5	0	133
06:45 AM	1	48	28	0	0	0	1	0	26	36	0	0	12	0	3	0	155
Total	1	93	56	0	0	0	1	0	50	56	0	0	23	0	8	0	288
07:00 AM	0	53	35	0	0	0	0	0	36	31	0	0	13	0	7	0	175
07:15 AM	0	67	46	0	0	0	0	0	47	32	0	0	21	0	16	1	230
07:30 AM	0	95	60	0	0	0	0	0	50	33	0	0	22	0	12	0	272
07:45 AM	0	65	42	0	0	0	0	0	43	58	0	0	27	0	12	0	247
Total	0	280	183	0	0	0	0	0	176	154	0	0	83	0	47	1	924
08:00 AM	0	74	55	0	0	0	0	0	63	50	0	0	18	0	15	0	275
08:15 AM	0	61	48	0	0	0	0	0	41	54	0	0	28	0	4	0	236
Total	0	135	103	0	0	0	0	0	104	104	0	0	46	0	19	0	511
04:00 PM	0	53	34	0	0	0	0	0	16	84	0	0	66	0	35	0	288
04:15 PM	0	73	37	0	0	0	0	0	25	89	0	0	49	0	28	0	301
04:30 PM	0	52	39	0	0	0	0	0	20	69	0	0	46	0	18	0	244
04:45 PM	0	47	39	0	0	0	0	0	18	93	0	0	59	0	24	0	280
Total	0	225	149	0	0	0	0	0	79	335	0	0	220	0	105	0	1113
05:00 PM	0	68	58	0	0	0	0	0	31	95	0	0	53	1	25	0	331
05:15 PM	0	69	35	0	0	0	0	0	28	90	0	0	63	0	20	0	305
05:30 PM	0	70	24	0	0	0	0	0	18	91	0	0	61	2	29	0	295
05:45 PM	0	65	25	0	0	0	0	0	22	71	0	0	58	0	27	0	268
Total	0	272	142	0	0	0	0	0	99	347	0	0	235	3	101	0	1199
Grand Total	1	1005	633	0	0	0	1	0	508	996	0	0	607	3	280	1	4035
Apprch %	0.1	61.3	38.6	0.0	0.0	0.0	100.0	0.0	33.8	66.2	0.0	0.0	68.1	0.3	31.4	0.1	
Total %	0.0	24.9	15.7	0.0	0.0	0.0	0.0	0.0	12.6	24.7	0.0	0.0	15.0	0.1	6.9	0.0	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: COUNTY LINE RD
E/W STREET: ARAPAHOE
CITY: ERIE
COUNTY: WELD

File Name : COUNARAPAHOE
Site Code : 00000022
Start Date : 11/30/2022

	COUNTY LINE RD Southbound					ARAPAHOE RD Westbound					COUNTY LINE RD Northbound					ARAPAHOE RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:15 AM to 08:00 AM - Peak 1 of 1																					
Intersection	07:15 AM																				
Volume	0	301	203	0	504	0	0	0	0	0	203	173	0	0	376	88	0	55	1	144	1024
Percent	0.0	59.7	40.3	0.0		0.0	0.0	0.0	0.0		54.0	46.0	0.0	0.0		61.1	0.0	38.2	0.7		
08:00 Volume	0	74	55	0	129	0	0	0	0	0	63	50	0	0	113	18	0	15	0	33	275
Peak Factor																					0.931
High Int.	07:30 AM										08:00 AM					07:45 AM					
Volume	0	95	60	0	155	0	0	0	0	0	63	50	0	0	113	27	0	12	0	39	
Peak Factor					0.813										0.832					0.923	

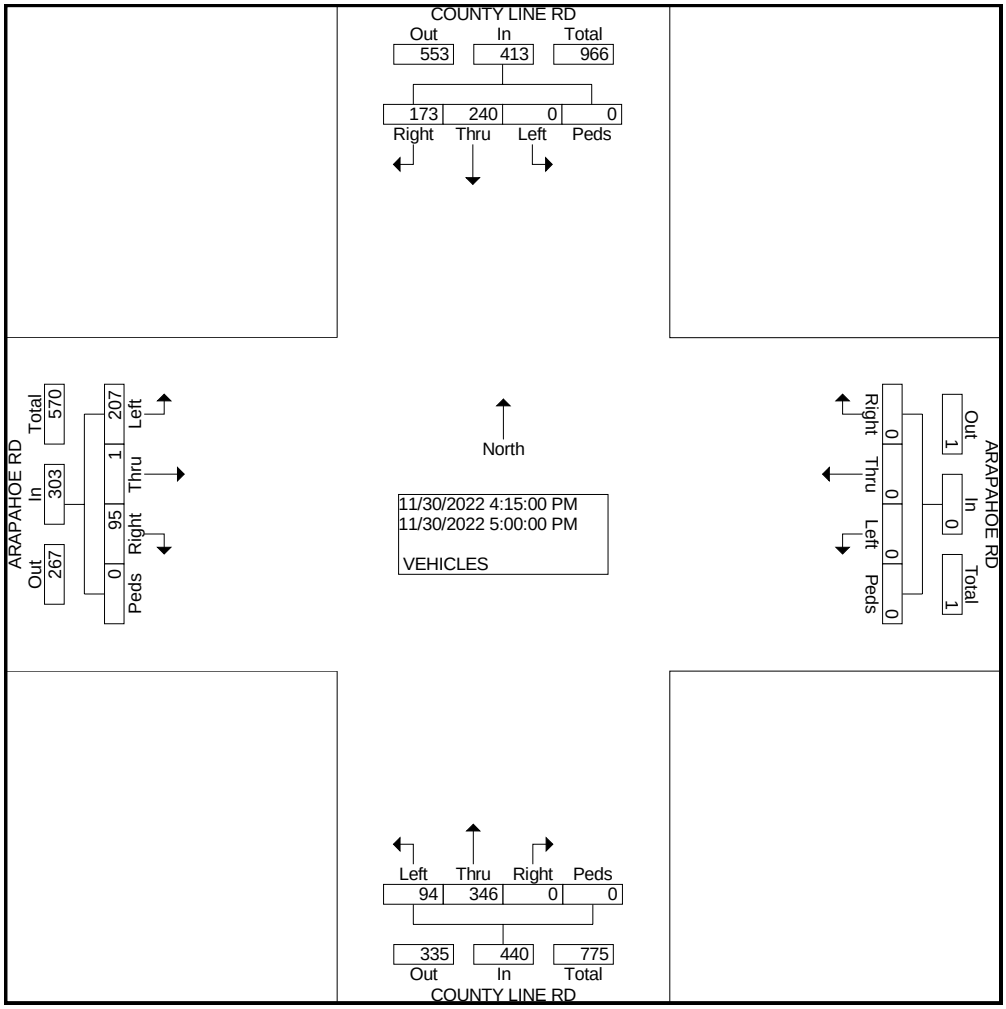


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: COUNTY LINE RD
E/W STREET: ARAPAHOE
CITY: ERIE
COUNTY: WELD

File Name : COUNARAPAHOE
Site Code : 00000022
Start Date : 11/30/2022

	COUNTY LINE RD Southbound					ARAPAHOE RD Westbound					COUNTY LINE RD Northbound					ARAPAHOE RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Intersection	04:15 PM																				
Volume	0	240	173	0	413	0	0	0	0	0	94	346	0	0	440	207	1	95	0	303	1156
Percent	0.0	58.1	41.9	0.0		0.0	0.0	0.0	0.0		21.4	78.6	0.0	0.0		68.3	0.3	31.4	0.0		
05:00 Volume	0	68	58	0	126	0	0	0	0	0	31	95	0	0	126	53	1	25	0	79	331
Peak Factor																					0.873
High Int.	05:00 PM										05:00 PM					04:45 PM					
Volume	0	68	58	0	126	0	0	0	0	0	31	95	0	0	126	59	0	24	0	83	
Peak Factor					0.819										0.873					0.913	



COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: E. COUNTY LINE RD
E/W STREET: HWY 7 (E. BASELINE RD)
CITY: ERIE
COUNTY: BOUNDER

File Name : COUNLINEHWY7
Site Code : 00000013
Start Date : 11/16/2022
Page No : 1

Groups Printed- VEHICLES

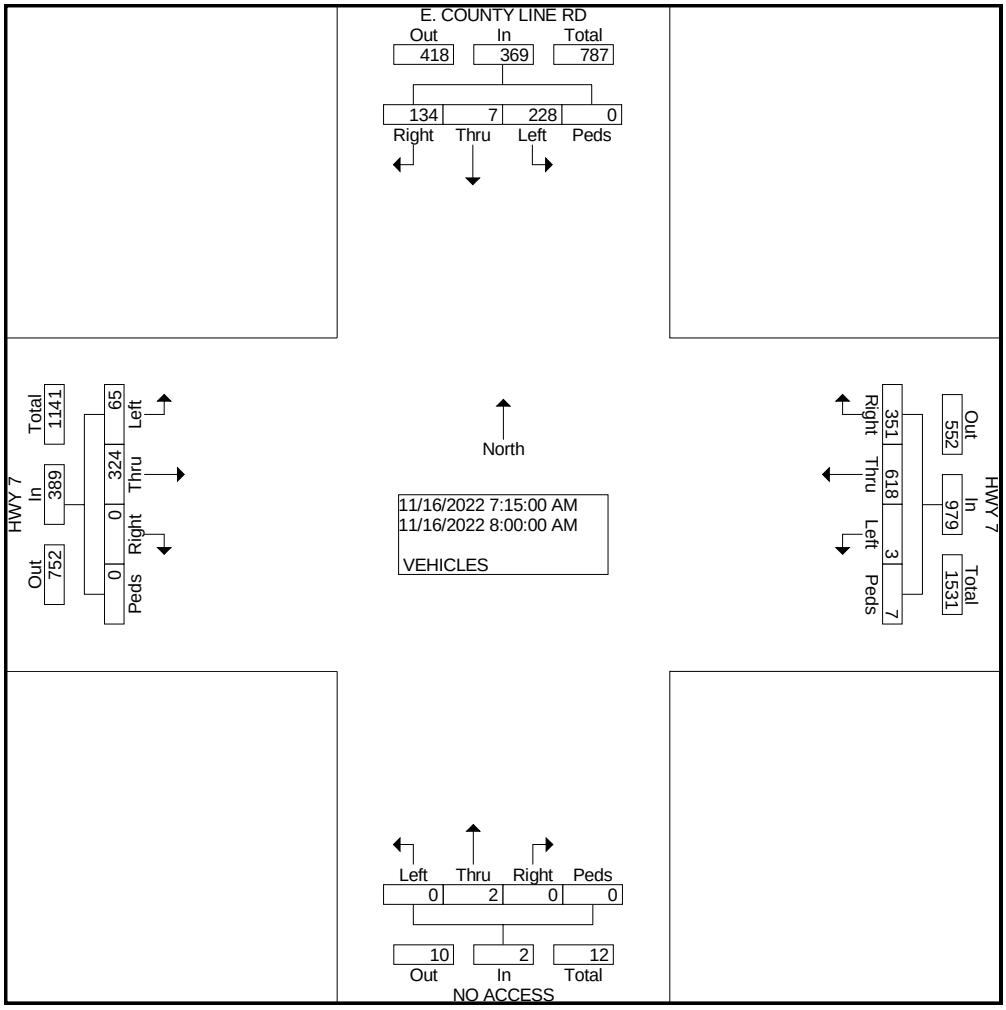
	E. COUNTY LINE RD Southbound				HWY 7 Westbound				NO ACCESS Northbound				HWY 7 Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	27	0	16	0	0	128	30	0	0	1	0	0	0	50	0	0	252
06:45 AM	39	1	32	0	0	151	58	0	0	0	0	0	7	59	0	0	347
Total	66	1	48	0	0	279	88	0	0	1	0	0	7	109	0	0	599
07:00 AM	21	0	29	0	0	150	74	0	0	0	0	0	14	65	0	0	353
07:15 AM	60	5	47	0	0	152	62	0	0	0	0	0	9	74	0	0	409
07:30 AM	62	1	35	0	0	175	88	1	0	1	0	0	13	73	0	0	449
07:45 AM	63	0	21	0	3	130	98	5	0	1	0	0	23	94	0	0	438
Total	206	6	132	0	3	607	322	6	0	2	0	0	59	306	0	0	1649
08:00 AM	43	1	31	0	0	161	103	1	0	0	0	0	20	83	0	0	443
08:15 AM	49	0	30	0	0	159	88	0	0	0	0	0	9	66	0	0	401
Total	92	1	61	0	0	320	191	1	0	0	0	0	29	149	0	0	844
04:00 PM	79	3	22	0	0	125	94	6	0	0	0	0	38	172	0	0	539
04:15 PM	69	0	18	0	0	113	64	2	0	0	0	0	39	192	0	0	497
04:30 PM	73	0	27	0	0	128	79	2	0	0	0	0	49	192	0	0	550
04:45 PM	87	0	29	0	0	138	94	0	0	0	0	0	45	196	0	0	589
Total	308	3	96	0	0	504	331	10	0	0	0	0	171	752	0	0	2175
05:00 PM	86	4	23	0	0	125	107	0	0	0	0	0	42	180	0	0	567
05:15 PM	87	0	15	0	0	125	113	0	0	0	0	0	21	188	0	0	549
05:30 PM	79	0	34	0	0	115	94	0	0	0	0	0	20	184	0	0	526
05:45 PM	54	0	26	0	0	101	72	0	0	0	0	0	26	171	0	0	450
Total	306	4	98	0	0	466	386	0	0	0	0	0	109	723	0	0	2092
06:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Grand Total	978	15	435	0	3	2176	1318	17	1	3	0	0	375	2039	0	0	7360
Apprch %	68.5	1.1	30.5	0.0	0.1	61.9	37.5	0.5	25.0	75.0	0.0	0.0	15.5	84.5	0.0	0.0	
Total %	13.3	0.2	5.9	0.0	0.0	29.6	17.9	0.2	0.0	0.0	0.0	0.0	5.1	27.7	0.0	0.0	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: E. COUNTY LINE RD
E/W STREET: HWY 7 (E. BASELINE RD)
CITY: ERIE
COUNTY: BOULDER

File Name : COUNLINEHWY7
Site Code : 00000013
Start Date : 11/16/2022
Page No : 2

	E. COUNTY LINE RD Southbound					HWY 7 Westbound					NO ACCESS Northbound					HWY 7 Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:15 AM to 08:00 AM - Peak 1 of 1																					
Intersection	07:15 AM																				
Volume	228	7	134	0	369	3	618	351	7	979	0	2	0	0	2	65	324	0	0	389	1739
Percent	61.8	1.9	36.3	0.0		0.3	63.1	35.9	0.7		0.0	100.0	0.0	0.0		16.7	83.3	0.0	0.0		
07:30 Volume	62	1	35	0	98	0	175	88	1	264	0	1	0	0	1	13	73	0	0	86	449
Peak Factor																					0.968
High Int.	07:15 AM					08:00 AM					07:30 AM					07:45 AM					
Volume	60	5	47	0	112	0	161	103	1	265	0	1	0	0	1	23	94	0	0	117	
Peak Factor					0.824					0.924					0.500					0.831	

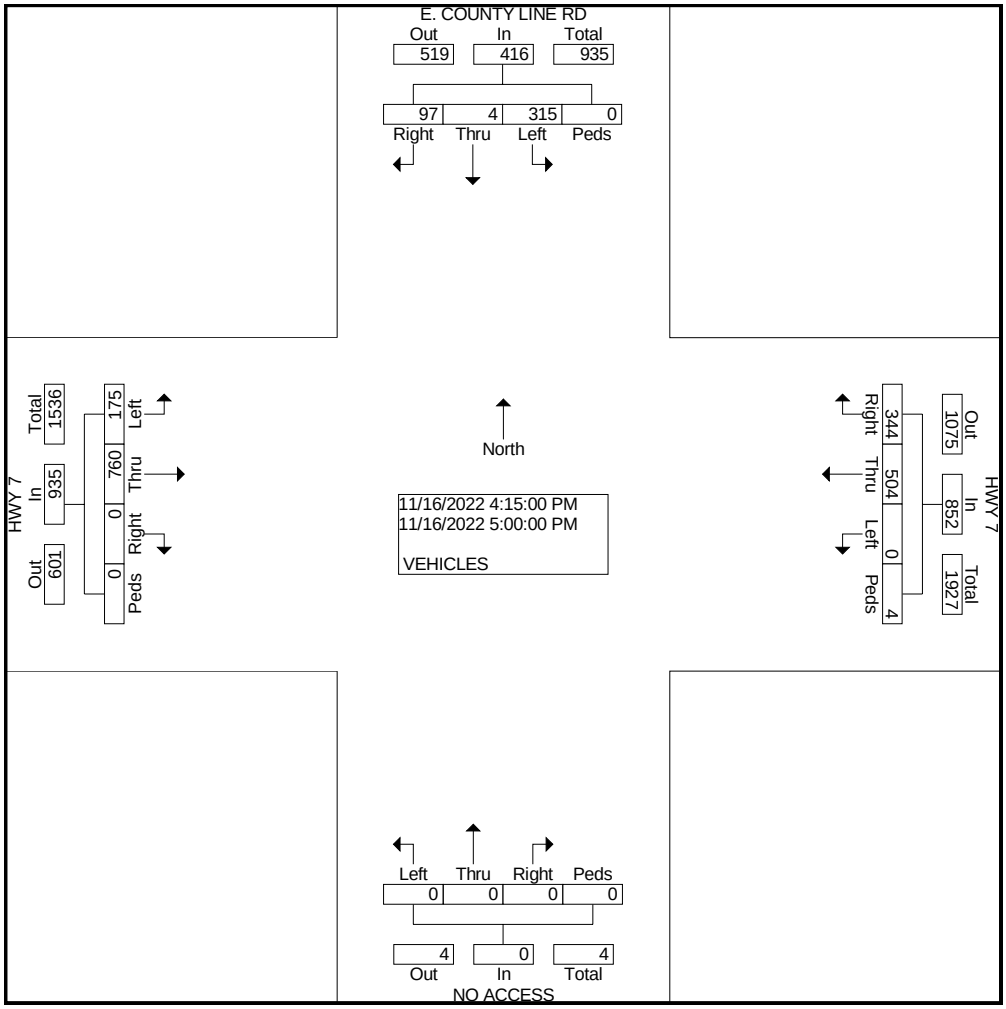


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: E. COUNTY LINE RD
E/W STREET: HWY 7 (E. BASELINE RD)
CITY: ERIE
COUNTY: BOULDER

File Name : COUNLINEHWY7
Site Code : 00000013
Start Date : 11/16/2022
Page No : 3

	E. COUNTY LINE RD Southbound					HWY 7 Westbound					NO ACCESS Northbound					HWY 7 Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Intersection	04:15 PM																				
Volume	315	4	97	0	416	0	504	344	4	852	0	0	0	0	0	175	760	0	0	935	2203
Percent	75.7	1.0	23.3	0.0		0.0	59.2	40.4	0.5		0.0	0.0	0.0	0.0		18.7	81.3	0.0	0.0		
04:45 Volume	87	0	29	0	116	0	138	94	0	232	0	0	0	0	0	45	196	0	0	241	589
Peak Factor																					0.935
High Int.	04:45 PM					04:45 PM										04:30 PM					
Volume	87	0	29	0	116	0	138	94	0	232	0	0	0	0	0	49	192	0	0	241	
Peak Factor					0.897					0.918										0.970	



COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET:
E/W STREET:
CITY:
COUNTY:

File Name : N119THHWY7
Site Code : 00000005
Start Date : 11/16/2022
Page No : 1

Groups Printed- VEHICLES

	N. 119TH ST Southbound				HWY 7 Westbound				N. 119TH ST Northbound				HWY 7 Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	10	20	3	0	46	66	27	0	6	1	16	0	1	33	1	0	230
06:45 AM	22	16	5	0	63	92	31	0	0	7	17	0	0	28	5	0	286
Total	32	36	8	0	109	158	58	0	6	8	33	0	1	61	6	0	516
07:00 AM	15	25	8	0	61	85	23	0	2	6	17	0	2	43	2	0	289
07:15 AM	19	53	5	0	91	92	14	0	4	12	23	0	4	48	7	0	372
07:30 AM	19	80	13	0	100	103	18	0	5	22	21	0	9	54	4	0	448
07:45 AM	32	49	16	0	62	113	22	0	9	45	40	0	14	63	8	0	473
Total	85	207	42	0	314	393	77	0	20	85	101	0	29	208	21	0	1582
08:00 AM	16	34	16	0	70	96	24	0	9	17	24	0	5	42	5	0	358
08:15 AM	17	24	14	0	62	104	25	0	2	13	20	0	14	52	9	0	356
Total	33	58	30	0	132	200	49	0	11	30	44	0	19	94	14	0	714
04:00 PM	53	31	7	0	51	89	12	0	7	47	52	0	11	105	5	0	470
04:15 PM	48	31	15	0	52	68	11	0	19	36	73	0	9	117	7	0	486
04:30 PM	72	34	8	0	57	90	15	0	6	49	74	0	26	81	2	0	514
04:45 PM	66	25	7	0	56	80	14	0	7	53	86	0	3	98	10	0	505
Total	239	121	37	0	216	327	52	0	39	185	285	0	49	401	24	0	1975
05:00 PM	61	32	5	0	46	100	17	0	8	26	78	0	13	98	9	0	493
05:15 PM	73	34	5	0	48	69	8	0	11	38	70	0	9	92	9	0	466
05:30 PM	56	29	10	0	47	83	19	0	6	36	65	0	14	104	4	0	473
05:45 PM	48	30	4	0	49	93	14	0	3	27	44	0	15	122	7	0	456
Total	238	125	24	0	190	345	58	0	28	127	257	0	51	416	29	0	1888
Grand Total	627	547	141	0	961	1423	294	0	104	435	720	0	149	1180	94	0	6675
Apprch %	47.7	41.6	10.7	0.0	35.9	53.1	11.0	0.0	8.3	34.6	57.2	0.0	10.5	82.9	6.6	0.0	
Total %	9.4	8.2	2.1	0.0	14.4	21.3	4.4	0.0	1.6	6.5	10.8	0.0	2.2	17.7	1.4	0.0	

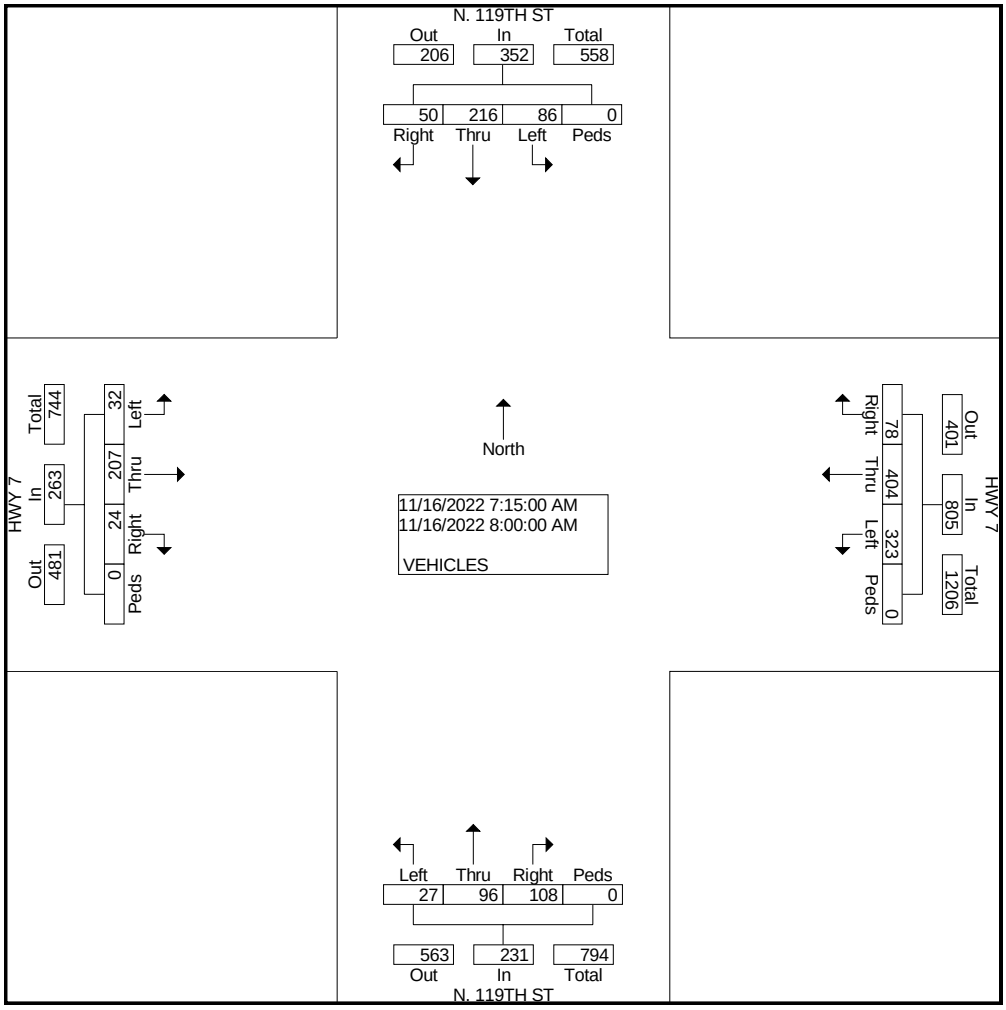
COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET:
E/W STREET:
CITY:
COUNTY:

File Name : N119THHWY7
Site Code : 00000005
Start Date : 11/16/2022
Page No : 2

	N. 119TH ST Southbound					HWY 7 Westbound					N. 119TH ST Northbound					HWY 7 Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:15 AM to 08:00 AM - Peak 1 of 1																					
Intersection	07:15 AM																				
Volume	86	216	50	0	352	323	404	78	0	805	27	96	108	0	231	32	207	24	0	263	1651
Percent	24.4	61.4	14.2	0.0		40.1	50.2	9.7	0.0		11.7	41.6	46.8	0.0		12.2	78.7	9.1	0.0		
07:45 Volume	32	49	16	0	97	62	113	22	0	197	9	45	40	0	94	14	63	8	0	85	473
Peak Factor																					0.873
High Int.	07:30 AM					07:30 AM					07:45 AM					07:45 AM					
Volume	19	80	13	0	112	100	103	18	0	221	9	45	40	0	94	14	63	8	0	85	
Peak Factor					0.786					0.911					0.614					0.774	

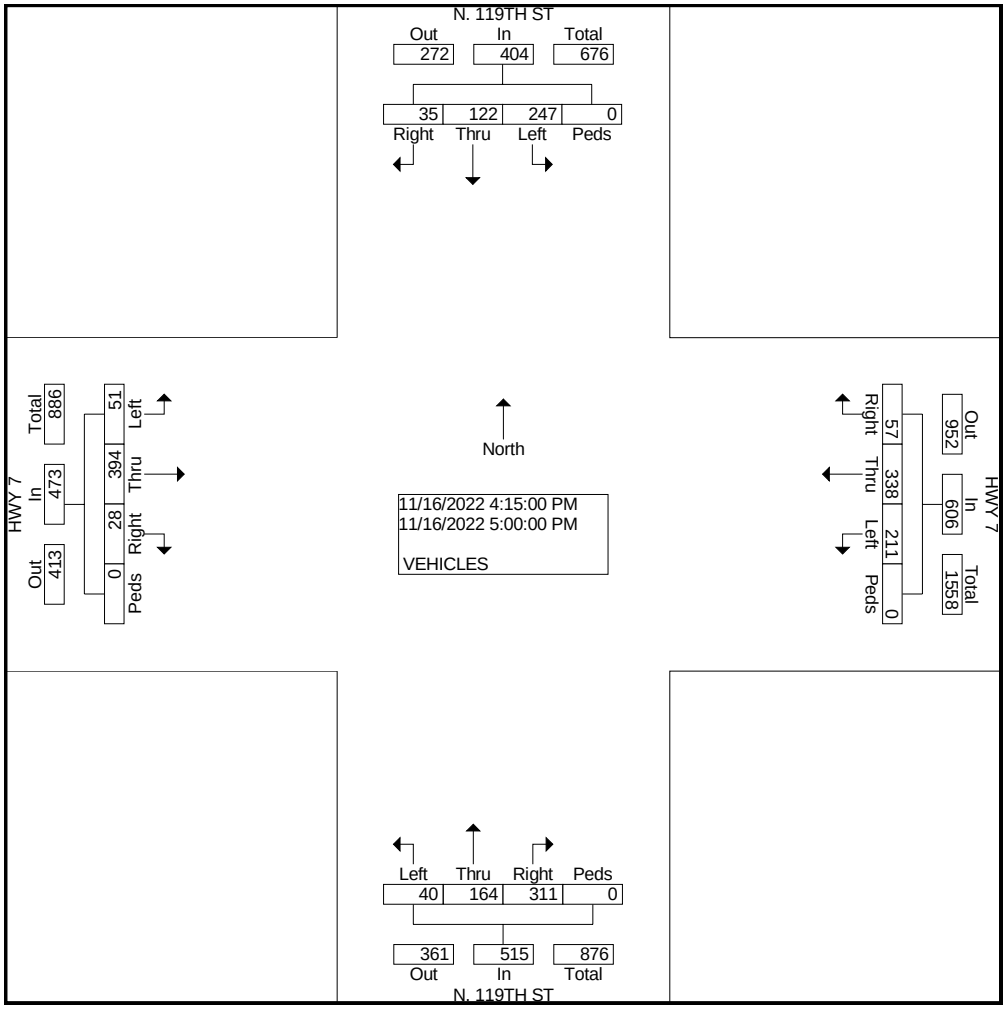


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET:
E/W STREET:
CITY:
COUNTY:

File Name : N119THHWY7
Site Code : 00000005
Start Date : 11/16/2022
Page No : 3

	N. 119TH ST Southbound					HWY 7 Westbound					N. 119TH ST Northbound					HWY 7 Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Intersection	04:15 PM																				
Volume	247	122	35	0	404	211	338	57	0	606	40	164	311	0	515	51	394	28	0	473	1998
Percent	61.1	30.2	8.7	0.0		34.8	55.8	9.4	0.0		7.8	31.8	60.4	0.0		10.8	83.3	5.9	0.0		
04:30 Volume	72	34	8	0	114	57	90	15	0	162	6	49	74	0	129	26	81	2	0	109	514
Peak Factor																					0.972
High Int.	04:30 PM					05:00 PM					04:45 PM					04:15 PM					
Volume	72	34	8	0	114	46	100	17	0	163	7	53	86	0	146	9	117	7	0	133	
Peak Factor					0.886					0.929					0.882					0.889	



COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: QUEST DR
E/W STREET: ARAPAHOE RD
CITY: ERIE
COUNTY: WELD

File Name : QUESARAPAHOE
Site Code : 00000005
Start Date : 11/30/2022
Page No : 1

Groups Printed- VEHICLES

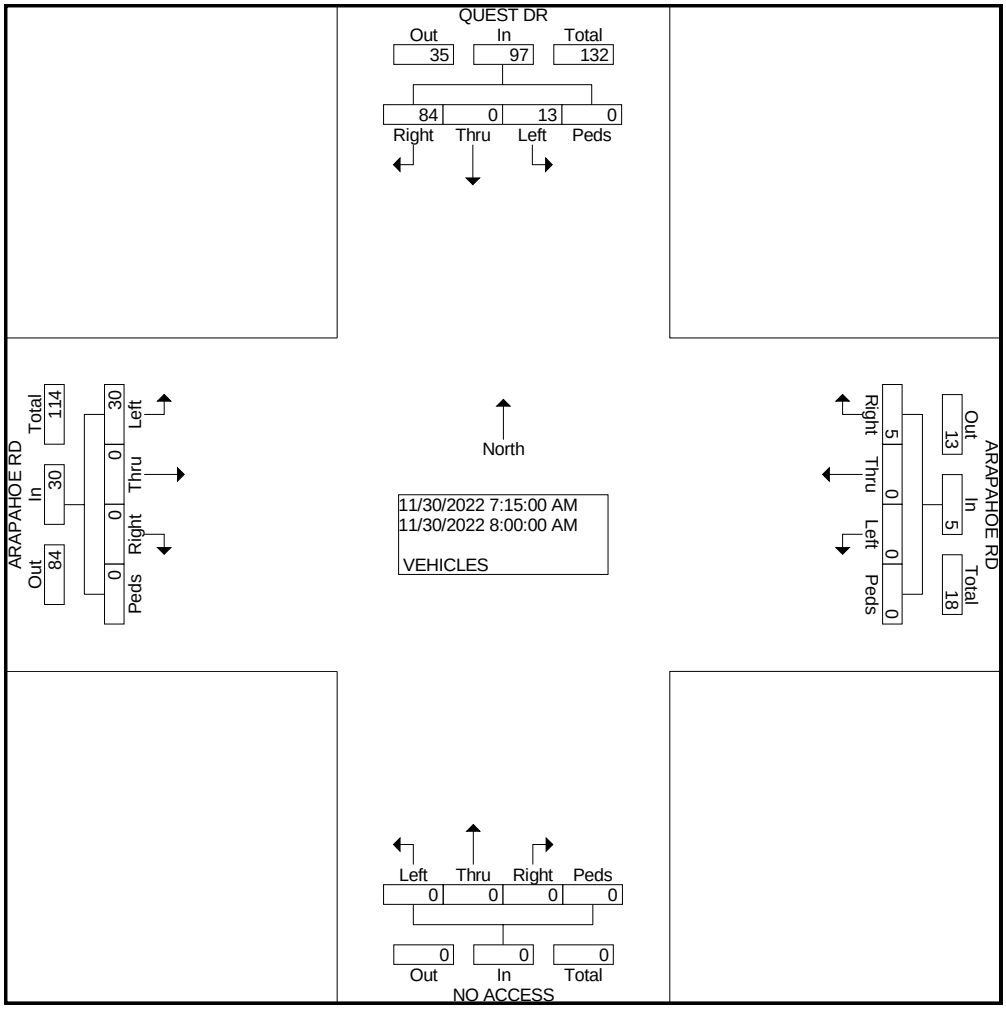
	QUEST DR Southbound				ARAPAHOE RD Westbound				NO ACCESS Northbound				ARAPAHOE RD Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	2	0	12	0	0	0	0	0	0	0	0	0	2	0	0	0	16
06:45 AM	2	0	6	0	0	0	2	0	0	0	0	0	1	0	0	0	11
Total	4	0	18	0	0	0	2	0	0	0	0	0	3	0	0	0	27
07:00 AM	4	0	11	0	0	0	1	0	0	0	0	0	4	0	0	0	20
07:15 AM	4	0	19	0	0	0	1	0	0	0	0	0	6	0	0	0	30
07:30 AM	4	0	34	0	0	0	0	0	0	0	0	0	2	0	0	0	40
07:45 AM	2	0	16	0	0	0	2	0	0	0	0	0	11	0	0	0	31
Total	14	0	80	0	0	0	4	0	0	0	0	0	23	0	0	0	121
08:00 AM	3	0	15	0	0	0	2	0	0	0	0	0	11	0	0	0	31
08:15 AM	1	0	16	0	0	0	0	0	0	0	0	0	7	0	0	0	24
Total	4	0	31	0	0	0	2	0	0	0	0	0	18	0	0	0	55
04:00 PM	4	0	15	0	0	0	1	0	0	0	0	0	28	0	0	0	48
04:15 PM	1	0	11	0	0	0	4	0	0	0	0	0	18	0	0	0	34
04:30 PM	0	0	17	0	0	0	2	0	0	0	0	0	26	0	0	0	45
04:45 PM	3	0	6	0	0	0	4	0	0	0	0	0	15	0	0	0	28
Total	8	0	49	0	0	0	11	0	0	0	0	0	87	0	0	0	155
05:00 PM	1	0	9	0	0	0	8	0	0	0	0	0	22	0	0	0	40
05:15 PM	0	0	14	0	0	0	8	0	0	0	0	0	30	0	0	0	52
05:30 PM	4	1	12	0	0	0	5	1	0	1	0	0	16	0	0	0	40
05:45 PM	3	0	4	0	0	0	3	0	0	0	0	0	23	0	0	0	33
Total	8	1	39	0	0	0	24	1	0	1	0	0	91	0	0	0	165
Grand Total	38	1	217	0	0	0	43	1	0	1	0	0	222	0	0	0	523
Apprch %	14.8	0.4	84.8	0.0	0.0	0.0	97.7	2.3	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	
Total %	7.3	0.2	41.5	0.0	0.0	0.0	8.2	0.2	0.0	0.2	0.0	0.0	42.4	0.0	0.0	0.0	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: QUEST DR
E/W STREET: ARAPAHOE RD
CITY: ERIE
COUNTY: WELD

File Name : QUESARAPAHOE
Site Code : 00000005
Start Date : 11/30/2022
Page No : 2

	QUEST DR Southbound					ARAPAHOE RD Westbound					NO ACCESS Northbound					ARAPAHOE RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:15 AM to 08:00 AM - Peak 1 of 1																					
Intersection	07:15 AM																				
Volume	13	0	84	0	97	0	0	5	0	5	0	0	0	0	0	30	0	0	0	30	132
Percent	13.4	0.0	86.6	0.0		0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		
07:30 Volume	4	0	34	0	38	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	40
Peak Factor																					0.825
High Int.	07:30 AM					07:45 AM										07:45 AM					
Volume	4	0	34	0	38	0	0	2	0	2	0	0	0	0	0	11	0	0	0	11	
Peak Factor					0.638					0.625										0.682	

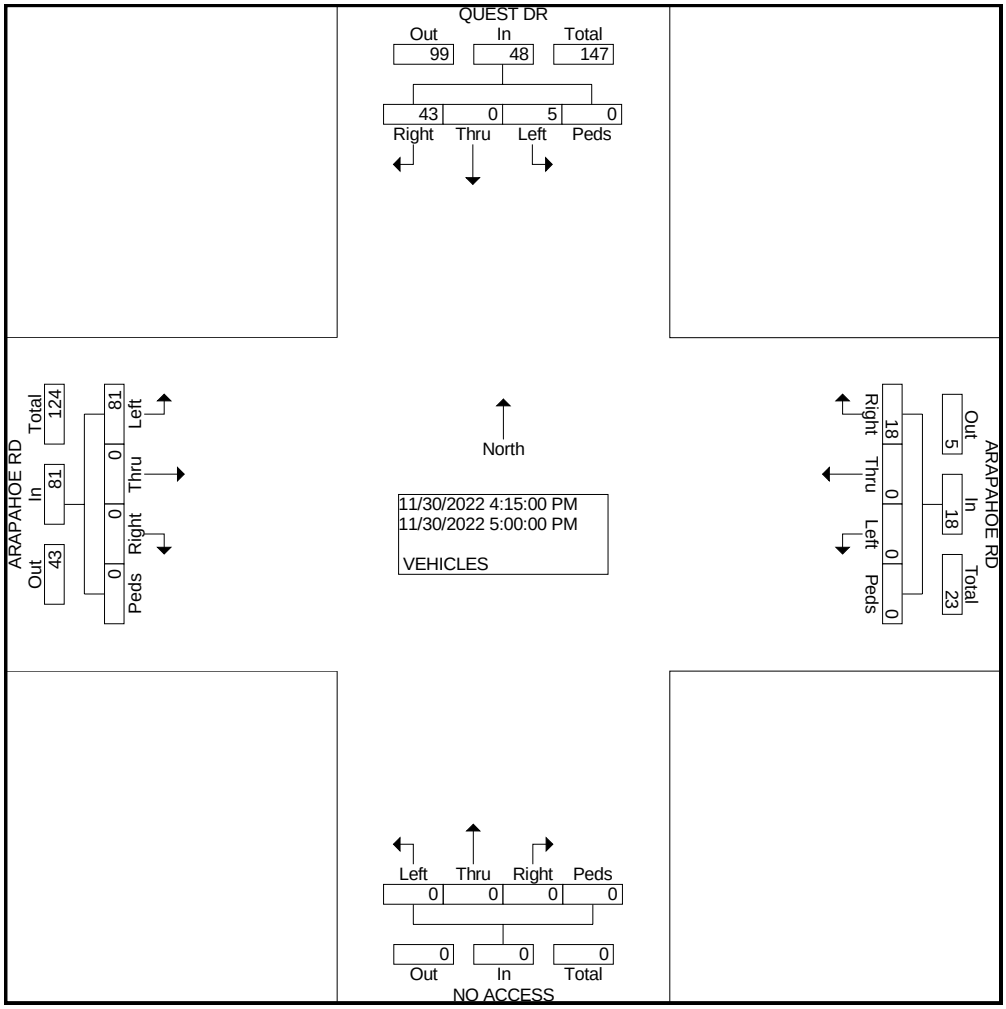


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: QUEST DR
E/W STREET: ARAPAHOE RD
CITY: ERIE
COUNTY: WELD

File Name : QUESARAPAHOE
Site Code : 00000005
Start Date : 11/30/2022
Page No : 3

	QUEST DR Southbound					ARAPAHOE RD Westbound					NO ACCESS Northbound					ARAPAHOE RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:15 PM to 05:00 PM - Peak 1 of 1																					
Intersection	04:15 PM																				
Volume	5	0	43	0	48	0	0	18	0	18	0	0	0	0	0	81	0	0	0	81	147
Percent	10.4	0.0	89.6	0.0		0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		
04:30 Volume	0	0	17	0	17	0	0	2	0	2	0	0	0	0	0	26	0	0	0	26	45
Peak Factor																					0.817
High Int.	04:30 PM					05:00 PM										04:30 PM					
Volume	0	0	17	0	17	0	0	8	0	8	0	0	0	0	0	26	0	0	0	26	
Peak Factor					0.706					0.563										0.779	



COUNTER MEASURES INC.
1889 YORK STREET
DENVER,COLORADO 80206
303-333-7409

Location: E. COUNTY LINE RD S-O ARAPAHOE RD
City: ERIE
County: BOULDER
Direction: NORTH/SOUTH

Site Code: 221614
Station ID: 221614

Start Time	16-Nov-22 Wed	NORTH	SOUTH							Total
12:00 AM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		**327**	262							**589**
10:00		286	222							508
11:00		274	**272**							546
12:00 PM		260	247							507
01:00		279	271							550
02:00		319	286							605
03:00		438	348							786
04:00		478	**355**							**833**
05:00		**484**	340							824
06:00		313	230							543
07:00		186	147							333
08:00		149	99							248
09:00		108	93							201
10:00		52	22							74
11:00		26	19							45
Total		3979	3213							7192
Percent		55.3%	44.7%							
AM Peak	-	09:00	11:00	-	-	-	-	-	-	09:00
Vol.	-	327	272	-	-	-	-	-	-	589
PM Peak	-	17:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	484	355	-	-	-	-	-	-	833

COUNTER MEASURES INC.
1889 YORK STREET
DENVER,COLORADO 80206
303-333-7409

Location: E. COUNTY LINE RD S-O ARAPAHOE RD
City: ERIE
County: BOULDER
Direction: NORTH/SOUTH

Site Code: 221614
Station ID: 221614

Start Time	17-Nov-22 Thu	NORTH	SOUTH							Total
12:00 AM		13	7							20
01:00		8	12							20
02:00		8	9							17
03:00		10	13							23
04:00		20	18							38
05:00		54	87							141
06:00		157	146							303
07:00		210	177							387
08:00		**245**	**233**							**478**
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
12:00 PM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
Total		725	702							1427
Percent		50.8%	49.2%							
AM Peak	-	08:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	245	233	-	-	-	-	-	-	478
PM Peak	-	-	-	-	-	-	-	-	-	-
Vol.	-	-	-	-	-	-	-	-	-	-
Grand Total		4704	3915							8619
Percent		54.6%	45.4%							
ADT		ADT 1,817		AADT 1,817						

COUNTER MEASURES INC.
1889 YORK STREET
DENVER,COLORADO 80206
303-333-7409

Location: ARAPAHOE RD E-O N. 119TH ST
City: ERIE
County: BOULDER
Direction: EAST/WEST

Site Code: 221603
Station ID: 221603

Start Time	16-Jan-22 Sun	EAST	WEST							Total
12:00 AM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		**262**	**281**							**543**
10:00		188	234							422
11:00		238	275							513
12:00 PM		267	277							544
01:00		211	233							444
02:00		289	241							530
03:00		387	293							680
04:00		391	**322**							713
05:00		**422**	299							**721**
06:00		233	212							445
07:00		143	118							261
08:00		121	77							198
09:00		95	63							158
10:00		33	13							46
11:00		16	11							27
Total		3296	2949							6245
Percent		52.8%	47.2%							
AM Peak	-	09:00	09:00	-	-	-	-	-	-	09:00
Vol.	-	262	281	-	-	-	-	-	-	543
PM Peak	-	17:00	16:00	-	-	-	-	-	-	17:00
Vol.	-	422	322	-	-	-	-	-	-	721

COUNTER MEASURES INC.
1889 YORK STREET
DENVER,COLORADO 80206
303-333-7409

Location: ARAPAHOE RD E-O N. 119TH ST
City: ERIE
County: BOULDER
Direction: EAST/WEST

Site Code: 221603
Station ID: 221603

Start Time	17-Jan-22 Mon	EAST	WEST							Total
12:00 AM		9	4							13
01:00		5	7							12
02:00		4	8							12
03:00		2	9							11
04:00		7	11							18
05:00		34	79							113
06:00		121	141							262
07:00		157	162							319
08:00		**186**	**211**							**397**
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
12:00 PM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
Total		525	632							1157
Percent		45.4%	54.6%							
AM Peak	-	08:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	186	211	-	-	-	-	-	-	397
PM Peak	-	-	-	-	-	-	-	-	-	-
Vol.	-	-	-	-	-	-	-	-	-	-
Grand Total		3821	3581							7402
Percent		51.6%	48.4%							
ADT		ADT 7,402		AADT 7,402						

PARKDALE NORTH-221090
Location: 119TH S-O ARAPAHOE RD
City: ERIE
County: BOULDER
Direction: NORTH/SOUTH

COUNTER MEASURES, INC.
TRAFFIC AND TRANSPORTATION FIELD DATA

Site Code: 2216304
Station ID:
Start Date: 11/16/2022
End Date: 11/17/2022
Latitude: 0.000000
Longitude: 0.000000

11/16/2022 Time	North, Lane 1	South, Lane 2	Total
12:00 AM	*	*	0
1:00	*	*	0
2:00	*	*	0
3:00	*	*	0
4:00	*	*	0
5:00	*	*	0
6:00	*	*	0
7:00	*	*	0
8:00	*	*	0
9:00	36	71	107
10:00	108	145	253
11:00	116	158	274
12:00 PM	98	166	264
1:00	124	161	285
2:00	122	210	332
3:00	211	297	508
4:00	264	374	638
5:00	273	382	655
6:00	133	230	363
7:00	111	117	228
8:00	81	84	165
9:00	56	41	97
10:00	25	29	54
11:00	20	12	32
Total	1778	2477	4255
Percent	41.8%	58.2%	
AM Peak	11:00	11:00	11:00
Volume	116	158	274
PM Peak	5:00	5:00	5:00
Volume	273	382	655

PARKDALE NORTH-221090
Location: 119TH S-O ARAPAHOE RD
City: ERIE
County: BOULDER
Direction: NORTH/SOUTH

COUNTER MEASURES, INC.
TRAFFIC AND TRANSPORTATION FIELD DATA

Site Code: 2216304
Station ID:
Start Date: 11/16/2022
End Date: 11/17/2022
Latitude: 0.000000
Longitude: 0.000000

11/17/2022 Time	North, Lane 1	South, Lane 2		Total
12:00 AM	9	4		13
1:00	2	8		10
2:00	2	8		10
3:00	4	4		8
4:00	20	14		34
5:00	56	38		94
6:00	86	101		187
7:00	115	303		418
8:00	75	99		174
9:00	*	*		0
10:00	*	*		0
11:00	*	*		0
12:00 PM	*	*		0
1:00	*	*		0
2:00	*	*		0
3:00	*	*		0
4:00	*	*		0
5:00	*	*		0
6:00	*	*		0
7:00	*	*		0
8:00	*	*		0
9:00	*	*		0
10:00	*	*		0
11:00	*	*		0
Total	369	579		948
Percent	38.9%	61.1%		
AM Peak	7:00	7:00		7:00
Volume	115	303		418
PM Peak				
Volume				
Grand Total	2147	3056		5203
Percent	41.3%	58.7%		
ADT		ADT: 5,203	AADT: 5,203	

LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board

SIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

LOS	Average Vehicle Delay sec/vehicle	Operational Characteristics
A	<10 seconds	Describes operations with low control delay, up to 10 sec/veh. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	10 to 20 seconds	Describes operations with control delay greater than 10 seconds and up to 20 sec/veh. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20 to 35 seconds	Describes operations with control delay greater than 20 and up to 35 sec/veh. These higher delays may result from only fair progression, longer cycle length, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	35 to 55 seconds	Describes operations with control delay greater than 35 and up to 55 sec/veh. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55 to 80 seconds	Describes operations with control delay greater than 55 and up to 80 sec/veh. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent.
F	>80 seconds	Describes operations with control delay in excess of 80 sec/veh. This level, considered unacceptable to most drivers, often occurs with over-saturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

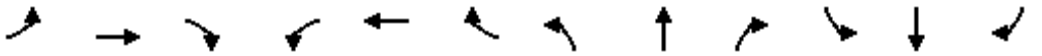
LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board

UNSIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

Applicable to Two-Way Stop Control, All-Way Stop Control, and Roundabouts

LOS	Average Vehicle Control Delay	Operational Characteristics
A	<10 seconds	Normally, vehicles on the stop-controlled approach only have to wait up to 10 seconds before being able to clear the intersection. Left-turning vehicles on the uncontrolled street do not have to wait to make their turn.
B	10 to 15 seconds	Vehicles on the stop-controlled approach will experience delays before being able to clear the intersection. The delay could be up to 15 seconds. Left-turning vehicles on the uncontrolled street may have to wait to make their turn.
C	15 to 25 seconds	Vehicles on the stop-controlled approach can expect delays in the range of 15 to 25 seconds before clearing the intersection. Motorists may begin to take chances due to the long delays, thereby posing a safety risk to through traffic. Left-turning vehicles on the uncontrolled street will now be required to wait to make their turn causing a queue to be created in the turn lane.
D	25 to 35 seconds	This is the point at which a traffic signal may be warranted for this intersection. The delays for the stop-controlled intersection are not considered to be excessive. The length of the queue may begin to block other public and private access points.
E	35 to 50 seconds	The delays for all critical traffic movements are considered to be unacceptable. The length of the queues for the stop-controlled approaches as well as the left-turn movements are extremely long. There is a high probability that this intersection will meet traffic signal warrants. The ability to install a traffic signal is affected by the location of other existing traffic signals. Consideration may be given to restricting the accesses by eliminating the left-turn movements from and to the stop-controlled approach.
F	>50 seconds	The delay for the critical traffic movements are probably in excess of 100 seconds. The length of the queues are extremely long. Motorists are selecting alternative routes due to the long delays. The only remedy for these long delays is installing a traffic signal or restricting the accesses. The potential for accidents at this intersection are extremely high due to motorist taking more risky chances. If the median permits, motorists begin making two-stage left-turns.

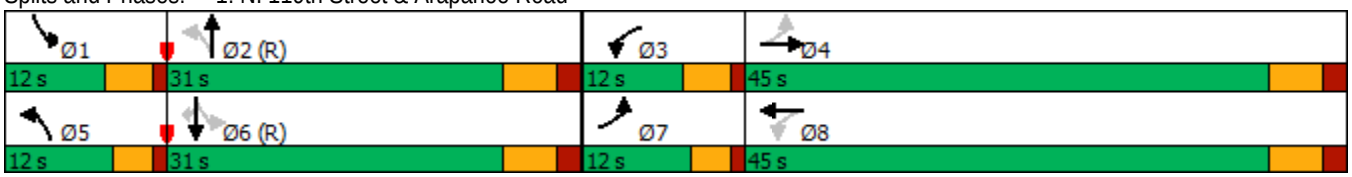


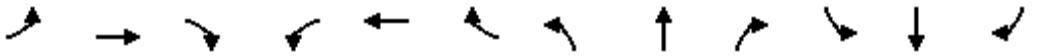
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	115	86	65	393	12	93	79	34	14	186	83
Future Volume (vph)	14	115	86	65	393	12	93	79	34	14	186	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	90		0	365		0	90		230
Storage Lanes	1		0	1		0	1		0	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
Frt		0.936			0.996			0.955				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1744	0	1770	1855	0	1770	1779	0	1770	1863	1583
Flt Permitted	0.250			0.452			0.561			0.679		
Satd. Flow (perm)	466	1744	0	842	1855	0	1045	1779	0	1265	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44			2			21				131
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		407			4177			5336			340	
Travel Time (s)		6.9			71.2			91.0			5.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	15	124	92	70	423	13	100	85	37	15	200	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	216	0	70	436	0	100	122	0	15	200	89
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	24.0		9.5	24.0		9.5	24.0		9.5	24.0	24.0
Total Split (s)	12.0	45.0		12.0	45.0		12.0	31.0		12.0	31.0	31.0
Total Split (%)	12.0%	45.0%		12.0%	45.0%		12.0%	31.0%		12.0%	31.0%	31.0%
Maximum Green (s)	8.0	39.0		7.5	39.0		8.0	25.0		7.5	25.0	25.0
Yellow Time (s)	3.0	4.0		3.5	4.0		3.0	4.0		3.5	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0		4.5	6.0		4.0	6.0		4.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Walk Time (s)		7.0			7.0			7.0			7.0	7.0
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	30.9	23.8		33.6	29.1		56.1	50.1		50.9	44.5	44.5
Actuated g/C Ratio	0.31	0.24		0.34	0.29		0.56	0.50		0.51	0.44	0.44
v/c Ratio	0.07	0.48		0.20	0.81		0.16	0.14		0.02	0.24	0.11
Control Delay	16.4	28.0		19.8	44.2		21.4	26.0		15.3	23.4	2.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	16.4	28.0		19.8	44.2		21.4	26.0		15.3	23.4	2.3
LOS	B	C		B	D		C	C		B	C	A
Approach Delay		27.3			40.8			24.0			16.8	
Approach LOS		C			D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 29.6		Intersection LOS: C	
Intersection Capacity Utilization 57.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: N. 119th Street & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	115	86	65	393	12	93	79	34	14	186	83
Future Volume (veh/h)	14	115	86	65	393	12	93	79	34	14	186	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	124	92	70	423	13	100	85	37	15	200	89
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	235	174	296	480	15	599	611	266	683	879	745
Arrive On Green	0.02	0.24	0.24	0.04	0.27	0.27	0.05	0.49	0.49	0.02	0.47	0.47
Sat Flow, veh/h	1781	997	740	1781	1805	55	1781	1236	538	1781	1870	1585
Grp Volume(v), veh/h	15	0	216	70	0	436	100	0	122	15	200	89
Grp Sat Flow(s),veh/h/ln	1781	0	1737	1781	0	1860	1781	0	1774	1781	1870	1585
Q Serve(g_s), s	0.6	0.0	10.9	2.9	0.0	22.5	2.8	0.0	3.7	0.4	6.3	3.2
Cycle Q Clear(g_c), s	0.6	0.0	10.9	2.9	0.0	22.5	2.8	0.0	3.7	0.4	6.3	3.2
Prop In Lane	1.00		0.43	1.00		0.03	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	142	0	409	296	0	495	599	0	877	683	879	745
V/C Ratio(X)	0.11	0.00	0.53	0.24	0.00	0.88	0.17	0.00	0.14	0.02	0.23	0.12
Avail Cap(c_a), veh/h	254	0	677	353	0	726	658	0	877	786	879	745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.85	0.00	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	33.4	27.4	0.0	35.2	12.4	0.0	13.7	13.3	15.7	14.9
Incr Delay (d2), s/veh	0.3	0.0	1.1	0.4	0.0	8.6	0.1	0.0	0.3	0.0	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	4.5	1.2	0.0	10.9	1.1	0.0	1.5	0.2	2.7	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	0.0	34.4	27.8	0.0	43.8	12.5	0.0	14.0	13.3	16.3	15.2
LnGrp LOS	C	A	C	C	A	D	B	A	B	B	B	B
Approach Vol, veh/h		231			506			222			304	
Approach Delay, s/veh		34.2			41.6			13.3			15.9	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	55.5	8.8	29.5	8.7	53.0	5.7	32.6
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	7.5	25.0	7.5	39.0	8.0	25.0	8.0	39.0
Max Q Clear Time (g_c+I1), s	2.4	5.7	4.9	12.9	4.8	8.3	2.6	24.5
Green Ext Time (p_c), s	0.0	0.5	0.0	1.2	0.1	1.2	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

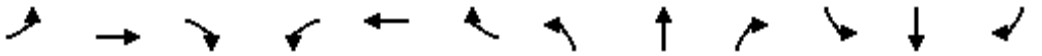
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	130	400	5	13	84
Future Vol, veh/h	30	130	400	5	13	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	157	482	6	16	101

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	488	0	-	0	714	244
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	229	-
Critical Hdwy	4.13	-	-	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.219	-	-	-	3.519	3.319
Pot Cap-1 Maneuver	1073	-	-	-	382	757
Stage 1	-	-	-	-	586	-
Stage 2	-	-	-	-	808	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1073	-	-	-	369	757
Mov Cap-2 Maneuver	-	-	-	-	369	-
Stage 1	-	-	-	-	566	-
Stage 2	-	-	-	-	808	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1073	-	-	-	369	757
HCM Lane V/C Ratio	0.034	-	-	-	0.042	0.134
HCM Control Delay (s)	8.5	-	-	-	15.2	10.5
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	0.5

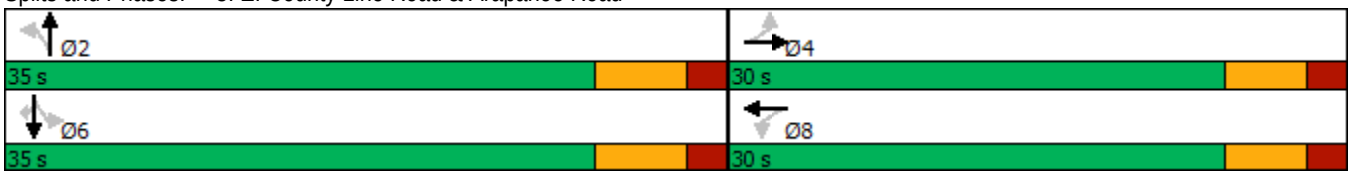


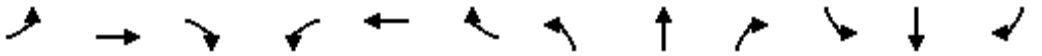
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	1	55	1	1	1	203	173	1	1	301	203
Future Volume (vph)	88	1	55	1	1	1	203	173	1	1	301	203
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	0		0	150		0	150		150
Storage Lanes	1		0	0		0	1		0	0		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
Frt		0.852			0.955			0.999				0.850
Flt Protected	0.950				0.984		0.950					
Satd. Flow (prot)	1770	1587	0	0	1750	0	1770	1861	0	0	1863	1583
Flt Permitted	0.756				0.887		0.564				0.999	
Satd. Flow (perm)	1408	1587	0	0	1578	0	1051	1861	0	0	1861	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		59			1			1				218
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1173			275			2342			343	
Travel Time (s)		20.0			4.7			31.9			4.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	95	1	59	1	1	1	218	186	1	1	324	218
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	60	0	0	3	0	218	187	0	0	325	218
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	24.0	24.0		24.0	24.0		24.5	24.5		24.5	24.5	24.5
Total Split (s)	30.0	30.0		30.0	30.0		35.0	35.0		35.0	35.0	35.0
Total Split (%)	46.2%	46.2%		46.2%	46.2%		53.8%	53.8%		53.8%	53.8%	53.8%
Maximum Green (s)	24.0	24.0		24.0	24.0		28.5	28.5		28.5	28.5	28.5
Yellow Time (s)	4.0	4.0		4.0	4.0		4.5	4.5		4.5	4.5	4.5
All-Red Time (s)	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
Total Lost Time (s)	6.0	6.0			6.0		6.5	6.5			6.5	6.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		Max	Max		Max	Max	Max
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	8.9	8.9			8.9		36.2	36.2			36.2	36.2
Actuated g/C Ratio	0.17	0.17			0.17		0.67	0.67			0.67	0.67
v/c Ratio	0.41	0.19			0.01		0.31	0.15			0.26	0.19
Control Delay	24.5	7.5			15.0		7.6	5.7			6.2	1.6
Queue Delay	0.0	0.0			0.0		0.0	0.0			0.0	0.0
Total Delay	24.5	7.5			15.0		7.6	5.7			6.2	1.6
LOS	C	A			B		A	A			A	A
Approach Delay		17.9			15.0			6.7			4.4	
Approach LOS		B			B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 53.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 7.2		Intersection LOS: A	
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: E. County Line Road & Arapahoe Road

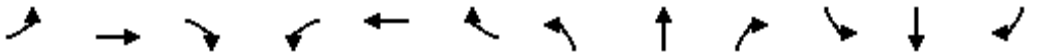




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	1	55	1	1	1	203	173	1	1	301	203
Future Volume (veh/h)	88	1	55	1	1	1	203	173	1	1	301	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	1	59	1	1	1	218	186	1	1	324	218
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	303	3	160	131	88	57	628	1159	6	79	1166	989
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	1415	26	1563	252	863	557	864	1859	10	1	1869	1585
Grp Volume(v), veh/h	95	0	60	3	0	0	218	0	187	325	0	218
Grp Sat Flow(s),veh/h/ln	1415	0	1589	1671	0	0	864	0	1869	1870	0	1585
Q Serve(g_s), s	2.9	0.0	1.6	0.0	0.0	0.0	7.0	0.0	1.9	0.0	0.0	2.7
Cycle Q Clear(g_c), s	2.9	0.0	1.6	0.1	0.0	0.0	10.6	0.0	1.9	3.6	0.0	2.7
Prop In Lane	1.00		0.98	0.33		0.33	1.00		0.01	0.00		1.00
Lane Grp Cap(c), veh/h	303	0	163	276	0	0	628	0	1166	1246	0	989
V/C Ratio(X)	0.31	0.00	0.37	0.01	0.00	0.00	0.35	0.00	0.16	0.26	0.00	0.22
Avail Cap(c_a), veh/h	902	0	835	940	0	0	628	0	1166	1246	0	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	19.1	18.4	0.0	0.0	6.3	0.0	3.6	3.9	0.0	3.7
Incr Delay (d2), s/veh	0.6	0.0	1.4	0.0	0.0	0.0	1.5	0.0	0.3	0.5	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.6	0.0	0.0	0.0	0.8	0.0	0.3	0.6	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	0.0	20.5	18.4	0.0	0.0	7.8	0.0	3.9	4.4	0.0	4.3
LnGrp LOS	C	A	C	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		155			3			405			543	
Approach Delay, s/veh		20.4			18.4			6.0			4.4	
Approach LOS		C			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.0		10.7		35.0		10.7				
Change Period (Y+Rc), s		6.5		6.0		6.5		6.0				
Max Green Setting (Gmax), s		28.5		24.0		28.5		24.0				
Max Q Clear Time (g_c+I1), s		12.6		4.9		5.6		2.1				
Green Ext Time (p_c), s		1.9		0.5		2.4		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			7.2									
HCM 6th LOS			A									

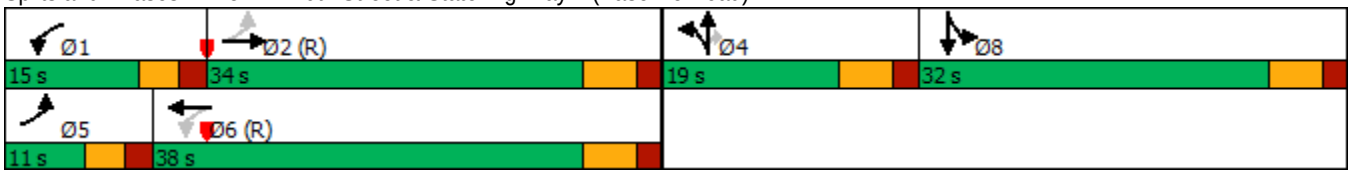


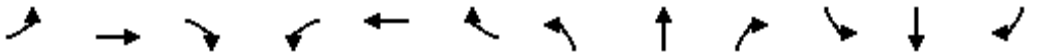
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	207	24	323	404	78	27	96	108	86	216	50
Future Volume (vph)	32	207	24	323	404	78	27	96	108	86	216	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	230		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.976				0.850		0.981	
Flt Protected	0.950			0.950				0.989			0.988	
Satd. Flow (prot)	1770	1835	0	1770	1818	0	0	1842	1583	0	1805	0
Flt Permitted	0.139			0.397				0.989			0.988	
Satd. Flow (perm)	259	1835	0	740	1818	0	0	1842	1583	0	1805	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			10				153		8	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		768			3921			468			5336	
Travel Time (s)		11.6			59.4			8.0			91.0	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	36	235	27	367	459	89	31	109	123	98	245	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	262	0	367	548	0	0	140	123	0	400	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6					4			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		4	4	4	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	
Minimum Split (s)	10.0	24.0		10.0	24.0		19.0	19.0	19.0	19.0	19.0	
Total Split (s)	11.0	34.0		15.0	38.0		19.0	19.0	19.0	32.0	32.0	
Total Split (%)	11.0%	34.0%		15.0%	38.0%		19.0%	19.0%	19.0%	32.0%	32.0%	
Maximum Green (s)	6.0	28.0		10.0	32.0		13.0	13.0	13.0	26.0	26.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0			-1.0	-1.0		-1.0	
Total Lost Time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	Max	C-Max		Max	C-Max		None	None	None	None	None	
Act Effct Green (s)	40.1	29.0		48.1	33.0			12.5	12.5		25.3	
Actuated g/C Ratio	0.40	0.29		0.48	0.33			0.12	0.12		0.25	
v/c Ratio	0.14	0.49		0.73	0.90			0.61	0.37		0.86	
Control Delay	17.0	32.4		30.0	52.0			52.7	6.9		53.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	17.0	32.4		30.0	52.0			52.7	6.9		53.6	
LOS	B	C		C	D			D	A		D	
Approach Delay		30.5			43.2			31.3			53.6	
Approach LOS		C			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 35 (35%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 41.7		Intersection LOS: D	
Intersection Capacity Utilization 67.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 15: N. 119th Street & State Highway 7 (Baseline Road)

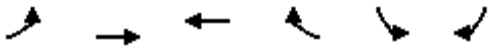




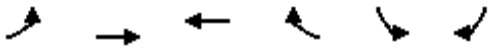
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	207	24	323	404	78	27	96	108	86	216	50
Future Volume (veh/h)	32	207	24	323	404	78	27	96	108	86	216	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	235	27	367	459	89	31	109	123	98	245	57
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	563	65	527	581	113	44	156	172	110	276	64
Arrive On Green	0.07	0.34	0.33	0.11	0.38	0.37	0.10	0.11	0.11	0.24	0.25	0.24
Sat Flow, veh/h	1781	1647	189	1781	1522	295	410	1440	1585	442	1104	257
Grp Volume(v), veh/h	36	0	262	367	0	548	140	0	123	400	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1836	1781	0	1817	1850	0	1585	1802	0	0
Q Serve(g_s), s	1.2	0.0	11.0	11.0	0.0	26.7	7.3	0.0	7.5	21.4	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	11.0	11.0	0.0	26.7	7.3	0.0	7.5	21.4	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.16	0.22		1.00	0.24		0.14
Lane Grp Cap(c), veh/h	295	0	627	527	0	693	201	0	172	450	0	0
V/C Ratio(X)	0.12	0.00	0.42	0.70	0.00	0.79	0.70	0.00	0.72	0.89	0.00	0.00
Avail Cap(c_a), veh/h	295	0	627	527	0	693	259	0	222	487	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.86	0.00	0.86	1.00	0.00	1.00	0.98	0.00	0.00
Uniform Delay (d), s/veh	20.4	0.0	25.3	21.0	0.0	27.5	43.1	0.0	43.1	36.3	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	2.0	6.4	0.0	7.8	5.6	0.0	7.5	16.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	4.9	6.1	0.0	12.2	3.6	0.0	3.2	11.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	0.0	27.4	27.4	0.0	35.2	48.7	0.0	50.6	53.1	0.0	0.0
LnGrp LOS	C	A	C	C	A	D	D	A	D	D	A	A
Approach Vol, veh/h		298			915			263			400	
Approach Delay, s/veh		26.6			32.1			49.6			53.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	39.2		15.8	11.0	43.2		30.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	10.0	28.0		13.0	6.0	32.0		26.0				
Max Q Clear Time (g_c+I1), s	13.0	13.0		9.5	3.2	28.7		23.4				
Green Ext Time (p_c), s	0.0	1.1		0.3	0.0	1.0		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			38.2									
HCM 6th LOS			D									



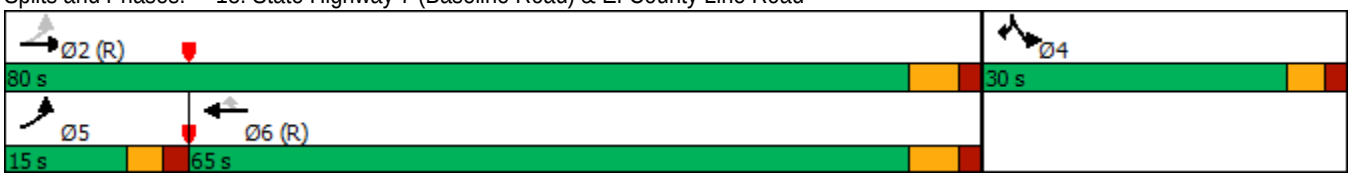
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	324	618	351	235	134
Future Volume (vph)	65	324	618	351	235	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	660			185	0	110
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.302				0.950	
Satd. Flow (perm)	563	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				344		132
Link Speed (mph)		45	45		50	
Link Distance (ft)		3921	2056		3327	
Travel Time (s)		59.4	31.2		45.4	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	67	334	637	362	242	138
Shared Lane Traffic (%)						
Lane Group Flow (vph)	67	334	637	362	242	138
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Prot
Protected Phases	5	2	6		4	4
Permitted Phases	2			6		

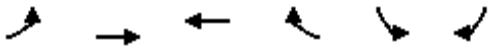


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	24.0	24.0	24.0	10.0	10.0
Total Split (s)	15.0	80.0	65.0	65.0	30.0	30.0
Total Split (%)	13.6%	72.7%	59.1%	59.1%	27.3%	27.3%
Maximum Green (s)	10.0	74.0	59.0	59.0	25.0	25.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	5.0	5.0	5.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	C-Max	None	None
Walk Time (s)		7.0	7.0	7.0		
Flash Dont Walk (s)		11.0	11.0	11.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)	81.2	80.2	70.6	70.6	20.8	20.8
Actuated g/C Ratio	0.74	0.73	0.64	0.64	0.19	0.19
v/c Ratio	0.13	0.25	0.53	0.32	0.72	0.34
Control Delay	5.3	6.0	14.5	2.3	54.2	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.3	6.0	14.5	2.3	54.2	9.2
LOS	A	A	B	A	D	A
Approach Delay		5.9	10.1		37.8	
Approach LOS		A	B		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 6 (5%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 15.0		Intersection LOS: B	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 18: State Highway 7 (Baseline Road) & E. County Line Road

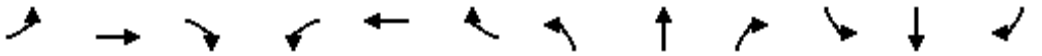




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	65	324	618	351	235	134
Future Volume (veh/h)	65	324	618	351	235	134
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	334	637	362	242	138
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	432	1408	1249	1058	295	262
Arrive On Green	0.05	0.75	0.67	0.67	0.17	0.17
Sat Flow, veh/h	1781	1870	1870	1585	1781	1585
Grp Volume(v), veh/h	67	334	637	362	242	138
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1781	1585
Q Serve(g_s), s	1.1	5.9	18.9	10.8	14.4	8.8
Cycle Q Clear(g_c), s	1.1	5.9	18.9	10.8	14.4	8.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	432	1408	1249	1058	295	262
V/C Ratio(X)	0.16	0.24	0.51	0.34	0.82	0.53
Avail Cap(c_a), veh/h	523	1408	1249	1058	421	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.3	4.1	9.2	7.9	44.3	42.0
Incr Delay (d2), s/veh	0.1	0.4	1.5	0.9	8.5	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	6.9	3.3	6.8	7.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.4	4.4	10.7	8.7	52.8	43.6
LnGrp LOS	A	A	B	A	D	D
Approach Vol, veh/h		401	999		380	
Approach Delay, s/veh		4.8	10.0		49.5	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		87.8		22.2	9.4	78.5
Change Period (Y+Rc), s		6.0		5.0	5.0	6.0
Max Green Setting (Gmax), s		74.0		25.0	10.0	59.0
Max Q Clear Time (g_c+I1), s		7.9		16.4	3.1	20.9
Green Ext Time (p_c), s		1.9		0.8	0.1	5.8

Intersection Summary	
HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B

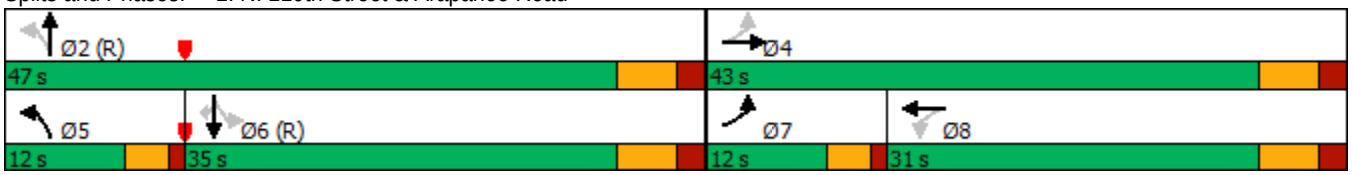


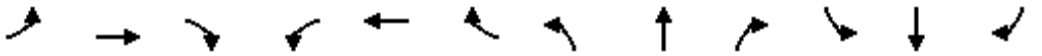
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	353	220	36	237	17	101	159	44	15	137	72
Future Volume (vph)	83	353	220	36	237	17	101	159	44	15	137	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	90		0	365		0	90		230
Storage Lanes	1		0	1		0	1		0	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
Frt		0.942			0.990			0.968				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1755	0	1770	1844	0	1770	1803	0	1770	1863	1583
Flt Permitted	0.381			0.186			0.586			0.616		
Satd. Flow (perm)	710	1755	0	346	1844	0	1092	1803	0	1147	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42			4			20				133
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		407			3967			5336			340	
Travel Time (s)		6.9			67.6			91.0			5.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	93	397	247	40	266	19	113	179	49	17	154	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	93	644	0	40	285	0	113	228	0	17	154	81
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases	7	4			8		5	2			6	
Permitted Phases	4			8			2			6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	24.0		24.0	24.0		9.5	24.0		24.0	24.0	24.0
Total Split (s)	12.0	43.0		31.0	31.0		12.0	47.0		35.0	35.0	35.0
Total Split (%)	13.3%	47.8%		34.4%	34.4%		13.3%	52.2%		38.9%	38.9%	38.9%
Maximum Green (s)	8.0	37.0		25.0	25.0		8.0	41.0		29.0	29.0	29.0
Yellow Time (s)	3.0	4.0		4.0	4.0		3.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	2.0		2.0	2.0		1.0	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
Total Lost Time (s)	4.0	6.0		6.0	6.0		4.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	C-Max
Walk Time (s)		7.0		7.0	7.0			7.0		7.0	7.0	7.0
Flash Dont Walk (s)		11.0		11.0	11.0			11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0		0	0	0
Act Effct Green (s)	36.7	34.7		25.2	25.2		45.3	43.3		33.8	33.8	33.8
Actuated g/C Ratio	0.41	0.39		0.28	0.28		0.50	0.48		0.38	0.38	0.38
v/c Ratio	0.25	0.92		0.41	0.55		0.19	0.26		0.04	0.22	0.12
Control Delay	17.5	44.0		41.9	32.1		13.6	14.3		21.5	22.5	1.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	17.5	44.0		41.9	32.1		13.6	14.3		21.5	22.5	1.4
LOS	B	D		D	C		B	B		C	C	A
Approach Delay		40.7			33.3			14.1			15.7	
Approach LOS		D			C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 29.9		Intersection LOS: C	
Intersection Capacity Utilization 71.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: N. 119th Street & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	353	220	36	237	17	101	159	44	15	137	72
Future Volume (veh/h)	83	353	220	36	237	17	101	159	44	15	137	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	397	247	40	266	19	113	179	49	17	154	81
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	354	421	262	108	508	36	546	673	184	512	702	595
Arrive On Green	0.05	0.39	0.39	0.29	0.29	0.29	0.06	0.48	0.48	0.38	0.38	0.38
Sat Flow, veh/h	1781	1079	671	786	1725	123	1781	1414	387	1153	1870	1585
Grp Volume(v), veh/h	93	0	644	40	0	285	113	0	228	17	154	81
Grp Sat Flow(s),veh/h/ln	1781	0	1750	786	0	1848	1781	0	1801	1153	1870	1585
Q Serve(g_s), s	3.1	0.0	31.9	3.2	0.0	11.6	3.3	0.0	6.8	0.8	5.0	3.0
Cycle Q Clear(g_c), s	3.1	0.0	31.9	26.5	0.0	11.6	3.3	0.0	6.8	0.8	5.0	3.0
Prop In Lane	1.00		0.38	1.00		0.07	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	354	0	684	108	0	544	546	0	857	512	702	595
V/C Ratio(X)	0.26	0.00	0.94	0.37	0.00	0.52	0.21	0.00	0.27	0.03	0.22	0.14
Avail Cap(c_a), veh/h	420	0	719	108	0	544	604	0	857	512	702	595
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.61	0.00	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	26.4	43.9	0.0	26.5	14.6	0.0	14.2	17.8	19.1	18.5
Incr Delay (d2), s/veh	0.4	0.0	20.2	2.1	0.0	0.9	0.1	0.0	0.5	0.1	0.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	16.0	0.9	0.0	5.0	1.3	0.0	2.7	0.2	2.2	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.4	0.0	46.6	46.0	0.0	27.4	14.8	0.0	14.6	18.0	19.9	19.0
LnGrp LOS	C	A	D	D	A	C	B	A	B	B	B	B
Approach Vol, veh/h		737			325			341			252	
Approach Delay, s/veh		43.3			29.7			14.7			19.5	
Approach LOS		D			C			B			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		48.8		41.2	9.1	39.8	8.7	32.5				
Change Period (Y+Rc), s		6.0		6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s		41.0		37.0	8.0	29.0	8.0	25.0				
Max Q Clear Time (g_c+I1), s		8.8		33.9	5.3	7.0	5.1	28.5				
Green Ext Time (p_c), s		1.3		1.2	0.1	1.0	0.0	0.0				

Intersection Summary												
HCM 6th Ctrl Delay			31.1									
HCM 6th LOS			C									

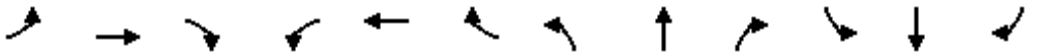
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	81	295	250	18	5	43
Future Vol, veh/h	81	295	250	18	5	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	88	321	272	20	5	47

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	292	0	-	0	779	146
Stage 1	-	-	-	-	282	-
Stage 2	-	-	-	-	497	-
Critical Hdwy	4.13	-	-	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.219	-	-	-	3.519	3.319
Pot Cap-1 Maneuver	1268	-	-	-	348	875
Stage 1	-	-	-	-	741	-
Stage 2	-	-	-	-	610	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1268	-	-	-	324	875
Mov Cap-2 Maneuver	-	-	-	-	324	-
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	610	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1268	-	-	-	324	875
HCM Lane V/C Ratio	0.069	-	-	-	0.017	0.053
HCM Control Delay (s)	8.1	-	-	-	16.3	9.3
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.2

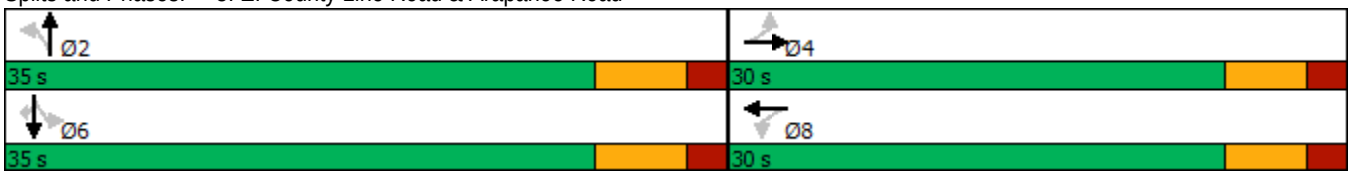


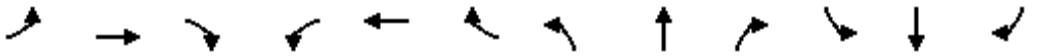
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	207	1	95	1	1	1	94	346	1	1	240	173
Future Volume (vph)	207	1	95	1	1	1	94	346	1	1	240	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	0		0	150		0	150		150
Storage Lanes	1		0	0		0	1		0	0		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
Frt		0.851			0.955							0.850
Flt Protected	0.950				0.984		0.950					
Satd. Flow (prot)	1770	1585	0	0	1750	0	1770	1863	0	0	1863	1583
Flt Permitted	0.756				0.928		0.589				0.999	
Satd. Flow (perm)	1408	1585	0	0	1651	0	1097	1863	0	0	1861	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		109			1							199
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1383			275			2342			343	
Travel Time (s)		23.6			4.7			31.9			4.7	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	238	1	109	1	1	1	108	398	1	1	276	199
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	110	0	0	3	0	108	399	0	0	277	199
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	24.0	24.0		24.0	24.0		24.5	24.5		24.5	24.5	24.5
Total Split (s)	30.0	30.0		30.0	30.0		35.0	35.0		35.0	35.0	35.0
Total Split (%)	46.2%	46.2%		46.2%	46.2%		53.8%	53.8%		53.8%	53.8%	53.8%
Maximum Green (s)	24.0	24.0		24.0	24.0		28.5	28.5		28.5	28.5	28.5
Yellow Time (s)	4.0	4.0		4.0	4.0		4.5	4.5		4.5	4.5	4.5
All-Red Time (s)	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
Total Lost Time (s)	6.0	6.0			6.0		6.5	6.5			6.5	6.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		Max	Max		Max	Max	Max
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	14.9	14.9			14.9		30.7	30.7			30.7	30.7
Actuated g/C Ratio	0.26	0.26			0.26		0.53	0.53			0.53	0.53
v/c Ratio	0.66	0.23			0.01		0.19	0.41			0.28	0.21
Control Delay	27.8	4.9			12.7		10.0	11.1			9.9	2.5
Queue Delay	0.0	0.0			0.0		0.0	0.0			0.0	0.0
Total Delay	27.8	4.9			12.7		10.0	11.1			9.9	2.5
LOS	C	A			B		B	B			A	A
Approach Delay		20.5			12.7			10.9			6.8	
Approach LOS		C			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 58.2			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 11.9		Intersection LOS: B	
Intersection Capacity Utilization 64.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: E. County Line Road & Arapahoe Road

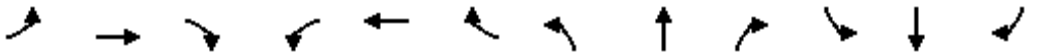




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	1	95	1	1	1	94	346	1	1	240	173
Future Volume (veh/h)	207	1	95	1	1	1	94	346	1	1	240	173
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	238	1	109	1	1	1	108	398	1	1	276	199
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	443	3	339	167	156	116	566	1017	3	70	1019	864
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1415	14	1573	350	725	538	919	1865	5	1	1869	1585
Grp Volume(v), veh/h	238	0	110	3	0	0	108	0	399	277	0	199
Grp Sat Flow(s),veh/h/ln	1415	0	1587	1613	0	0	919	0	1870	1870	0	1585
Q Serve(g_s), s	8.2	0.0	3.1	0.0	0.0	0.0	3.7	0.0	6.4	0.0	0.0	3.4
Cycle Q Clear(g_c), s	8.3	0.0	3.1	0.1	0.0	0.0	7.8	0.0	6.4	4.1	0.0	3.4
Prop In Lane	1.00		0.99	0.33		0.33	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	443	0	342	440	0	0	566	0	1019	1089	0	864
V/C Ratio(X)	0.54	0.00	0.32	0.01	0.00	0.00	0.19	0.00	0.39	0.25	0.00	0.23
Avail Cap(c_a), veh/h	788	0	729	815	0	0	566	0	1019	1089	0	864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.3	0.0	17.3	16.1	0.0	0.0	8.4	0.0	6.9	6.3	0.0	6.2
Incr Delay (d2), s/veh	1.0	0.0	0.5	0.0	0.0	0.0	0.7	0.0	1.1	0.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	1.0	0.0	0.0	0.0	0.6	0.0	1.7	1.1	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	0.0	17.8	16.1	0.0	0.0	9.2	0.0	8.0	6.9	0.0	6.8
LnGrp LOS	C	A	B	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		348			3			507			476	
Approach Delay, s/veh		19.5			16.1			8.3			6.9	
Approach LOS		B			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.0		17.3		35.0		17.3				
Change Period (Y+Rc), s		6.5		6.0		6.5		6.0				
Max Green Setting (Gmax), s		28.5		24.0		28.5		24.0				
Max Q Clear Time (g_c+I1), s		9.8		10.3		6.1		2.1				
Green Ext Time (p_c), s		2.5		1.1		2.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			10.7									
HCM 6th LOS			B									

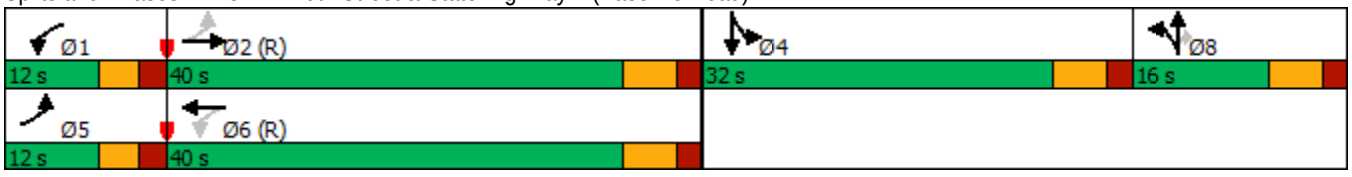


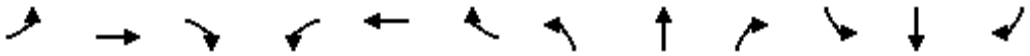
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	394	28	211	338	57	40	164	311	247	122	35
Future Volume (vph)	51	394	28	211	338	57	40	164	311	247	122	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	230		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.978				0.850		0.988	
Flt Protected	0.950			0.950				0.990			0.970	
Satd. Flow (prot)	1770	1844	0	1770	1822	0	0	1844	1583	0	1785	0
Flt Permitted	0.314			0.281				0.990			0.970	
Satd. Flow (perm)	585	1844	0	523	1822	0	0	1844	1583	0	1785	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9				309		5	
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		768			3921			468			5336	
Travel Time (s)		11.6			59.4			8.0			91.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	53	406	29	218	348	59	41	169	321	255	126	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	435	0	218	407	0	0	210	321	0	417	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	2			6					8			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	17.0		10.0	24.0		17.0	17.0	17.0	24.0	24.0	
Total Split (s)	12.0	40.0		12.0	40.0		16.0	16.0	16.0	32.0	32.0	
Total Split (%)	12.0%	40.0%		12.0%	40.0%		16.0%	16.0%	16.0%	32.0%	32.0%	
Maximum Green (s)	7.0	34.0		7.0	34.0		10.0	10.0	10.0	26.0	26.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0			-2.0	-1.0		-2.0	
Total Lost Time (s)	4.0	5.0		4.0	5.0			4.0	5.0		4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	Max	C-Max		Max	C-Max		None	None	None	None	None	
Act Effct Green (s)	44.2	35.0		44.2	35.0			13.0	12.0		26.8	
Actuated g/C Ratio	0.44	0.35		0.44	0.35			0.13	0.12		0.27	
v/c Ratio	0.15	0.67		0.65	0.63			0.88	0.70		0.87	
Control Delay	15.1	33.5		26.9	31.8			79.0	14.8		53.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	15.1	33.5		26.9	31.8			79.0	14.8		53.6	
LOS	B	C		C	C			E	B		D	
Approach Delay		31.5			30.1			40.2			53.6	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 32 (32%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 37.8		Intersection LOS: D	
Intersection Capacity Utilization 81.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 15: N. 119th Street & State Highway 7 (Baseline Road)

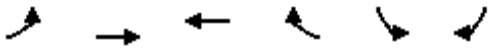




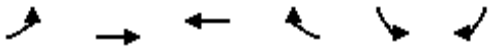
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	394	28	211	338	57	40	164	311	247	122	35
Future Volume (veh/h)	51	394	28	211	338	57	40	164	311	247	122	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	406	29	218	348	59	41	169	321	255	126	36
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	390	625	45	373	565	96	43	179	174	293	145	41
Arrive On Green	0.08	0.36	0.35	0.08	0.36	0.35	0.10	0.12	0.11	0.25	0.27	0.25
Sat Flow, veh/h	1781	1725	123	1781	1559	264	362	1491	1585	1093	540	154
Grp Volume(v), veh/h	53	0	435	218	0	407	210	0	321	417	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1848	1781	0	1823	1852	0	1585	1788	0	0
Q Serve(g_s), s	1.7	0.0	19.6	7.8	0.0	18.4	11.3	0.0	11.0	22.3	0.0	0.0
Cycle Q Clear(g_c), s	1.7	0.0	19.6	7.8	0.0	18.4	11.3	0.0	11.0	22.3	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.14	0.20		1.00	0.61		0.09
Lane Grp Cap(c), veh/h	390	0	670	373	0	661	222	0	174	478	0	0
V/C Ratio(X)	0.14	0.00	0.65	0.58	0.00	0.62	0.94	0.00	1.84	0.87	0.00	0.00
Avail Cap(c_a), veh/h	390	0	670	373	0	661	222	0	174	501	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.46	0.00	0.46	1.00	0.00	1.00	0.98	0.00	0.00
Uniform Delay (d), s/veh	17.8	0.0	26.6	20.2	0.0	26.2	43.9	0.0	44.5	35.7	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	4.8	3.1	0.0	2.0	45.0	0.0	399.9	14.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	9.0	3.3	0.0	7.8	7.8	0.0	23.6	11.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	0.0	31.4	23.3	0.0	28.2	88.9	0.0	444.4	50.4	0.0	0.0
LnGrp LOS	B	A	C	C	A	C	F	A	F	D	A	A
Approach Vol, veh/h		488			625			531			417	
Approach Delay, s/veh		30.0			26.5			303.8			50.4	
Approach LOS		C			C			F			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	41.2		30.8	12.0	41.2		16.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	7.0	34.0		26.0	7.0	34.0		10.0				
Max Q Clear Time (g_c+I1), s	9.8	21.6		24.3	3.7	20.4		13.3				
Green Ext Time (p_c), s	0.0	1.9		0.4	0.0	1.9		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			103.6									
HCM 6th LOS			F									



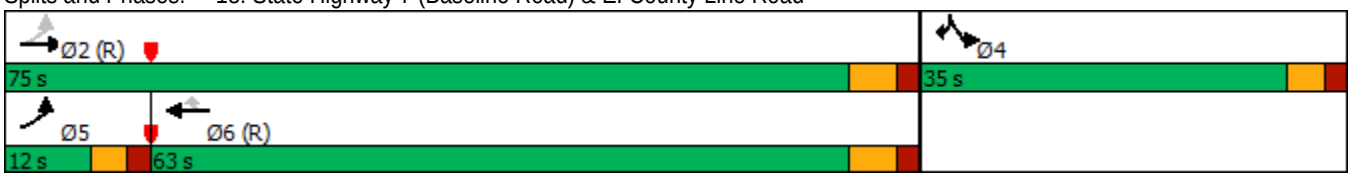
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	175	760	852	344	319	97
Future Volume (vph)	175	760	852	344	319	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	660			185	0	110
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.074				0.950	
Satd. Flow (perm)	138	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				235		75
Link Speed (mph)		45	45		50	
Link Distance (ft)		3921	2056		3327	
Travel Time (s)		59.4	31.2		45.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	186	809	906	366	339	103
Shared Lane Traffic (%)						
Lane Group Flow (vph)	186	809	906	366	339	103
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Prot
Protected Phases	5	2	6		4	4
Permitted Phases	2			6		

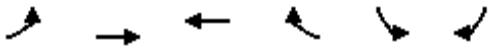


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	24.0	24.0	24.0	23.0	23.0
Total Split (s)	12.0	75.0	63.0	63.0	35.0	35.0
Total Split (%)	10.9%	68.2%	57.3%	57.3%	31.8%	31.8%
Maximum Green (s)	7.0	69.0	57.0	57.0	30.0	30.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	5.0	5.0	5.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	C-Max	None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	75.7	74.7	60.0	60.0	26.3	26.3
Actuated g/C Ratio	0.69	0.68	0.55	0.55	0.24	0.24
v/c Ratio	0.74	0.64	0.89	0.38	0.80	0.24
Control Delay	38.2	13.8	35.7	6.3	53.9	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	13.8	35.7	6.3	53.9	12.4
LOS	D	B	D	A	D	B
Approach Delay		18.4	27.3		44.2	
Approach LOS		B	C		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 48 (44%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 26.8		Intersection LOS: C	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 18: State Highway 7 (Baseline Road) & E. County Line Road

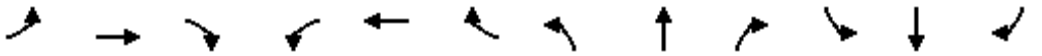




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	175	760	852	344	319	97
Future Volume (veh/h)	175	760	852	344	319	97
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	186	809	906	366	339	103
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	277	1308	1119	948	390	347
Arrive On Green	0.06	0.70	0.60	0.60	0.22	0.22
Sat Flow, veh/h	1781	1870	1870	1585	1781	1585
Grp Volume(v), veh/h	186	809	906	366	339	103
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1781	1585
Q Serve(g_s), s	4.1	25.2	41.5	13.3	20.2	6.0
Cycle Q Clear(g_c), s	4.1	25.2	41.5	13.3	20.2	6.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	277	1308	1119	948	390	347
V/C Ratio(X)	0.67	0.62	0.81	0.39	0.87	0.30
Avail Cap(c_a), veh/h	291	1308	1119	948	502	447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	8.8	17.2	11.5	41.5	35.9
Incr Delay (d2), s/veh	3.8	1.5	6.4	1.2	12.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	8.6	17.3	4.5	9.8	5.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.6	10.2	23.6	12.7	54.0	36.4
LnGrp LOS	C	B	C	B	D	D
Approach Vol, veh/h		995	1272		442	
Approach Delay, s/veh		12.9	20.5		49.9	
Approach LOS		B	C		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		81.9		28.1	11.1	70.8
Change Period (Y+Rc), s		6.0		5.0	5.0	6.0
Max Green Setting (Gmax), s		69.0		30.0	7.0	57.0
Max Q Clear Time (g_c+I1), s		27.2		22.2	6.1	43.5
Green Ext Time (p_c), s		6.3		0.9	0.0	6.3

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

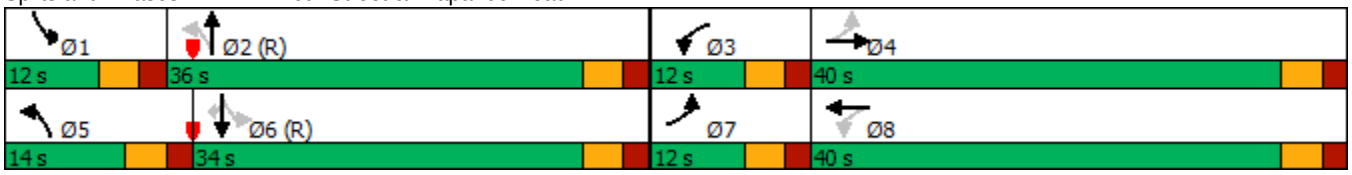


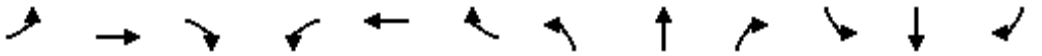
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	140	140	75	440	20	180	165	45	20	310	125
Future Volume (vph)	25	140	140	75	440	20	180	165	45	20	310	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		150	90		150	365		150	90		230
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
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
Frt		0.925			0.993			0.968				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1723	0	1770	1850	0	1770	1803	0	1770	1863	1583
Flt Permitted	0.154			0.374			0.354			0.616		
Satd. Flow (perm)	287	1723	0	697	1850	0	659	1803	0	1147	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		55			3			14				136
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		636			2736			2089			552	
Travel Time (s)		10.8			46.6			35.6			9.4	
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
Adj. Flow (vph)	27	152	152	82	478	22	196	179	49	22	337	136
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	304	0	82	500	0	196	228	0	22	337	136
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	12.0	40.0		12.0	40.0		14.0	36.0		12.0	34.0	34.0
Total Split (%)	12.0%	40.0%		12.0%	40.0%		14.0%	36.0%		12.0%	34.0%	34.0%
Maximum Green (s)	7.0	35.0		7.0	35.0		9.0	31.0		7.0	29.0	29.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	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
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	33.7	28.5		35.2	31.0		50.8	47.2		43.8	37.7	37.7
Actuated g/C Ratio	0.34	0.28		0.35	0.31		0.51	0.47		0.44	0.38	0.38
v/c Ratio	0.14	0.57		0.26	0.87		0.45	0.27		0.04	0.48	0.20
Control Delay	17.3	28.4		19.3	46.9		17.5	17.3		16.3	29.7	5.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	17.3	28.4		19.3	46.9		17.5	17.3		16.3	29.7	5.6
LOS	B	C		B	D		B	B		B	C	A
Approach Delay		27.5			43.0			17.4			22.5	
Approach LOS		C			D			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 84 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 28.7		Intersection LOS: C	
Intersection Capacity Utilization 71.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: N. 119th Street & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	140	140	75	440	20	180	165	45	20	310	125
Future Volume (veh/h)	25	140	140	75	440	20	180	165	45	20	310	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	152	152	82	478	22	196	179	49	22	337	136
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	152	236	236	285	526	24	460	642	176	545	739	626
Arrive On Green	0.03	0.28	0.28	0.05	0.30	0.30	0.08	0.45	0.45	0.02	0.39	0.39
Sat Flow, veh/h	1781	858	858	1781	1774	82	1781	1414	387	1781	1870	1585
Grp Volume(v), veh/h	27	0	304	82	0	500	196	0	228	22	337	136
Grp Sat Flow(s),veh/h/ln	1781	0	1716	1781	0	1856	1781	0	1801	1781	1870	1585
Q Serve(g_s), s	1.1	0.0	15.6	3.3	0.0	26.0	6.2	0.0	7.9	0.7	13.3	5.7
Cycle Q Clear(g_c), s	1.1	0.0	15.6	3.3	0.0	26.0	6.2	0.0	7.9	0.7	13.3	5.7
Prop In Lane	1.00		0.50	1.00		0.04	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	152	0	472	285	0	550	460	0	818	545	739	626
V/C Ratio(X)	0.18	0.00	0.64	0.29	0.00	0.91	0.43	0.00	0.28	0.04	0.46	0.22
Avail Cap(c_a), veh/h	230	0	601	325	0	649	474	0	818	629	739	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	0.0	31.9	25.4	0.0	33.9	15.7	0.0	17.0	17.2	22.3	20.0
Incr Delay (d2), s/veh	0.6	0.0	1.5	0.6	0.0	15.2	0.6	0.0	0.8	0.0	2.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	6.4	1.4	0.0	13.4	2.4	0.0	3.3	0.3	6.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.2	0.0	33.5	25.9	0.0	49.1	16.3	0.0	17.9	17.2	24.4	20.8
LnGrp LOS	C	A	C	C	A	D	B	A	B	B	C	C
Approach Vol, veh/h		331			582			424			495	
Approach Delay, s/veh		33.0			45.8			17.2			23.1	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	50.4	9.7	32.5	13.2	44.5	7.6	34.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	31.0	7.0	35.0	9.0	29.0	7.0	35.0
Max Q Clear Time (g_c+I1), s	2.7	9.9	5.3	17.6	8.2	15.3	3.1	28.0
Green Ext Time (p_c), s	0.0	1.1	0.0	1.6	0.0	1.9	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	200	435	5	13	84
Future Vol, veh/h	30	200	435	5	13	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	217	473	5	14	91

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	478	0	-	0	651	239
Stage 1	-	-	-	-	476	-
Stage 2	-	-	-	-	175	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1081	-	-	-	401	762
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	838	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1081	-	-	-	389	762
Mov Cap-2 Maneuver	-	-	-	-	389	-
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	838	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	11
HCM LOS			B

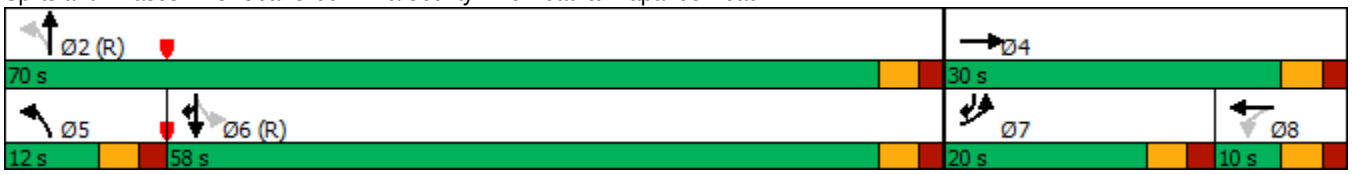
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1081	-	-	-	389	762
HCM Lane V/C Ratio	0.03	-	-	-	0.036	0.12
HCM Control Delay (s)	8.4	-	-	-	14.6	10.4
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	0.4

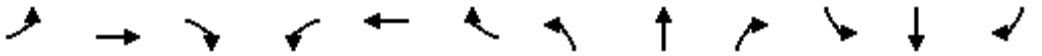
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	1	75	1	1	1	215	280	1	1	355	225
Future Volume (vph)	110	1	75	1	1	1	215	280	1	1	355	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	0		0	150		0	150		150
Storage Lanes	1		0	0		0	1		0	0		1
Taper Length (ft)	100			100			100			100		
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
Frt		0.852			0.955							0.850
Flt Protected	0.950				0.984		0.950					
Satd. Flow (prot)	1770	1587	0	0	1750	0	1770	1863	0	0	1863	1583
Flt Permitted	0.950						0.440					
Satd. Flow (perm)	1770	1587	0	0	1779	0	820	1863	0	0	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		82			1							245
Link Speed (mph)		40			25			45			45	
Link Distance (ft)		1749			776			1338			543	
Travel Time (s)		29.8			21.2			20.3			8.2	
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
Adj. Flow (vph)	120	1	82	1	1	1	234	304	1	1	386	245
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	83	0	0	3	0	234	305	0	0	387	245
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Perm	NA		pm+pt	NA		Perm	NA	pt+ov
Protected Phases	7	4			8		5	2			6	6 7
Permitted Phases				8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2		6	6	6 7
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Total Split (s)	20.0	30.0		10.0	10.0		12.0	70.0		58.0	58.0	
Total Split (%)	20.0%	30.0%		10.0%	10.0%		12.0%	70.0%		58.0%	58.0%	
Maximum Green (s)	15.0	25.0		5.0	5.0		7.0	65.0		53.0	53.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)	5.0	5.0			5.0		5.0	5.0			5.0	
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Act Effct Green (s)	11.7	13.7			5.5		76.3	76.3			63.2	79.9
Actuated g/C Ratio	0.12	0.14			0.06		0.76	0.76			0.63	0.80
v/c Ratio	0.58	0.29			0.03		0.33	0.21			0.33	0.19
Control Delay	58.6	12.4			40.7		5.5	4.6			10.7	0.8
Queue Delay	0.0	0.0			0.0		0.0	0.0			0.0	0.0
Total Delay	58.6	12.4			40.7		5.5	4.6			10.7	0.8
LOS	E	B			D		A	A			B	A
Approach Delay		39.7			40.7			5.0			6.8	
Approach LOS		D			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 11.0		Intersection LOS: B	
Intersection Capacity Utilization 58.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Coal Creek Blvd/County Line Road & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1	75	1	1	1	215	280	1	1	355	225
Future Volume (veh/h)	110	1	75	1	1	1	215	280	1	1	355	225
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	1	82	1	1	1	234	304	1	1	386	245
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	150	3	282	60	38	25	589	1342	4	36	1128	1090
Arrive On Green	0.08	0.18	0.18	0.05	0.05	0.05	0.07	0.72	0.72	0.60	0.60	0.60
Sat Flow, veh/h	1781	19	1569	273	830	552	1781	1863	6	0	1870	1585
Grp Volume(v), veh/h	120	0	83	3	0	0	234	0	305	387	0	245
Grp Sat Flow(s),veh/h/ln	1781	0	1588	1656	0	0	1781	0	1869	1870	0	1585
Q Serve(g_s), s	6.6	0.0	4.5	0.0	0.0	0.0	4.7	0.0	5.5	0.0	0.0	5.7
Cycle Q Clear(g_c), s	6.6	0.0	4.5	0.2	0.0	0.0	4.7	0.0	5.5	10.3	0.0	5.7
Prop In Lane	1.00		0.99	0.33		0.33	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	150	0	285	123	0	0	589	0	1346	1164	0	1090
V/C Ratio(X)	0.80	0.00	0.29	0.02	0.00	0.00	0.40	0.00	0.23	0.33	0.00	0.22
Avail Cap(c_a), veh/h	267	0	397	130	0	0	594	0	1346	1164	0	1090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.0	0.0	35.5	45.6	0.0	0.0	6.6	0.0	4.7	9.9	0.0	5.8
Incr Delay (d2), s/veh	9.3	0.0	0.6	0.1	0.0	0.0	0.4	0.0	0.4	0.8	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	1.7	0.1	0.0	0.0	1.4	0.0	1.7	3.9	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	0.0	36.1	45.7	0.0	0.0	7.0	0.0	5.1	10.7	0.0	6.2
LnGrp LOS	D	A	D	D	A	A	A	A	A	B	A	A
Approach Vol, veh/h		203			3			539			632	
Approach Delay, s/veh		46.8			45.7			5.9			9.0	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		77.0		23.0	11.7	65.3	13.4	9.5				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s		65.0		25.0	7.0	53.0	15.0	5.0				
Max Q Clear Time (g_c+I1), s		7.5		6.5	6.7	12.3	8.6	2.2				
Green Ext Time (p_c), s		1.7		0.3	0.0	3.1	0.1	0.0				

Intersection Summary												
HCM 6th Ctrl Delay			13.4									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.1

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	490	1	3	425	1	7
Future Vol, veh/h	490	1	3	425	1	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	533	1	3	462	1	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	534	0	771	267
Stage 1	-	-	-	-	534	-
Stage 2	-	-	-	-	237	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1030	-	337	731
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	780	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1030	-	336	731
Mov Cap-2 Maneuver	-	-	-	-	336	-
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	778	-

Approach	NB	SB	NW
HCM Control Delay, s	0	0.1	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	SBL	SBT
Capacity (veh/h)	-	-	637	1030	-
HCM Lane V/C Ratio	-	-	0.014	0.003	-
HCM Control Delay (s)	-	-	10.7	8.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	470	2	0	425	0	19
Future Vol, veh/h	470	2	0	425	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	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	511	2	0	462	0	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	256
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	-	0	743
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	743
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	743	-	-	-
HCM Lane V/C Ratio	0.028	-	-	-
HCM Control Delay (s)	10	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	5.8
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	0	2	2
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	0	513	461
Demand Flow Rate, veh/h	0	523	470
Vehicles Circulating, veh/h	521	10	13
Vehicles Exiting, veh/h	12	473	528
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	0.0	6.0	5.6
Approach LOS	-	A	A

Lane	Left	Right	Left
Designated Moves	LT	R	LT
Assumed Moves	LT	R	LT
RT Channelized			
Lane Util	0.996	0.004	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.544	4.544	4.544
Entry Flow, veh/h	521	2	470
Cap Entry Lane, veh/h	1407	1407	1403
Entry HV Adj Factor	0.980	1.000	0.981
Flow Entry, veh/h	511	2	461
Cap Entry, veh/h	1380	1407	1376
V/C Ratio	0.370	0.001	0.335
Control Delay, s/veh	6.0	2.6	5.6
LOS	A	A	A
95th %tile Queue, veh	2	0	1

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	57	330	23	20	505
Future Vol, veh/h	67	57	330	23	20	505
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	225	325	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	73	62	359	25	22	549

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	952	359	0	0	384	0
Stage 1	359	-	-	-	-	-
Stage 2	593	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	288	685	-	-	1174	-
Stage 1	707	-	-	-	-	-
Stage 2	552	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	283	685	-	-	1174	-
Mov Cap-2 Maneuver	283	-	-	-	-	-
Stage 1	707	-	-	-	-	-
Stage 2	542	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.9	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	283	685	1174	-
HCM Lane V/C Ratio	-	-	0.257	0.09	0.019	-
HCM Control Delay (s)	-	-	22.1	10.8	8.1	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.3	0.1	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	19	15	4	50	12	43	0	12	16	0	36
Future Vol, veh/h	13	19	15	4	50	12	43	0	12	16	0	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	21	16	4	54	13	47	0	13	17	0	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	67	0	0	37	0	0	145	132	29	133	134	61
Stage 1	-	-	-	-	-	-	57	57	-	69	69	-
Stage 2	-	-	-	-	-	-	88	75	-	64	65	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1535	-	-	1574	-	-	824	759	1046	839	757	1004
Stage 1	-	-	-	-	-	-	955	847	-	941	837	-
Stage 2	-	-	-	-	-	-	920	833	-	947	841	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1535	-	-	1574	-	-	784	750	1046	821	748	1004
Mov Cap-2 Maneuver	-	-	-	-	-	-	784	750	-	821	748	-
Stage 1	-	-	-	-	-	-	946	839	-	933	834	-
Stage 2	-	-	-	-	-	-	881	831	-	927	833	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	0.4	9.7	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	829	1535	-	-	1574	-	-	940
HCM Lane V/C Ratio	0.072	0.009	-	-	0.003	-	-	0.06
HCM Control Delay (s)	9.7	7.4	0	-	7.3	0	-	9.1
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	12	1	5	1	22	1	1	10	54	1	19
Future Vol, veh/h	7	12	1	5	1	22	1	1	10	54	1	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	13	1	5	1	24	1	1	11	59	1	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	25	0	0	14	0	0	64	65	14	59	53	13
Stage 1	-	-	-	-	-	-	30	30	-	23	23	-
Stage 2	-	-	-	-	-	-	34	35	-	36	30	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1589	-	-	1604	-	-	930	826	1066	937	838	1067
Stage 1	-	-	-	-	-	-	987	870	-	995	876	-
Stage 2	-	-	-	-	-	-	982	866	-	980	870	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1589	-	-	1604	-	-	906	819	1066	921	831	1067
Mov Cap-2 Maneuver	-	-	-	-	-	-	906	819	-	921	831	-
Stage 1	-	-	-	-	-	-	982	866	-	990	873	-
Stage 2	-	-	-	-	-	-	959	863	-	964	866	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.5	1.3	8.6	9.1
HCM LOS			A	A

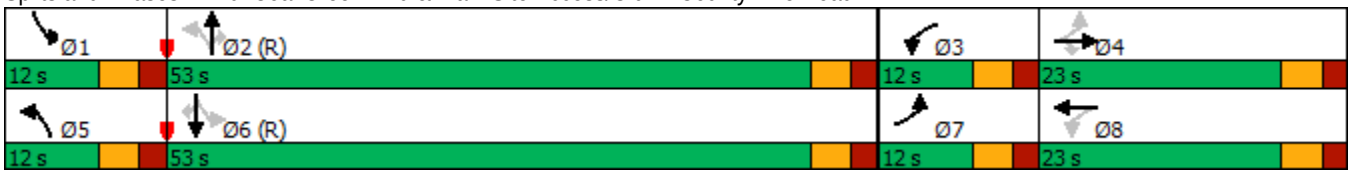
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1025	1589	-	-	1604	-	-	953
HCM Lane V/C Ratio	0.013	0.005	-	-	0.003	-	-	0.084
HCM Control Delay (s)	8.6	7.3	0	-	7.3	0	-	9.1
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

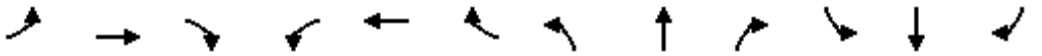
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	1	62	48	1	5	22	460	20	5	415	5
Future Volume (vph)	13	1	62	48	1	5	22	460	20	5	415	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	150		0	355		275	300		275
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.875				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1630	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.754			0.488			0.479			0.469		
Satd. Flow (perm)	1405	1863	1583	909	1630	0	892	3539	1583	874	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			131		5				131			131
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		557			814			864			533	
Travel Time (s)		15.2			22.2			13.1			8.1	
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
Adj. Flow (vph)	14	1	67	52	1	5	24	500	22	5	451	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	1	67	52	6	0	24	500	22	5	451	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			18			18	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	23.0	23.0	12.0	23.0		12.0	53.0	53.0	12.0	53.0	53.0
Total Split (%)	12.0%	23.0%	23.0%	12.0%	23.0%		12.0%	53.0%	53.0%	12.0%	53.0%	53.0%
Maximum Green (s)	7.0	18.0	18.0	7.0	18.0		7.0	48.0	48.0	7.0	48.0	48.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	-1.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	10.8	5.8	6.8	14.3	12.9		75.9	75.6	75.6	74.5	73.3	73.3
Actuated g/C Ratio	0.11	0.06	0.07	0.14	0.13		0.76	0.76	0.76	0.74	0.73	0.73
v/c Ratio	0.08	0.01	0.29	0.28	0.03		0.03	0.19	0.02	0.01	0.17	0.00
Control Delay	35.2	44.0	3.2	38.9	27.5		3.4	4.2	0.1	4.2	6.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	44.0	3.2	38.9	27.5		3.4	4.2	0.1	4.2	6.4	0.0
LOS	D	D	A	D	C		A	A	A	A	A	A
Approach Delay		9.2			37.7			4.0			6.3	
Approach LOS		A			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay: 7.0		Intersection LOS: A	
Intersection Capacity Utilization 35.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Coal Creek Blvd & Main Site Access/Old E. County Line Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	1	62	48	1	5	22	460	20	5	415	5
Future Volume (veh/h)	13	1	62	48	1	5	22	460	20	5	415	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	1	67	52	1	5	24	500	22	5	451	5
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	181	106	106	215	21	107	708	2482	1107	655	2419	1079
Arrive On Green	0.02	0.06	0.07	0.04	0.08	0.08	0.02	0.70	0.70	0.01	0.68	0.68
Sat Flow, veh/h	1781	1870	1585	1781	271	1355	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	14	1	67	52	0	6	24	500	22	5	451	5
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1626	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	0.1	4.1	2.7	0.0	0.3	0.4	4.9	0.4	0.1	4.6	0.1
Cycle Q Clear(g_c), s	0.7	0.1	4.1	2.7	0.0	0.3	0.4	4.9	0.4	0.1	4.6	0.1
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	106	106	215	0	128	708	2482	1107	655	2419	1079
V/C Ratio(X)	0.08	0.01	0.63	0.24	0.00	0.05	0.03	0.20	0.02	0.01	0.19	0.00
Avail Cap(c_a), veh/h	277	337	301	272	0	293	790	2482	1107	768	2419	1079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	44.5	45.5	42.2	0.0	42.6	4.5	5.3	4.6	5.0	5.8	5.1
Incr Delay (d2), s/veh	0.2	0.0	6.1	0.6	0.0	0.1	0.0	0.2	0.0	0.0	0.2	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	0.3	0.0	1.8	1.2	0.0	0.1	0.1	1.5	0.1	0.0	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	44.5	51.5	42.8	0.0	42.7	4.5	5.5	4.6	5.0	6.0	5.1
LnGrp LOS	D	D	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		82			58			546			461	
Approach Delay, s/veh		50.1			42.7			5.4			6.0	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	74.8	8.8	10.7	7.4	73.1	6.6	12.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	48.0	7.0	18.0	7.0	48.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	2.1	6.9	4.7	6.1	2.4	6.6	2.7	2.3
Green Ext Time (p_c), s	0.0	3.4	0.0	0.1	0.0	2.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	17	31	1	3	23
Future Vol, veh/h	9	17	31	1	3	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	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	10	18	34	1	3	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	35	0	-	0	73	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	38	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1576	-	-	-	931	1038
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	984	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1576	-	-	-	925	1038
Mov Cap-2 Maneuver	-	-	-	-	925	-
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	984	-

Approach	EB	WB	SB
HCM Control Delay, s	2.5	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1576	-	-	-	1024
HCM Lane V/C Ratio	0.006	-	-	-	0.028
HCM Control Delay (s)	7.3	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	9	2	1	4	30
Future Vol, veh/h	11	9	2	1	4	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	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	12	10	2	1	4	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	3	0	-	0	37	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	34	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1619	-	-	-	975	1081
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	988	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1619	-	-	-	968	1081
Mov Cap-2 Maneuver	-	-	-	-	968	-
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	988	-

Approach	EB	WB	SB
HCM Control Delay, s	4	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1619	-	-	-	1066
HCM Lane V/C Ratio	0.007	-	-	-	0.035
HCM Control Delay (s)	7.2	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	60	13	490	520	5
Future Vol, veh/h	15	60	13	490	520	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	380	-	-	275
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	65	14	533	565	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	860	283	570	0	-	0
Stage 1	565	-	-	-	-	-
Stage 2	295	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	343	*893	1278	-	-	-
Stage 1	799	-	-	-	-	-
Stage 2	730	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	339	*893	1278	-	-	-
Mov Cap-2 Maneuver	339	-	-	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	730	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1278	-	339	893	-	-
HCM Lane V/C Ratio	0.011	-	0.048	0.073	-	-
HCM Control Delay (s)	7.8	-	16.2	9.3	-	-
HCM Lane LOS	A	-	C	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0.2	-	-

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

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	25	330	13	11	560
Future Vol, veh/h	0	25	330	13	11	560
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	-	225	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	27	359	14	12	609

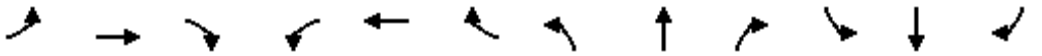
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	180	0	0	373	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	*954	-	-	1407	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	-	-	1	-
Mov Cap-1 Maneuver	-	*954	-	-	1407	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	954	1407	-
HCM Lane V/C Ratio	-	-	0.028	0.008	-
HCM Control Delay (s)	-	-	8.9	7.6	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Notes

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

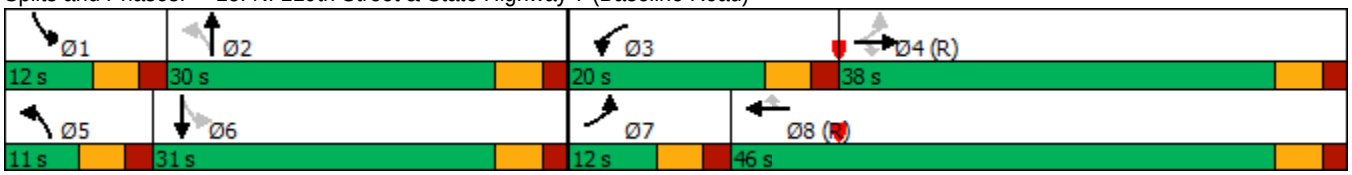


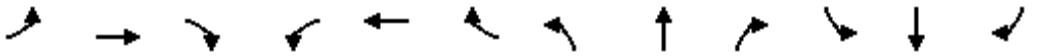
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	260	40	365	560	130	35	150	135	140	325	95
Future Volume (vph)	60	260	40	365	560	130	35	150	135	140	325	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		275	230		275	300		275	530		225
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.276			0.950			0.270			0.502		
Satd. Flow (perm)	514	3539	1583	3433	1863	1583	503	1863	1583	935	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			207			147			267			267
Link Speed (mph)		55			55			40			40	
Link Distance (ft)		768			363			733			1133	
Travel Time (s)		9.5			4.5			12.5			19.3	
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
Adj. Flow (vph)	65	283	43	397	609	141	38	163	147	152	353	103
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	283	43	397	609	141	38	163	147	152	353	103
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (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
Detector 1 Queue (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
Detector 1 Delay (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
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4			8	2		Free	6		Free

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	10.5	23.5	23.5	10.5	23.5		10.5	23.5	
Total Split (s)	12.0	38.0	38.0	20.0	46.0	46.0	11.0	30.0		12.0	31.0	
Total Split (%)	12.0%	38.0%	38.0%	20.0%	46.0%	46.0%	11.0%	30.0%		12.0%	31.0%	
Maximum Green (s)	6.5	32.5	32.5	14.5	40.5	40.5	5.5	24.5		6.5	25.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	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	-1.0	0.0	0.0	0.0	0.0		0.0	-1.0	
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5	5.5	5.5	5.5		5.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	44.8	38.4	38.4	15.5	48.7	48.7	24.1	18.6	100.0	27.9	25.0	100.0
Actuated g/C Ratio	0.45	0.38	0.38	0.16	0.49	0.49	0.24	0.19	1.00	0.28	0.25	1.00
v/c Ratio	0.21	0.21	0.06	0.75	0.67	0.17	0.20	0.47	0.09	0.48	0.76	0.07
Control Delay	13.7	22.8	0.1	60.8	13.4	0.7	24.5	39.3	0.1	29.5	44.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.7	22.8	0.1	60.8	13.4	0.7	24.5	39.3	0.1	29.5	44.9	0.1
LOS	B	C	A	E	B	A	C	D	A	C	D	A
Approach Delay		18.8			28.3			21.2			33.5	
Approach LOS		B			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 48 (48%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 27.1		Intersection LOS: C	
Intersection Capacity Utilization 72.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 15: N. 119th Street & State Highway 7 (Baseline Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	260	40	365	560	130	35	150	135	140	325	95
Future Volume (veh/h)	60	260	40	365	560	130	35	150	135	140	325	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	283	43	397	609	141	38	163	0	152	353	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	326	1435	640	495	926	785	160	333		309	412	
Arrive On Green	0.04	0.40	0.40	0.14	0.50	0.50	0.03	0.18	0.00	0.06	0.22	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	65	283	43	397	609	141	38	163	0	152	353	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.1	5.2	1.7	11.1	24.4	4.9	1.7	7.8	0.0	6.5	18.1	0.0
Cycle Q Clear(g_c), s	2.1	5.2	1.7	11.1	24.4	4.9	1.7	7.8	0.0	6.5	18.1	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	326	1435	640	495	926	785	160	333		309	412	
V/C Ratio(X)	0.20	0.20	0.07	0.80	0.66	0.18	0.24	0.49		0.49	0.86	
Avail Cap(c_a), veh/h	367	1435	640	536	926	785	200	458		309	496	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.2	19.3	18.3	41.5	18.9	14.0	33.0	37.0	0.0	32.2	37.5	0.0
Incr Delay (d2), s/veh	0.3	0.3	0.2	8.0	3.6	0.5	0.8	1.1	0.0	1.2	12.1	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	2.0	0.6	5.0	10.0	1.7	0.8	3.6	0.0	3.0	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.5	19.6	18.5	49.5	22.5	14.5	33.8	38.1	0.0	33.4	49.6	0.0
LnGrp LOS	B	B	B	D	C	B	C	D		C	D	
Approach Vol, veh/h		391			1147			201	A		505	A
Approach Delay, s/veh		19.1			30.9			37.3			44.7	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	23.3	18.8	45.9	8.8	26.5	9.7	55.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	6.5	24.5	14.5	32.5	5.5	25.5	6.5	40.5
Max Q Clear Time (g_c+I1), s	8.5	9.8	13.1	7.2	3.7	20.1	4.1	26.4
Green Ext Time (p_c), s	0.0	0.6	0.2	1.6	0.0	0.9	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	32.5
HCM 6th LOS	C

Notes

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

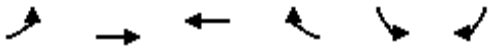
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	535	1015	6	0	38
Future Vol, veh/h	0	535	1015	6	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	582	1103	7	0	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

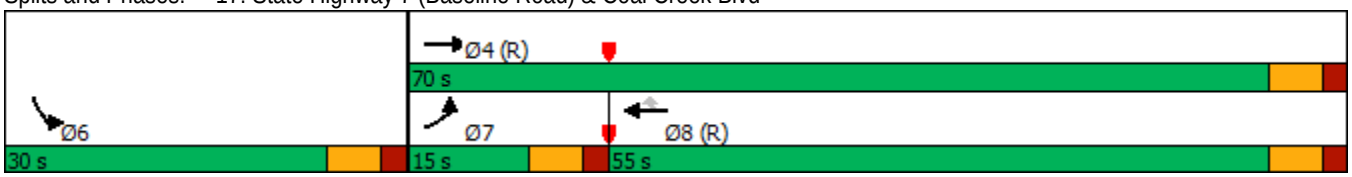


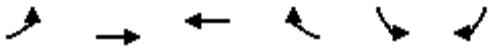
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	100	435	795	400	355	225
Future Volume (vph)	100	435	795	400	355	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	580			380	280	0
Storage Lanes	2			1	1	1
Taper Length (ft)	100				100	
Lane Util. Factor	0.97	1.00	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	1863	1863	1583	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	1863	1863	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				435		245
Link Speed (mph)		55	55		45	
Link Distance (ft)		1410	1068		1156	
Travel Time (s)		17.5	13.2		17.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	473	864	435	386	245
Shared Lane Traffic (%)						
Lane Group Flow (vph)	109	473	864	435	386	245
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector Phase	7	4	8	8	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	12.0	25.0	24.0	24.0	24.0	
Total Split (s)	15.0	70.0	55.0	55.0	30.0	
Total Split (%)	15.0%	70.0%	55.0%	55.0%	30.0%	
Maximum Green (s)	9.0	64.0	49.0	49.0	24.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	None	
Walk Time (s)		7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	
Act Effct Green (s)	8.5	71.5	57.0	57.0	16.5	100.0
Actuated g/C Ratio	0.08	0.72	0.57	0.57	0.16	1.00
v/c Ratio	0.37	0.36	0.81	0.40	0.68	0.15
Control Delay	42.7	3.7	26.5	2.5	43.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.7	3.7	26.5	2.5	43.6	0.2
LOS	D	A	C	A	D	A
Approach Delay		11.0	18.5		26.7	
Approach LOS		B	B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 18.8		Intersection LOS: B	
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 17: State Highway 7 (Baseline Road) & Coal Creek Blvd





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	435	795	400	355	225
Future Volume (veh/h)	100	435	795	400	355	225
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	109	473	864	435	386	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	170	1387	1182	1002	479	
Arrive On Green	0.05	0.74	0.63	0.63	0.14	0.00
Sat Flow, veh/h	3456	1870	1870	1585	3456	1585
Grp Volume(v), veh/h	109	473	864	435	386	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1870	1585	1728	1585
Q Serve(g_s), s	3.1	8.8	31.6	13.9	10.8	0.0
Cycle Q Clear(g_c), s	3.1	8.8	31.6	13.9	10.8	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	170	1387	1182	1002	479	
V/C Ratio(X)	0.64	0.34	0.73	0.43	0.81	
Avail Cap(c_a), veh/h	311	1387	1182	1002	829	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.7	4.5	12.6	9.3	41.8	0.0
Incr Delay (d2), s/veh	4.0	0.7	4.0	1.4	3.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.3	11.3	4.1	4.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.6	5.1	16.6	10.7	45.0	0.0
LnGrp LOS	D	A	B	B	D	
Approach Vol, veh/h		582	1299		386	A
Approach Delay, s/veh		13.7	14.6		45.0	
Approach LOS		B	B		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			80.1		19.9	10.9	69.2
Change Period (Y+Rc), s			6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s			64.0		24.0	9.0	49.0
Max Q Clear Time (g_c+I1), s			10.8		12.8	5.1	33.6
Green Ext Time (p_c), s			2.7		1.0	0.1	6.4

Intersection Summary		
HCM 6th Ctrl Delay	19.5	
HCM 6th LOS	B	

Notes

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

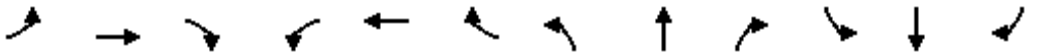
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	-	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1
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	-	-	-	0	1083
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	1083
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

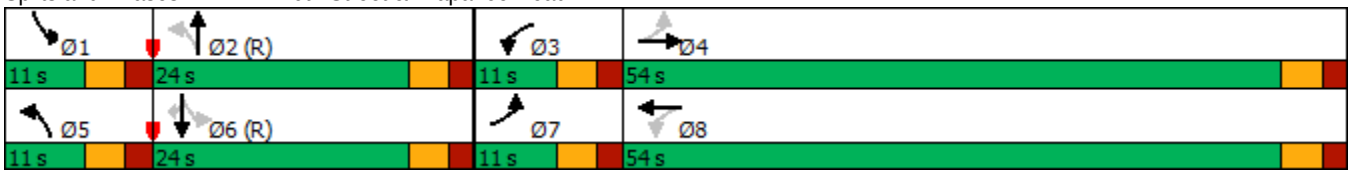


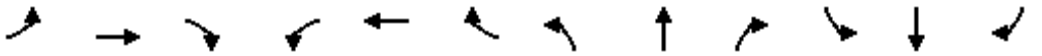
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	390	365	45	265	20	175	225	55	25	215	105
Future Volume (vph)	125	390	365	45	265	20	175	225	55	25	215	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		150	90		150	365		150	90		230
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
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
Frt		0.927			0.989			0.970				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1727	0	1770	1842	0	1770	1807	0	1770	1863	1583
Flt Permitted	0.475			0.085			0.354			0.361		
Satd. Flow (perm)	885	1727	0	158	1842	0	659	1807	0	672	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		69			6			11				131
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		636			2736			2089			552	
Travel Time (s)		10.8			46.6			35.6			9.4	
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
Adj. Flow (vph)	136	424	397	49	288	22	190	245	60	27	234	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	821	0	49	310	0	190	305	0	27	234	114
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	11.0	54.0		11.0	54.0		11.0	24.0		11.0	24.0	24.0
Total Split (%)	11.0%	54.0%		11.0%	54.0%		11.0%	24.0%		11.0%	24.0%	24.0%
Maximum Green (s)	6.0	49.0		6.0	49.0		6.0	19.0		6.0	19.0	19.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-1.0		-1.0	-1.0		-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	3.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	54.0	49.4		53.1	46.2		32.4	28.2		30.0	23.1	23.1
Actuated g/C Ratio	0.54	0.49		0.53	0.46		0.32	0.28		0.30	0.23	0.23
v/c Ratio	0.25	0.92		0.25	0.36		0.64	0.59		0.10	0.54	0.24
Control Delay	10.2	38.9		12.8	17.0		30.9	31.8		25.2	40.9	6.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	10.2	38.9		12.8	17.0		30.9	31.8		25.2	40.9	6.0
LOS	B	D		B	B		C	C		C	D	A
Approach Delay		34.8			16.4			31.4			29.2	
Approach LOS		C			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 84 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 30.1		Intersection LOS: C	
Intersection Capacity Utilization 81.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: N. 119th Street & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	390	365	45	265	20	175	225	55	25	215	105
Future Volume (veh/h)	125	390	365	45	265	20	175	225	55	25	215	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	424	397	49	288	22	190	245	60	27	234	114
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	583	447	418	182	812	62	320	382	94	259	430	365
Arrive On Green	0.07	0.50	0.50	0.05	0.47	0.47	0.07	0.26	0.26	0.04	0.23	0.23
Sat Flow, veh/h	1781	889	832	1781	1716	131	1781	1451	355	1781	1870	1585
Grp Volume(v), veh/h	136	0	821	49	0	310	190	0	305	27	234	114
Grp Sat Flow(s),veh/h/ln	1781	0	1721	1781	0	1847	1781	0	1806	1781	1870	1585
Q Serve(g_s), s	3.8	0.0	45.4	1.4	0.0	10.6	7.0	0.0	15.0	1.1	11.0	6.0
Cycle Q Clear(g_c), s	3.8	0.0	45.4	1.4	0.0	10.6	7.0	0.0	15.0	1.1	11.0	6.0
Prop In Lane	1.00		0.48	1.00		0.07	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	583	0	865	182	0	874	320	0	476	259	430	365
V/C Ratio(X)	0.23	0.00	0.95	0.27	0.00	0.35	0.59	0.00	0.64	0.10	0.54	0.31
Avail Cap(c_a), veh/h	589	0	878	223	0	923	320	0	476	319	430	365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	0.0	23.6	22.0	0.0	16.7	28.9	0.0	32.6	28.0	33.9	31.9
Incr Delay (d2), s/veh	0.2	0.0	19.0	0.8	0.0	0.2	2.9	0.0	6.5	0.2	4.9	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	21.0	0.5	0.0	4.3	3.6	0.0	7.1	0.5	5.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.3	0.0	42.7	22.8	0.0	16.9	31.8	0.0	39.1	28.2	38.8	34.2
LnGrp LOS	B	A	D	C	A	B	C	A	D	C	D	C
Approach Vol, veh/h		957			359			495			375	
Approach Delay, s/veh		38.3			17.7			36.3			36.6	
Approach LOS		D			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	30.4	8.7	53.3	11.0	27.0	10.7	51.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	6.0	19.0	6.0	49.0	6.0	19.0	6.0	49.0
Max Q Clear Time (g_c+I1), s	3.1	17.0	3.4	47.4	9.0	13.0	5.8	12.6
Green Ext Time (p_c), s	0.0	0.3	0.0	0.9	0.0	0.8	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

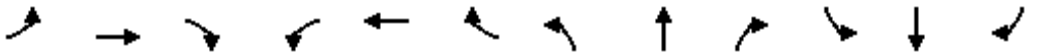
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	81	340	290	18	5	43
Future Vol, veh/h	81	340	290	18	5	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	88	370	315	20	5	47

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	335	0	-	0	686	168
Stage 1	-	-	-	-	325	-
Stage 2	-	-	-	-	361	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1221	-	-	-	381	847
Stage 1	-	-	-	-	705	-
Stage 2	-	-	-	-	676	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1221	-	-	-	354	847
Mov Cap-2 Maneuver	-	-	-	-	354	-
Stage 1	-	-	-	-	654	-
Stage 2	-	-	-	-	676	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1221	-	-	-	354	847
HCM Lane V/C Ratio	0.072	-	-	-	0.015	0.055
HCM Control Delay (s)	8.2	-	-	-	15.3	9.5
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0	0.2

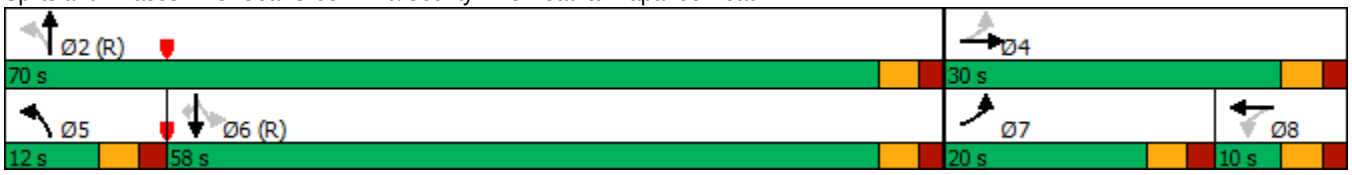


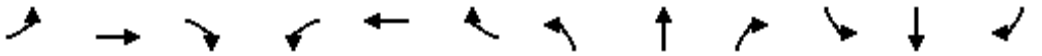
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	1	115	1	1	1	110	475	1	1	395	200
Future Volume (vph)	230	1	115	1	1	1	110	475	1	1	395	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	0		0	150		0	150		150
Storage Lanes	1		0	0		0	1		0	0		1
Taper Length (ft)	100			100			100			100		
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
Frt		0.851			0.955							0.850
Flt Protected	0.950				0.984		0.950					
Satd. Flow (prot)	1770	1585	0	0	1750	0	1770	1863	0	0	1863	1583
Flt Permitted	0.667						0.403				0.999	
Satd. Flow (perm)	1242	1585	0	0	1779	0	751	1863	0	0	1861	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		125			1							217
Link Speed (mph)		40			25			45			45	
Link Distance (ft)		1749			776			1338			543	
Travel Time (s)		29.8			21.2			20.3			8.2	
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
Adj. Flow (vph)	250	1	125	1	1	1	120	516	1	1	429	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	250	126	0	0	3	0	120	517	0	0	430	217
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases	7	4			8		5	2			6	
Permitted Phases	4			8			2			6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	20.0	30.0		10.0	10.0		12.0	70.0		58.0	58.0	58.0
Total Split (%)	20.0%	30.0%		10.0%	10.0%		12.0%	70.0%		58.0%	58.0%	58.0%
Maximum Green (s)	15.0	25.0		5.0	5.0		7.0	65.0		53.0	53.0	53.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	5.0	5.0			5.0		5.0	5.0			5.0	5.0
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)	16.5	16.5			5.1		73.5	73.5			61.5	61.5
Actuated g/C Ratio	0.16	0.16			0.05		0.74	0.74			0.62	0.62
v/c Ratio	0.89	0.34			0.03		0.19	0.38			0.38	0.21
Control Delay	61.4	10.7			41.0		5.2	6.4			11.7	2.0
Queue Delay	0.0	0.0			0.0		0.0	0.0			0.0	0.0
Total Delay	61.4	10.7			41.0		5.2	6.4			11.7	2.0
LOS	E	B			D		A	A			B	A
Approach Delay		44.4			41.0			6.2			8.4	
Approach LOS		D			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 15.8		Intersection LOS: B	
Intersection Capacity Utilization 77.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Coal Creek Blvd/County Line Road & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1	115	1	1	1	110	475	1	1	395	200
Future Volume (veh/h)	230	1	115	1	1	1	110	475	1	1	395	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	1	125	1	1	1	120	516	1	1	429	217
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	441	3	388	60	41	27	489	1219	2	36	1038	880
Arrive On Green	0.15	0.25	0.25	0.05	0.05	0.05	0.05	0.65	0.65	0.56	0.56	0.56
Sat Flow, veh/h	1781	13	1574	254	845	550	1781	1866	4	0	1869	1585
Grp Volume(v), veh/h	250	0	126	3	0	0	120	0	517	430	0	217
Grp Sat Flow(s),veh/h/ln	1781	0	1587	1650	0	0	1781	0	1870	1870	0	1585
Q Serve(g_s), s	12.8	0.0	6.5	0.0	0.0	0.0	2.7	0.0	13.2	0.0	0.0	7.1
Cycle Q Clear(g_c), s	12.8	0.0	6.5	0.2	0.0	0.0	2.7	0.0	13.2	13.3	0.0	7.1
Prop In Lane	1.00		0.99	0.33		0.33	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	441	0	391	128	0	0	489	0	1222	1074	0	880
V/C Ratio(X)	0.57	0.00	0.32	0.02	0.00	0.00	0.25	0.00	0.42	0.40	0.00	0.25
Avail Cap(c_a), veh/h	444	0	397	130	0	0	528	0	1222	1074	0	880
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.7	0.0	30.8	45.3	0.0	0.0	9.0	0.0	8.3	12.8	0.0	11.5
Incr Delay (d2), s/veh	1.7	0.0	0.5	0.1	0.0	0.0	0.3	0.0	1.1	1.1	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	2.5	0.1	0.0	0.0	0.9	0.0	4.7	5.2	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.4	0.0	31.3	45.4	0.0	0.0	9.2	0.0	9.4	14.0	0.0	12.1
LnGrp LOS	D	A	C	D	A	A	A	A	A	B	A	B
Approach Vol, veh/h		376			3			637			647	
Approach Delay, s/veh		35.3			45.4			9.3			13.3	
Approach LOS		D			D			A			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		70.3		29.7	9.8	60.5	19.8	9.9				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s		65.0		25.0	7.0	53.0	15.0	5.0				
Max Q Clear Time (g_c+I1), s		15.2		8.5	4.7	15.3	14.8	2.2				
Green Ext Time (p_c), s		3.3		0.5	0.1	3.3	0.0	0.0				

Intersection Summary												
HCM 6th Ctrl Delay			16.8									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.1

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	580	1	8	505	1	5
Future Vol, veh/h	580	1	8	505	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	630	1	9	549	1	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	631	0	924	316
Stage 1	-	-	-	-	631	-
Stage 2	-	-	-	-	293	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	947	-	268	680
Stage 1	-	-	-	-	492	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	947	-	265	680
Mov Cap-2 Maneuver	-	-	-	-	265	-
Stage 1	-	-	-	-	492	-
Stage 2	-	-	-	-	724	-

Approach	NB	SB	NW
HCM Control Delay, s	0	0.1	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	SBL	SBT
Capacity (veh/h)	-	-	539	947	-
HCM Lane V/C Ratio	-	-	0.012	0.009	-
HCM Control Delay (s)	-	-	11.8	8.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	570	6	0	505	0	13
Future Vol, veh/h	570	6	0	505	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	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	620	7	0	549	0	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	310
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	-	0	686
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	686
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	686	-	-	-
HCM Lane V/C Ratio	0.021	-	-	-
HCM Control Delay (s)	10.4	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	6.7
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	13	627	550
Demand Flow Rate, veh/h	13	639	561
Vehicles Circulating, veh/h	632	29	9
Vehicles Exiting, veh/h	36	541	636
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.2	7.1	6.3
Approach LOS	A	A	A

Lane	Left	Left	Right	Left
Designated Moves	LR	LT	R	LT
Assumed Moves	LR	LT	R	LT
RT Channelized				
Lane Util	1.000	0.989	0.011	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.535
Critical Headway, s	4.976	4.544	4.544	4.544
Entry Flow, veh/h	13	632	7	561
Cap Entry Lane, veh/h	724	1383	1383	1409
Entry HV Adj Factor	1.000	0.980	1.000	0.980
Flow Entry, veh/h	13	620	7	550
Cap Entry, veh/h	724	1356	1383	1380
V/C Ratio	0.018	0.457	0.005	0.398
Control Delay, s/veh	5.2	7.2	2.6	6.3
LOS	A	A	A	A
95th %tile Queue, veh	0	2	0	2

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	38	415	76	65	560
Future Vol, veh/h	45	38	415	76	65	560
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	225	325	-
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	49	41	451	83	71	609

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	898	226	0	0	534	0
Stage 1	451	-	-	-	-	-
Stage 2	447	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	279	777	-	-	1030	-
Stage 1	609	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	260	777	-	-	1030	-
Mov Cap-2 Maneuver	260	-	-	-	-	-
Stage 1	609	-	-	-	-	-
Stage 2	569	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.5	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	260	777	1030	-
HCM Lane V/C Ratio	-	-	0.188	0.053	0.069	-
HCM Control Delay (s)	-	-	22	9.9	8.8	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.2	0.2	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	41	70	50	13	47	17	29	0	8	15	0	24
Future Vol, veh/h	41	70	50	13	47	17	29	0	8	15	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	76	54	14	51	18	32	0	9	16	0	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	69	0	0	130	0	0	294	290	103	286	308	60
Stage 1	-	-	-	-	-	-	193	193	-	88	88	-
Stage 2	-	-	-	-	-	-	101	97	-	198	220	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1532	-	-	1455	-	-	658	620	952	666	606	1005
Stage 1	-	-	-	-	-	-	809	741	-	920	822	-
Stage 2	-	-	-	-	-	-	905	815	-	804	721	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1532	-	-	1455	-	-	620	594	952	639	581	1005
Mov Cap-2 Maneuver	-	-	-	-	-	-	620	594	-	639	581	-
Stage 1	-	-	-	-	-	-	783	717	-	891	814	-
Stage 2	-	-	-	-	-	-	873	807	-	771	698	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	1.3	10.7	9.6
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	671	1532	-	-	1455	-	-	824
HCM Lane V/C Ratio	0.06	0.029	-	-	0.01	-	-	0.051
HCM Control Delay (s)	10.7	7.4	0	-	7.5	0	-	9.6
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	8	1	10	51	26	1	1	5	39	1	13
Future Vol, veh/h	22	8	1	10	51	26	1	1	5	39	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	9	1	11	55	28	1	1	5	42	1	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	83	0	0	10	0	0	157	163	10	152	149	69
Stage 1	-	-	-	-	-	-	58	58	-	91	91	-
Stage 2	-	-	-	-	-	-	99	105	-	61	58	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1514	-	-	1610	-	-	809	729	1071	815	743	994
Stage 1	-	-	-	-	-	-	954	847	-	916	820	-
Stage 2	-	-	-	-	-	-	907	808	-	950	847	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1514	-	-	1610	-	-	782	712	1071	795	726	994
Mov Cap-2 Maneuver	-	-	-	-	-	-	782	712	-	795	726	-
Stage 1	-	-	-	-	-	-	939	833	-	901	814	-
Stage 2	-	-	-	-	-	-	887	802	-	929	833	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5.3	0.8	8.8	9.6
HCM LOS			A	A

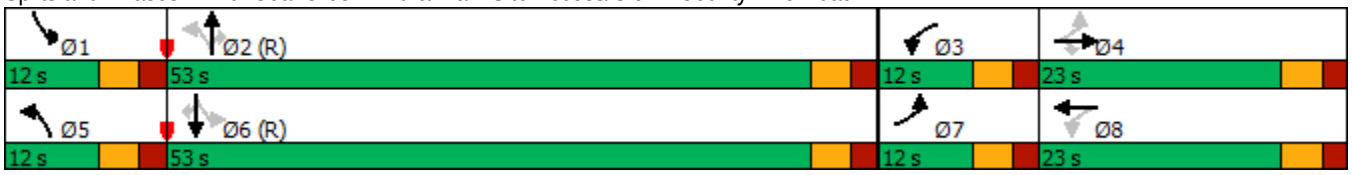
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	952	1514	-	-	1610	-	-	834
HCM Lane V/C Ratio	0.008	0.016	-	-	0.007	-	-	0.069
HCM Control Delay (s)	8.8	7.4	0	-	7.3	0	-	9.6
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

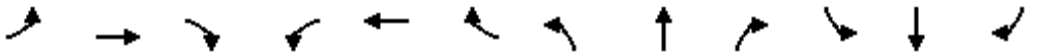
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	1	42	45	1	5	71	560	65	5	470	15
Future Volume (vph)	9	1	42	45	1	5	71	560	65	5	470	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	150		0	355		275	300		275
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.875				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1630	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.754			0.429			0.424			0.421		
Satd. Flow (perm)	1405	1863	1583	799	1630	0	790	3539	1583	784	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			131		5				131			131
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		557			814			864			533	
Travel Time (s)		15.2			22.2			13.1			8.1	
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
Adj. Flow (vph)	10	1	46	49	1	5	77	609	71	5	511	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	1	46	49	6	0	77	609	71	5	511	16
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			18			18	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	23.0	23.0	12.0	23.0		12.0	53.0	53.0	12.0	53.0	53.0
Total Split (%)	12.0%	23.0%	23.0%	12.0%	23.0%		12.0%	53.0%	53.0%	12.0%	53.0%	53.0%
Maximum Green (s)	7.0	18.0	18.0	7.0	18.0		7.0	48.0	48.0	7.0	48.0	48.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	-1.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	9.6	5.8	6.8	12.2	10.8		78.3	77.7	77.7	73.8	70.3	70.3
Actuated g/C Ratio	0.10	0.06	0.07	0.12	0.11		0.78	0.78	0.78	0.74	0.70	0.70
v/c Ratio	0.06	0.01	0.20	0.30	0.03		0.11	0.22	0.06	0.01	0.21	0.01
Control Delay	34.9	44.0	2.0	40.9	27.5		2.7	3.0	0.1	4.2	7.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	44.0	2.0	40.9	27.5		2.7	3.0	0.1	4.2	7.8	0.0
LOS	C	D	A	D	C		A	A	A	A	A	A
Approach Delay		8.5			39.4			2.7			7.5	
Approach LOS		A			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 6.2		Intersection LOS: A	
Intersection Capacity Utilization 41.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Coal Creek Blvd & Main Site Access/Old E. County Line Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	1	42	45	1	5	71	560	65	5	470	15
Future Volume (veh/h)	9	1	42	45	1	5	71	560	65	5	470	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	1	46	49	1	5	77	609	71	5	511	16
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	152	77	81	194	18	90	696	2541	1133	582	2407	1074
Arrive On Green	0.01	0.04	0.05	0.04	0.07	0.07	0.04	0.72	0.72	0.01	0.68	0.68
Sat Flow, veh/h	1781	1870	1585	1781	271	1355	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	10	1	46	49	0	6	77	609	71	5	511	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1626	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.5	0.1	2.8	2.6	0.0	0.3	1.2	5.9	1.3	0.1	5.4	0.3
Cycle Q Clear(g_c), s	0.5	0.1	2.8	2.6	0.0	0.3	1.2	5.9	1.3	0.1	5.4	0.3
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	77	81	194	0	108	696	2541	1133	582	2407	1074
V/C Ratio(X)	0.07	0.01	0.57	0.25	0.00	0.06	0.11	0.24	0.06	0.01	0.21	0.01
Avail Cap(c_a), veh/h	255	337	301	252	0	293	743	2541	1133	695	2407	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	46.0	46.3	43.7	0.0	43.7	4.0	4.9	4.3	5.0	6.1	5.3
Incr Delay (d2), s/veh	0.2	0.1	6.0	0.7	0.0	0.2	0.1	0.2	0.1	0.0	0.2	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	0.2	0.0	1.3	1.2	0.0	0.1	0.3	1.7	0.4	0.0	1.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	46.0	52.4	44.3	0.0	44.0	4.1	5.1	4.4	5.0	6.3	5.3
LnGrp LOS	D	D	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		57			55			757			532	
Approach Delay, s/veh		51.0			44.3			4.9			6.2	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	76.5	8.7	9.1	9.4	72.7	6.2	11.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	48.0	7.0	18.0	7.0	48.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	2.1	7.9	4.6	4.8	3.2	7.4	2.5	2.3
Green Ext Time (p_c), s	0.0	4.4	0.0	0.1	0.0	3.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	38	28	4	2	23
Future Vol, veh/h	33	38	28	4	2	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	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	36	41	30	4	2	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	34	0	-	0	145	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	113	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1578	-	-	-	852	1042
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	1578	-	-	-	832	1042
Mov Cap-2 Maneuver	-	-	-	-	832	-
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	914	-

Approach	EB	WB	SB
HCM Control Delay, s	3.4	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1578	-	-	-	1021
HCM Lane V/C Ratio	0.023	-	-	-	0.027
HCM Control Delay (s)	7.3	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	3	5	4	3	27
Future Vol, veh/h	37	3	5	4	3	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	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	40	3	5	4	3	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	9	0	-	0	90	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	83	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1611	-	-	-	910	1075
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	940	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1611	-	-	-	887	1075
Mov Cap-2 Maneuver	-	-	-	-	887	-
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	940	-

Approach	EB	WB	SB
HCM Control Delay, s	6.7	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1611	-	-	-	1053
HCM Lane V/C Ratio	0.025	-	-	-	0.031
HCM Control Delay (s)	7.3	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	40	43	685	540	15
Future Vol, veh/h	10	40	43	685	540	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	380	-	-	275
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	43	47	745	587	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1054	294	603	0	-	0
Stage 1	587	-	-	-	-	-
Stage 2	467	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*252	*863	*1290	-	-	-
Stage 1	*814	-	-	-	-	-
Stage 2	*597	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	*243	*863	*1290	-	-	-
Mov Cap-2 Maneuver	*243	-	-	-	-	-
Stage 1	*785	-	-	-	-	-
Stage 2	*597	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	* 1290	-	243	863	-	-
HCM Lane V/C Ratio	0.036	-	0.045	0.05	-	-
HCM Control Delay (s)	7.9	-	20.5	9.4	-	-
HCM Lane LOS	A	-	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.2	-	-

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

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	17	475	38	34	570
Future Vol, veh/h	0	17	475	38	34	570
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	-	225	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	18	516	41	37	620

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	258	0	0	557	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	*893	-	-	1297	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	-	-	1	-
Mov Cap-1 Maneuver	-	*893	-	-	1297	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	893	1297	-
HCM Lane V/C Ratio	-	-	0.021	0.028	-
HCM Control Delay (s)	-	-	9.1	7.9	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

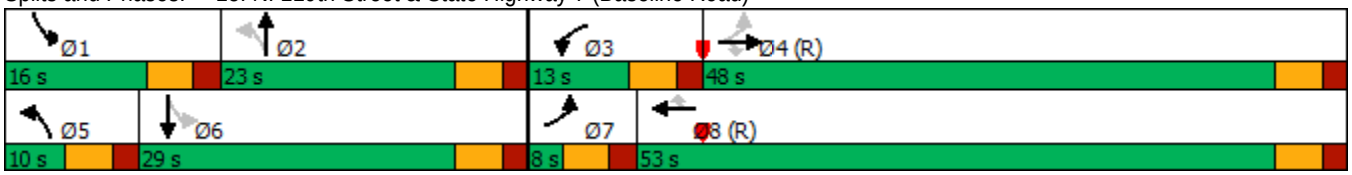
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

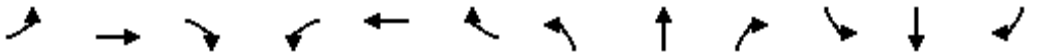
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	590	45	250	870	120	50	270	345	310	195	65
Future Volume (vph)	120	590	45	250	870	120	50	270	345	310	195	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		275	230		275	300		275	530		225
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.092			0.950			0.630			0.218		
Satd. Flow (perm)	171	1863	1583	3433	1863	1583	1174	1863	1583	406	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			207			207			329			267
Link Speed (mph)		55			55			40			40	
Link Distance (ft)		768			363			733			1133	
Travel Time (s)		9.5			4.5			12.5			19.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	125	615	47	260	906	125	52	281	359	323	203	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	125	615	47	260	906	125	52	281	359	323	203	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (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
Detector 1 Queue (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
Detector 1 Delay (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
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4			8	2		Free	6		Free

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	2.5	5.0	5.0	5.0	5.0	5.0	4.5	5.0		5.0	5.0	
Minimum Split (s)	8.0	23.5	23.5	10.5	23.5	23.5	10.0	23.0		10.5	23.5	
Total Split (s)	8.0	48.0	48.0	13.0	53.0	53.0	10.0	23.0		16.0	29.0	
Total Split (%)	8.0%	48.0%	48.0%	13.0%	53.0%	53.0%	10.0%	23.0%		16.0%	29.0%	
Maximum Green (s)	2.5	42.5	42.5	7.5	47.5	47.5	4.5	17.5		10.5	23.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.5	-2.5	-2.0	-2.0	-2.5		-2.5	-2.0	
Total Lost Time (s)	3.5	3.5	3.5	3.0	3.0	3.5	3.5	3.0		3.0	3.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	50.0	44.8	44.8	10.4	50.0	49.5	25.3	19.3	100.0	35.3	26.8	100.0
Actuated g/C Ratio	0.50	0.45	0.45	0.10	0.50	0.50	0.25	0.19	1.00	0.35	0.27	1.00
v/c Ratio	0.74	0.74	0.06	0.73	0.97	0.14	0.16	0.78	0.23	1.01	0.41	0.04
Control Delay	42.7	29.4	0.1	34.8	53.7	4.3	23.2	54.7	0.3	79.7	31.6	0.0
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	42.7	29.4	0.1	34.8	53.7	4.3	23.2	54.7	0.3	79.7	31.6	0.0
LOS	D	C	A	C	D	A	C	D	A	E	C	A
Approach Delay		29.7			45.1			24.1			54.1	
Approach LOS		C			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 38.8		Intersection LOS: D	
Intersection Capacity Utilization 97.2%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 15: N. 119th Street & State Highway 7 (Baseline Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	590	45	250	870	120	50	270	345	310	195	65
Future Volume (veh/h)	120	590	45	250	870	120	50	270	345	310	195	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	615	47	260	906	125	52	281	0	323	203	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	851	721	346	954	801	363	355		355	478	
Arrive On Green	0.05	0.46	0.46	0.10	0.51	0.51	0.05	0.19	0.00	0.13	0.26	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	125	615	47	260	906	125	52	281	0	323	203	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.8	26.7	1.7	7.3	46.0	4.2	2.3	14.3	0.0	13.0	9.1	0.0
Cycle Q Clear(g_c), s	3.8	26.7	1.7	7.3	46.0	4.2	2.3	14.3	0.0	13.0	9.1	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	177	851	721	346	954	801	363	355		355	478	
V/C Ratio(X)	0.71	0.72	0.07	0.75	0.95	0.16	0.14	0.79		0.91	0.42	
Avail Cap(c_a), veh/h	177	851	721	346	954	801	382	374		355	478	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.4	22.1	15.3	43.8	23.3	13.3	29.8	38.6	0.0	29.9	31.1	0.0
Incr Delay (d2), s/veh	12.2	5.3	0.2	9.0	19.3	0.4	0.2	10.5	0.0	26.6	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	1.9	11.4	0.6	3.4	22.0	1.4	1.0	7.4	0.0	8.5	4.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.6	27.4	15.5	52.8	42.5	13.7	30.0	49.1	0.0	56.5	31.7	0.0
LnGrp LOS	D	C	B	D	D	B	C	D		E	C	
Approach Vol, veh/h		787			1291			333	A		526	A
Approach Delay, s/veh		28.0			41.8			46.1			46.9	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	22.0	13.0	49.0	8.9	29.1	8.0	54.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	10.5	17.5	7.5	42.5	4.5	23.5	2.5	47.5
Max Q Clear Time (g_c+I1), s	15.0	16.3	9.3	28.7	4.3	11.1	5.8	48.0
Green Ext Time (p_c), s	0.0	0.2	0.0	3.1	0.0	0.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	39.5
HCM 6th LOS	D

Notes

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

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

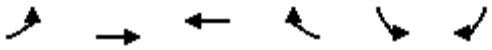
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	1245	1215	20	0	25
Future Vol, veh/h	0	1245	1215	20	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	95	95	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1311	1279	22	0	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

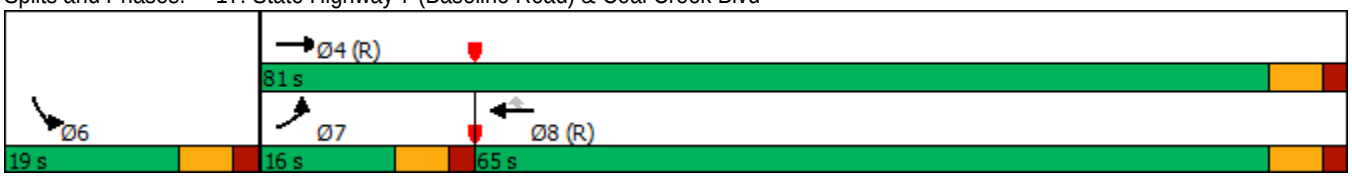


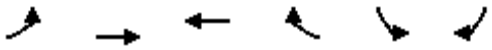
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	275	970	1075	455	420	160
Future Volume (vph)	275	970	1075	455	420	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	580			380	280	0
Storage Lanes	2			1	1	1
Taper Length (ft)	100				100	
Lane Util. Factor	0.97	1.00	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	1863	1863	1583	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	1863	1863	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				479		170
Link Speed (mph)		55	55		45	
Link Distance (ft)		1410	1068		1156	
Travel Time (s)		17.5	13.2		17.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.94
Adj. Flow (vph)	289	1021	1132	479	442	170
Shared Lane Traffic (%)						
Lane Group Flow (vph)	289	1021	1132	479	442	170
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector Phase	7	4	8	8	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	12.0	25.0	24.0	24.0	24.0	
Total Split (s)	16.0	81.0	65.0	65.0	19.0	
Total Split (%)	16.0%	81.0%	65.0%	65.0%	19.0%	
Maximum Green (s)	10.0	75.0	59.0	59.0	13.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	3.9	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	None	
Walk Time (s)		4.0	4.0	4.0	4.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	
Act Effct Green (s)	12.0	77.0	61.0	61.0	15.1	100.0
Actuated g/C Ratio	0.12	0.77	0.61	0.61	0.15	1.00
v/c Ratio	0.70	0.71	1.00	0.42	0.85	0.11
Control Delay	41.3	9.3	46.6	2.0	56.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.3	9.3	46.6	2.0	56.3	0.1
LOS	D	A	D	A	E	A
Approach Delay		16.4	33.3		40.7	
Approach LOS		B	C		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 28.3		Intersection LOS: C	
Intersection Capacity Utilization 86.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 17: State Highway 7 (Baseline Road) & Coal Creek Blvd





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	275	970	1075	455	420	160
Future Volume (veh/h)	275	970	1075	455	420	160
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	289	1021	1132	479	442	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	415	1440	1141	967	522	
Arrive On Green	0.12	0.77	0.61	0.61	0.15	0.00
Sat Flow, veh/h	3456	1870	1870	1585	3456	1585
Grp Volume(v), veh/h	289	1021	1132	479	442	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1870	1585	1728	1585
Q Serve(g_s), s	8.0	27.6	59.8	16.9	12.5	0.0
Cycle Q Clear(g_c), s	8.0	27.6	59.8	16.9	12.5	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	415	1440	1141	967	522	
V/C Ratio(X)	0.70	0.71	0.99	0.50	0.85	
Avail Cap(c_a), veh/h	415	1440	1141	967	522	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.3	5.8	19.3	10.9	41.3	0.0
Incr Delay (d2), s/veh	5.1	3.0	24.8	1.8	12.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	6.5	27.5	5.2	6.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	47.3	8.8	44.1	12.7	53.6	0.0
LnGrp LOS	D	A	D	B	D	
Approach Vol, veh/h		1310	1611		442	A
Approach Delay, s/veh		17.3	34.8		53.6	
Approach LOS		B	C		D	

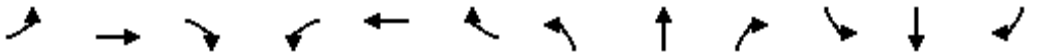
Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	81.0	19.0	16.0	65.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	75.0	13.0	10.0	59.0
Max Q Clear Time (g_c+I1), s	29.6	14.5	10.0	61.8
Green Ext Time (p_c), s	9.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Notes

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

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



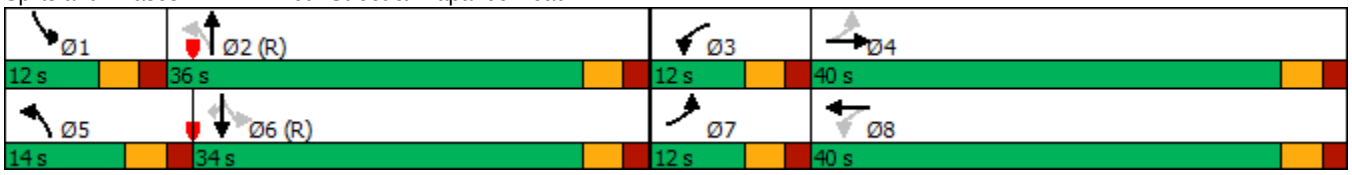
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	150	154	75	477	43	191	171	45	25	322	125
Future Volume (vph)	25	150	154	75	477	43	191	171	45	25	322	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		150	90		150	365		150	90		230
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
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
Frt		0.924			0.988			0.969				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1721	0	1770	1840	0	1770	1805	0	1770	1863	1583
Flt Permitted	0.126			0.361			0.325			0.612		
Satd. Flow (perm)	235	1721	0	672	1840	0	605	1805	0	1140	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		57			5			14				136
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		636			2736			2089			552	
Travel Time (s)		10.8			46.6			35.6			9.4	
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
Adj. Flow (vph)	27	163	167	82	518	47	208	186	49	27	350	136
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	330	0	82	565	0	208	235	0	27	350	136
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6

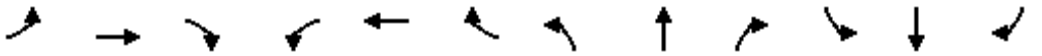
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	12.0	40.0		12.0	40.0		14.0	36.0		12.0	34.0	34.0
Total Split (%)	12.0%	40.0%		12.0%	40.0%		14.0%	36.0%		12.0%	34.0%	34.0%
Maximum Green (s)	7.0	35.0		7.0	35.0		9.0	31.0		7.0	29.0	29.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	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
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	36.0	30.7		37.4	33.2		48.0	42.6		42.1	35.8	35.8
Actuated g/C Ratio	0.36	0.31		0.37	0.33		0.48	0.43		0.42	0.36	0.36
v/c Ratio	0.15	0.58		0.25	0.92		0.53	0.30		0.05	0.53	0.21
Control Delay	16.9	27.7		18.3	51.6		19.7	19.0		16.6	31.3	5.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	16.9	27.7		18.3	51.6		19.7	19.0		16.6	31.3	5.7
LOS	B	C		B	D		B	B		B	C	A
Approach Delay		26.9			47.4			19.3			23.8	
Approach LOS		C			D			B			C	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 84 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 31.1 Intersection LOS: C
Intersection Capacity Utilization 76.1% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1: N. 119th Street & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	150	154	75	477	43	191	171	45	25	322	125
Future Volume (veh/h)	25	150	154	75	477	43	191	171	45	25	322	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	163	167	82	518	47	208	186	49	27	350	136
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	145	261	267	305	554	50	421	598	158	499	665	564
Arrive On Green	0.03	0.31	0.31	0.05	0.33	0.33	0.09	0.42	0.42	0.03	0.36	0.36
Sat Flow, veh/h	1781	847	867	1781	1689	153	1781	1427	376	1781	1870	1585
Grp Volume(v), veh/h	27	0	330	82	0	565	208	0	235	27	350	136
Grp Sat Flow(s),veh/h/ln	1781	0	1714	1781	0	1843	1781	0	1803	1781	1870	1585
Q Serve(g_s), s	1.0	0.0	16.5	3.1	0.0	29.7	7.1	0.0	8.7	1.0	14.8	6.0
Cycle Q Clear(g_c), s	1.0	0.0	16.5	3.1	0.0	29.7	7.1	0.0	8.7	1.0	14.8	6.0
Prop In Lane	1.00		0.51	1.00		0.08	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	528	305	0	604	421	0	756	499	665	564
V/C Ratio(X)	0.19	0.00	0.62	0.27	0.00	0.93	0.49	0.00	0.31	0.05	0.53	0.24
Avail Cap(c_a), veh/h	223	0	600	347	0	645	421	0	756	577	665	564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	29.6	23.3	0.0	32.6	18.0	0.0	19.4	19.4	25.5	22.7
Incr Delay (d2), s/veh	0.6	0.0	1.7	0.5	0.0	20.3	0.9	0.0	1.1	0.0	3.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	6.7	1.3	0.0	15.9	2.8	0.0	3.7	0.4	6.8	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.1	0.0	31.3	23.8	0.0	52.9	18.9	0.0	20.5	19.5	28.5	23.7
LnGrp LOS	C	A	C	C	A	D	B	A	C	B	C	C
Approach Vol, veh/h		357			647			443			513	
Approach Delay, s/veh		31.0			49.2			19.7			26.8	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	46.9	9.6	35.8	14.0	40.6	7.6	37.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	31.0	7.0	35.0	9.0	29.0	7.0	35.0
Max Q Clear Time (g_c+I1), s	3.0	10.7	5.1	18.5	9.1	16.8	3.0	31.7
Green Ext Time (p_c), s	0.0	1.2	0.0	1.7	0.0	1.9	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

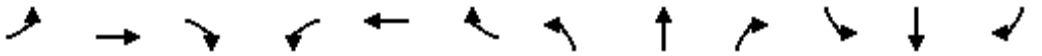
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	204	11	3	464	5	31	0	12	13	0	84
Future Vol, veh/h	30	204	11	3	464	5	31	0	12	13	0	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	250	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	222	12	3	504	5	34	0	13	14	0	91

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	509	0	0	234	0	0	552	809	117	690	813	255
Stage 1	-	-	-	-	-	-	294	294	-	513	513	-
Stage 2	-	-	-	-	-	-	258	515	-	177	300	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1052	-	-	1331	-	-	416	313	913	331	311	744
Stage 1	-	-	-	-	-	-	690	668	-	512	534	-
Stage 2	-	-	-	-	-	-	724	533	-	808	664	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1052	-	-	1331	-	-	356	303	913	318	301	744
Mov Cap-2 Maneuver	-	-	-	-	-	-	356	303	-	318	301	-
Stage 1	-	-	-	-	-	-	669	647	-	496	533	-
Stage 2	-	-	-	-	-	-	634	532	-	771	643	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0	14.2	11.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	356	913	1052	-	-	1331	-	-	318	744
HCM Lane V/C Ratio	0.095	0.014	0.031	-	-	0.002	-	-	0.044	0.123
HCM Control Delay (s)	16.2	9	8.5	-	-	7.7	-	-	16.8	10.5
HCM Lane LOS	C	A	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.3	0	0.1	-	-	0	-	-	0.1	0.4

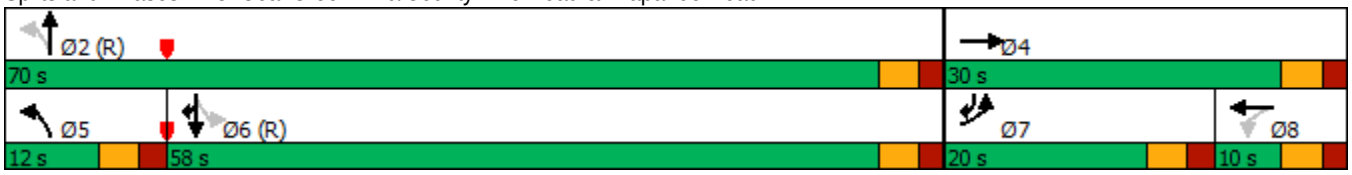


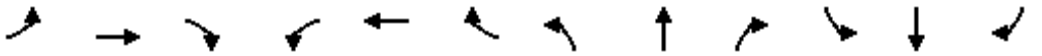
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	1	79	1	1	1	244	308	1	1	373	228
Future Volume (vph)	122	1	79	1	1	1	244	308	1	1	373	228
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	0		0	150		0	150		150
Storage Lanes	1		0	0		0	2		0	1		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.852			0.955							0.850
Flt Protected	0.950				0.984		0.950			0.950		
Satd. Flow (prot)	1770	1587	0	0	1750	0	1770	3539	0	1770	3539	1583
Flt Permitted	0.950						0.468			0.549		
Satd. Flow (perm)	1770	1587	0	0	1779	0	872	3539	0	1023	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		86			1			1				248
Link Speed (mph)		40			25			45			45	
Link Distance (ft)		1749			776			1338			543	
Travel Time (s)		29.8			21.2			20.3			8.2	
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
Adj. Flow (vph)	133	1	86	1	1	1	265	335	1	1	405	248
Shared Lane Traffic (%)												
Lane Group Flow (vph)	133	87	0	0	3	0	265	336	0	1	405	248
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Perm	NA		pm+pt	NA		Perm	NA	pt+ov
Protected Phases	7	4			8		5	2			6	6 7
Permitted Phases				8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2		6	6	6 7
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Total Split (s)	20.0	30.0		10.0	10.0		12.0	70.0		58.0	58.0	
Total Split (%)	20.0%	30.0%		10.0%	10.0%		12.0%	70.0%		58.0%	58.0%	
Maximum Green (s)	15.0	25.0		5.0	5.0		7.0	65.0		53.0	53.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Act Effct Green (s)	12.2	14.2			5.4		75.8	75.8		62.2	62.2	79.5
Actuated g/C Ratio	0.12	0.14			0.05		0.76	0.76		0.62	0.62	0.80
v/c Ratio	0.62	0.29			0.03		0.36	0.13		0.00	0.18	0.19
Control Delay	58.7	12.3			41.0		5.8	4.1		10.0	9.2	0.8
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	58.7	12.3			41.0		5.8	4.1		10.0	9.2	0.8
LOS	E	B			D		A	A		A	A	A
Approach Delay		40.3			41.0			4.8			6.0	
Approach LOS		D			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 10.7		Intersection LOS: B	
Intersection Capacity Utilization 49.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Coal Creek Blvd/County Line Road & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	1	79	1	1	1	244	308	1	1	373	228
Future Volume (veh/h)	122	1	79	1	1	1	244	308	1	1	373	228
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	133	1	86	1	1	1	265	335	1	1	405	248
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	164	3	295	60	38	25	617	2587	8	690	2103	1084
Arrive On Green	0.09	0.19	0.19	0.05	0.05	0.05	0.07	0.71	0.71	0.59	0.59	0.59
Sat Flow, veh/h	1781	18	1570	271	833	552	1781	3634	11	1044	3554	1585
Grp Volume(v), veh/h	133	0	87	3	0	0	265	164	172	1	405	248
Grp Sat Flow(s),veh/h/ln	1781	0	1588	1655	0	0	1781	1777	1868	1044	1777	1585
Q Serve(g_s), s	7.3	0.0	4.7	0.0	0.0	0.0	5.6	2.9	2.9	0.0	5.3	5.9
Cycle Q Clear(g_c), s	7.3	0.0	4.7	0.2	0.0	0.0	5.6	2.9	2.9	0.0	5.3	5.9
Prop In Lane	1.00		0.99	0.33		0.33	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	164	0	299	124	0	0	617	1265	1330	690	2103	1084
V/C Ratio(X)	0.81	0.00	0.29	0.02	0.00	0.00	0.43	0.13	0.13	0.00	0.19	0.23
Avail Cap(c_a), veh/h	267	0	397	130	0	0	617	1265	1330	690	2103	1084
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	34.9	45.6	0.0	0.0	6.3	4.6	4.6	8.3	9.4	5.9
Incr Delay (d2), s/veh	9.1	0.0	0.5	0.1	0.0	0.0	0.5	0.2	0.2	0.0	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	1.8	0.1	0.0	0.0	1.7	0.9	0.9	0.0	1.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.6	0.0	35.4	45.7	0.0	0.0	6.8	4.8	4.8	8.3	9.6	6.4
LnGrp LOS	D	A	D	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		220			3			601			654	
Approach Delay, s/veh		46.4			45.7			5.7			8.4	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		76.2		23.8	12.0	64.2	14.2	9.6				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s		65.0		25.0	7.0	53.0	15.0	5.0				
Max Q Clear Time (g_c+I1), s		4.9		6.7	7.6	7.9	9.3	2.2				
Green Ext Time (p_c), s		1.8		0.3	0.0	3.5	0.1	0.0				

Intersection Summary												
HCM 6th Ctrl Delay			13.0									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.4

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	5	544	1	3	446	1	1	0	7	3	0	12
Future Vol, veh/h	5	544	1	3	446	1	1	0	7	3	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	591	1	3	485	1	1	0	8	3	0	13

Major/Minor	Major1			Major2			Minor2			Minor1		
Conflicting Flow All	486	0	0	592	0	0	798	1094	243	851	1094	296
Stage 1	-	-	-	-	-	-	492	492	-	602	602	-
Stage 2	-	-	-	-	-	-	306	602	-	249	492	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1073	-	-	980	-	-	277	213	758	253	213	700
Stage 1	-	-	-	-	-	-	527	546	-	453	487	-
Stage 2	-	-	-	-	-	-	679	487	-	733	546	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1073	-	-	980	-	-	270	211	758	249	211	700
Mov Cap-2 Maneuver	-	-	-	-	-	-	270	211	-	249	211	-
Stage 1	-	-	-	-	-	-	524	544	-	451	485	-
Stage 2	-	-	-	-	-	-	663	485	-	723	544	-

Approach	NB	SB	SE	NW
HCM Control Delay, s	0.1	0.1	10.9	12.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBL	NBT	NBR	NWLn1	SELn1	SBL	SBT	SBR
Capacity (veh/h)	1073	-	-	514	618	980	-	-
HCM Lane V/C Ratio	0.005	-	-	0.032	0.014	0.003	-	-
HCM Control Delay (s)	8.4	-	-	12.2	10.9	8.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	520	8	0	456	2	0	0	28	0	0	50
Future Vol, veh/h	0	520	8	0	456	2	0	0	28	0	0	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	565	9	0	496	2	0	0	30	0	0	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	283	-	-	249
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	714	0	0	751
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	714	-	-	751
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.3	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	714	-	-	-	-	751
HCM Lane V/C Ratio	0.043	-	-	-	-	0.072
HCM Control Delay (s)	10.3	-	-	-	-	10.2
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.2

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	1	2	2
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	277	109	582	552
Demand Flow Rate, veh/h	283	111	593	562
Vehicles Circulating, veh/h	594	636	106	146
Vehicles Exiting, veh/h	114	63	771	601
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.5	6.8	7.4	7.3
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	LT	R	LT	R
Assumed Moves	LT	R	LTR	LT	R	LT	R
RT Channelized							
Lane Util	0.318	0.682	1.000	0.985	0.015	0.966	0.034
Follow-Up Headway, s	2.535	2.535	2.609	2.535	2.535	2.535	2.535
Critical Headway, s	4.544	4.544	4.976	4.544	4.544	4.544	4.544
Entry Flow, veh/h	90	193	111	584	9	543	19
Cap Entry Lane, veh/h	827	827	721	1290	1290	1243	1243
Entry HV Adj Factor	0.981	0.979	0.983	0.980	1.000	0.981	1.000
Flow Entry, veh/h	88	189	109	573	9	533	19
Cap Entry, veh/h	811	810	709	1264	1290	1220	1243
V/C Ratio	0.109	0.233	0.154	0.453	0.007	0.437	0.015
Control Delay, s/veh	5.5	7.0	6.8	7.4	2.8	7.4	3.0
LOS	A	A	A	A	A	A	A
95th %tile Queue, veh	0	1	1	2	0	2	0

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	81	74	330	28	46	505
Future Vol, veh/h	81	74	330	28	46	505
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	225	325	-
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	88	80	359	30	50	549

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1008	359	0	0	389	0
Stage 1	359	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	267	685	-	-	1170	-
Stage 1	707	-	-	-	-	-
Stage 2	520	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	256	685	-	-	1170	-
Mov Cap-2 Maneuver	256	-	-	-	-	-
Stage 1	707	-	-	-	-	-
Stage 2	498	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	256	685	1170	-
HCM Lane V/C Ratio	-	-	0.344	0.117	0.043	-
HCM Control Delay (s)	-	-	26.3	11	8.2	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	1.5	0.4	0.1	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	50	15	4	81	12	43	0	12	16	0	36
Future Vol, veh/h	13	50	15	4	81	12	43	0	12	16	0	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	54	16	4	88	13	47	0	13	17	0	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	101	0	0	70	0	0	212	199	62	200	201	95
Stage 1	-	-	-	-	-	-	90	90	-	103	103	-
Stage 2	-	-	-	-	-	-	122	109	-	97	98	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1491	-	-	1531	-	-	745	697	1003	759	695	962
Stage 1	-	-	-	-	-	-	917	820	-	903	810	-
Stage 2	-	-	-	-	-	-	882	805	-	910	814	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1491	-	-	1531	-	-	708	688	1003	742	686	962
Mov Cap-2 Maneuver	-	-	-	-	-	-	708	688	-	742	686	-
Stage 1	-	-	-	-	-	-	908	812	-	894	808	-
Stage 2	-	-	-	-	-	-	844	803	-	889	806	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0.3	10.2	9.4
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	757	1491	-	-	1531	-	-	882
HCM Lane V/C Ratio	0.079	0.009	-	-	0.003	-	-	0.064
HCM Control Delay (s)	10.2	7.4	0	-	7.4	0	-	9.4
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	15	1	5	83	22	1	1	10	54	1	19
Future Vol, veh/h	7	15	1	5	83	22	1	1	10	54	1	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	16	1	5	90	24	1	1	11	59	1	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	114	0	0	17	0	0	156	157	17	151	145	102
Stage 1	-	-	-	-	-	-	33	33	-	112	112	-
Stage 2	-	-	-	-	-	-	123	124	-	39	33	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1475	-	-	1600	-	-	810	735	1062	816	746	953
Stage 1	-	-	-	-	-	-	983	868	-	893	803	-
Stage 2	-	-	-	-	-	-	881	793	-	976	868	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1475	-	-	1600	-	-	787	729	1062	802	740	953
Mov Cap-2 Maneuver	-	-	-	-	-	-	787	729	-	802	740	-
Stage 1	-	-	-	-	-	-	978	864	-	889	801	-
Stage 2	-	-	-	-	-	-	858	791	-	960	864	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	0.3	8.7	9.8
HCM LOS			A	A

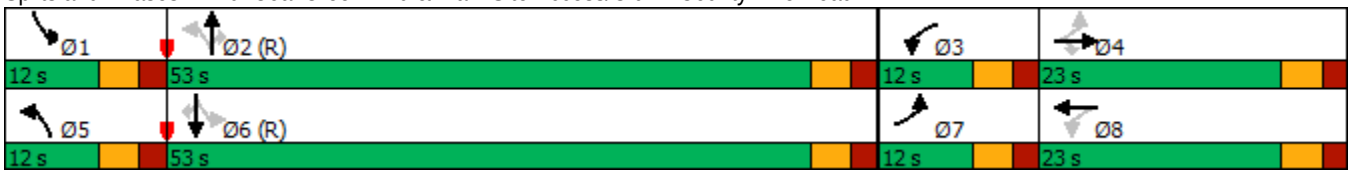
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	995	1475	-	-	1600	-	-	835
HCM Lane V/C Ratio	0.013	0.005	-	-	0.003	-	-	0.096
HCM Control Delay (s)	8.7	7.5	0	-	7.3	0	-	9.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

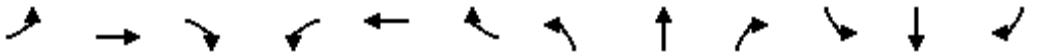
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	1	65	48	1	5	53	512	20	5	592	56
Future Volume (vph)	13	1	65	48	1	5	53	512	20	5	592	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	150		0	355		275	300		275
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.875				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1630	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.754			0.488			0.358			0.443		
Satd. Flow (perm)	1405	1863	1583	909	1630	0	667	3539	1583	825	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			131		5				131			131
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		557			814			864			533	
Travel Time (s)		15.2			22.2			13.1			8.1	
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
Adj. Flow (vph)	14	1	71	52	1	5	58	557	22	5	643	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	1	71	52	6	0	58	557	22	5	643	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			18			18	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	23.0	23.0	12.0	23.0		12.0	53.0	53.0	12.0	53.0	53.0
Total Split (%)	12.0%	23.0%	23.0%	12.0%	23.0%		12.0%	53.0%	53.0%	12.0%	53.0%	53.0%
Maximum Green (s)	7.0	18.0	18.0	7.0	18.0		7.0	48.0	48.0	7.0	48.0	48.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	-1.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	10.8	5.8	6.8	14.3	12.9		76.1	75.6	75.6	71.9	68.4	68.4
Actuated g/C Ratio	0.11	0.06	0.07	0.14	0.13		0.76	0.76	0.76	0.72	0.68	0.68
v/c Ratio	0.08	0.01	0.31	0.28	0.03		0.10	0.21	0.02	0.01	0.27	0.05
Control Delay	35.2	44.0	4.1	38.9	27.5		3.4	3.9	0.0	4.2	8.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	44.0	4.1	38.9	27.5		3.4	3.9	0.0	4.2	8.7	0.1
LOS	D	D	A	D	C		A	A	A	A	A	A
Approach Delay		9.6			37.7			3.8			8.0	
Approach LOS		A			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay: 7.4		Intersection LOS: A	
Intersection Capacity Utilization 42.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Coal Creek Blvd & Main Site Access/Old E. County Line Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	1	65	48	1	5	53	512	20	5	592	56
Future Volume (veh/h)	13	1	65	48	1	5	53	512	20	5	592	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	1	71	52	1	5	58	557	22	5	643	61
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	185	112	111	219	22	111	580	2472	1102	617	2353	1049
Arrive On Green	0.02	0.06	0.07	0.04	0.08	0.08	0.04	0.70	0.70	0.01	0.66	0.66
Sat Flow, veh/h	1781	1870	1585	1781	271	1355	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	14	1	71	52	0	6	58	557	22	5	643	61
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1626	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	0.1	4.4	2.7	0.0	0.3	1.0	5.7	0.4	0.1	7.5	1.4
Cycle Q Clear(g_c), s	0.7	0.1	4.4	2.7	0.0	0.3	1.0	5.7	0.4	0.1	7.5	1.4
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	112	111	219	0	133	580	2472	1102	617	2353	1049
V/C Ratio(X)	0.08	0.01	0.64	0.24	0.00	0.05	0.10	0.23	0.02	0.01	0.27	0.06
Avail Cap(c_a), veh/h	281	337	301	275	0	293	633	2472	1102	730	2353	1049
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	44.2	45.3	41.9	0.0	42.3	4.8	5.5	4.7	5.5	7.0	5.9
Incr Delay (d2), s/veh	0.2	0.0	6.1	0.6	0.0	0.1	0.1	0.2	0.0	0.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.9	1.2	0.0	0.1	0.3	1.7	0.1	0.0	2.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	44.3	51.4	42.5	0.0	42.4	4.9	5.7	4.7	5.5	7.3	6.0
LnGrp LOS	D	D	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		86			58			637			709	
Approach Delay, s/veh		50.0			42.5			5.6			7.1	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	74.6	8.8	11.0	9.0	71.2	6.6	13.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	48.0	7.0	18.0	7.0	48.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	2.1	7.7	4.7	6.4	3.0	9.5	2.7	2.3
Green Ext Time (p_c), s	0.0	3.8	0.0	0.1	0.0	4.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	17	31	1	3	23
Future Vol, veh/h	9	17	31	1	3	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	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	10	18	34	1	3	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	35	0	-	0	73	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	38	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1576	-	-	-	931	1038
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	984	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1576	-	-	-	925	1038
Mov Cap-2 Maneuver	-	-	-	-	925	-
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	984	-

Approach	EB	WB	SB
HCM Control Delay, s	2.5	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1576	-	-	-	1024
HCM Lane V/C Ratio	0.006	-	-	-	0.028
HCM Control Delay (s)	7.3	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	9	2	1	4	30
Future Vol, veh/h	11	9	2	1	4	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	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	12	10	2	1	4	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	3	0	-	0	37	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	34	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1619	-	-	-	975	1081
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	988	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1619	-	-	-	968	1081
Mov Cap-2 Maneuver	-	-	-	-	968	-
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	988	-

Approach	EB	WB	SB
HCM Control Delay, s	4	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1619	-	-	-	1066
HCM Lane V/C Ratio	0.007	-	-	-	0.035
HCM Control Delay (s)	7.2	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	60	13	573	700	5
Future Vol, veh/h	15	60	13	573	700	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	380	-	-	275
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	65	14	623	761	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1101	381	766	0	-	0
Stage 1	761	-	-	-	-	-
Stage 2	340	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*235	*801	*1199	-	-	-
Stage 1	*756	-	-	-	-	-
Stage 2	*692	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	*232	*801	*1199	-	-	-
Mov Cap-2 Maneuver	*232	-	-	-	-	-
Stage 1	*747	-	-	-	-	-
Stage 2	*692	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	* 1199	-	232	801	-	-
HCM Lane V/C Ratio	0.012	-	0.07	0.081	-	-
HCM Control Delay (s)	8	-	21.7	9.9	-	-
HCM Lane LOS	A	-	C	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0.3	-	-

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

Intersection	
Int Delay, s/veh	0.3

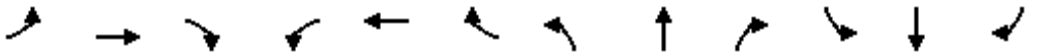
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	25	335	13	11	574
Future Vol, veh/h	0	25	335	13	11	574
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	225	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	27	364	14	12	624

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	182	0	0	378	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	*954	-	-	1401	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	-	-	1	-
Mov Cap-1 Maneuver	-	*954	-	-	1401	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	954	1401	-
HCM Lane V/C Ratio	-	-	0.028	0.009	-
HCM Control Delay (s)	-	-	8.9	7.6	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

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

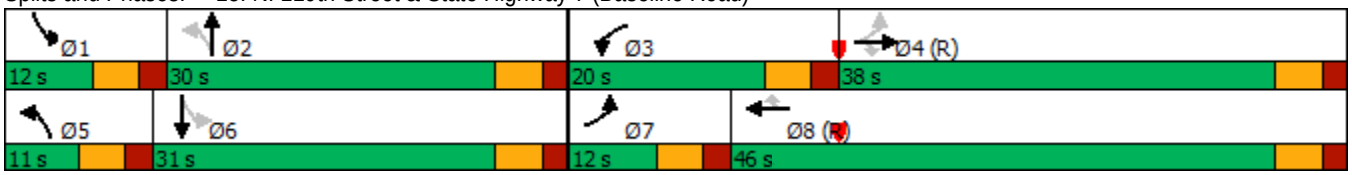


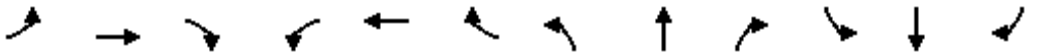
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	285	40	407	612	130	35	152	157	140	330	104
Future Volume (vph)	63	285	40	407	612	130	35	152	157	140	330	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		275	230		275	300		275	530		225
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.217			0.950			0.260			0.499		
Satd. Flow (perm)	404	3539	1583	3433	1863	1583	484	1863	1583	930	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			207			147			267			267
Link Speed (mph)		55			55			40			40	
Link Distance (ft)		768			363			733			1133	
Travel Time (s)		9.5			4.5			12.5			19.3	
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
Adj. Flow (vph)	68	310	43	442	665	141	38	165	171	152	359	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	310	43	442	665	141	38	165	171	152	359	113
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (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
Detector 1 Queue (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
Detector 1 Delay (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
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4			8	2		Free	6		Free

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	10.5	23.5	23.5	10.5	23.5		10.5	23.5	
Total Split (s)	12.0	38.0	38.0	20.0	46.0	46.0	11.0	30.0		12.0	31.0	
Total Split (%)	12.0%	38.0%	38.0%	20.0%	46.0%	46.0%	11.0%	30.0%		12.0%	31.0%	
Maximum Green (s)	6.5	32.5	32.5	14.5	40.5	40.5	5.5	24.5		6.5	25.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	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	-1.0	0.0	0.0	0.0	0.0		0.0	-1.0	
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5	5.5	5.5	5.5		5.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	44.2	37.8	37.8	16.0	48.6	48.6	24.2	18.7	100.0	28.0	25.1	100.0
Actuated g/C Ratio	0.44	0.38	0.38	0.16	0.49	0.49	0.24	0.19	1.00	0.28	0.25	1.00
v/c Ratio	0.26	0.23	0.06	0.80	0.73	0.17	0.20	0.48	0.11	0.48	0.77	0.07
Control Delay	14.6	23.3	0.1	65.2	15.7	0.6	24.5	39.3	0.1	29.2	45.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	23.3	0.1	65.2	15.7	0.6	24.5	39.3	0.1	29.2	45.3	0.1
LOS	B	C	A	E	B	A	C	D	A	C	D	A
Approach Delay		19.5			31.6			19.9			33.2	
Approach LOS		B			C			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 48 (48%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 28.4		Intersection LOS: C	
Intersection Capacity Utilization 75.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 15: N. 119th Street & State Highway 7 (Baseline Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	285	40	407	612	130	35	152	157	140	330	104
Future Volume (veh/h)	63	285	40	407	612	130	35	152	157	140	330	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	310	43	442	665	141	38	165	0	152	359	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	290	1386	618	533	920	779	159	338		312	417	
Arrive On Green	0.04	0.39	0.39	0.15	0.49	0.49	0.03	0.18	0.00	0.06	0.22	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	68	310	43	442	665	141	38	165	0	152	359	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.3	5.8	1.7	12.4	28.0	5.0	1.7	7.9	0.0	6.5	18.5	0.0
Cycle Q Clear(g_c), s	2.3	5.8	1.7	12.4	28.0	5.0	1.7	7.9	0.0	6.5	18.5	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	290	1386	618	533	920	779	159	338		312	417	
V/C Ratio(X)	0.23	0.22	0.07	0.83	0.72	0.18	0.24	0.49		0.49	0.86	
Avail Cap(c_a), veh/h	331	1386	618	536	920	779	199	458		312	496	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.5	20.4	19.1	41.0	20.0	14.2	32.8	36.8	0.0	32.0	37.3	0.0
Incr Delay (d2), s/veh	0.4	0.4	0.2	10.5	4.9	0.5	0.8	1.1	0.0	1.2	12.5	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	0.9	2.3	0.6	5.7	11.7	1.7	0.8	3.6	0.0	3.0	9.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.9	20.8	19.3	51.5	25.0	14.7	33.6	37.9	0.0	33.2	49.9	0.0
LnGrp LOS	B	C	B	D	C	B	C	D		C	D	
Approach Vol, veh/h		421			1248			203	A		511	A
Approach Delay, s/veh		20.3			33.2			37.1			44.9	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	23.6	19.9	44.5	8.8	26.8	9.7	54.7
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	6.5	24.5	14.5	32.5	5.5	25.5	6.5	40.5
Max Q Clear Time (g_c+I1), s	8.5	9.9	14.4	7.8	3.7	20.5	4.3	30.0
Green Ext Time (p_c), s	0.0	0.6	0.0	1.8	0.0	0.9	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	33.8
HCM 6th LOS	C

Notes

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

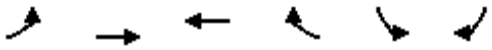
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	581	1109	6	0	38
Future Vol, veh/h	0	581	1109	6	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	632	1205	7	0	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

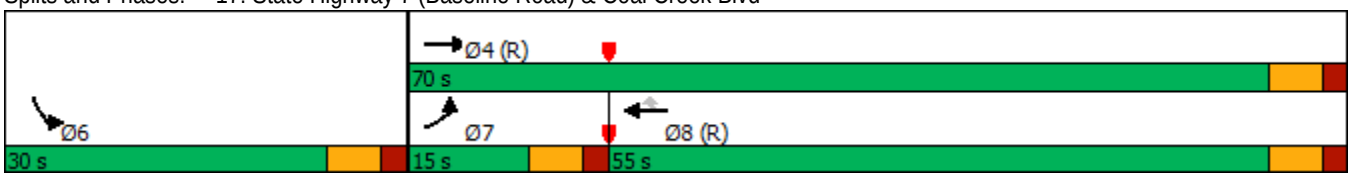


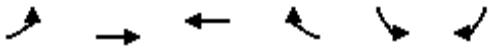
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	146	435	795	437	441	319
Future Volume (vph)	146	435	795	437	441	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	580			380	280	0
Storage Lanes	2			1	1	1
Taper Length (ft)	100				100	
Lane Util. Factor	0.97	1.00	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	1863	1863	1583	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	1863	1863	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				475		347
Link Speed (mph)		55	55		45	
Link Distance (ft)		1410	1068		1156	
Travel Time (s)		17.5	13.2		17.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	159	473	864	475	479	347
Shared Lane Traffic (%)						
Lane Group Flow (vph)	159	473	864	475	479	347
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector Phase	7	4	8	8	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	12.0	25.0	24.0	24.0	24.0	
Total Split (s)	15.0	70.0	55.0	55.0	30.0	
Total Split (%)	15.0%	70.0%	55.0%	55.0%	30.0%	
Maximum Green (s)	9.0	64.0	49.0	49.0	24.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	None	
Walk Time (s)		7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	
Act Effct Green (s)	9.3	68.9	53.7	53.7	19.1	100.0
Actuated g/C Ratio	0.09	0.69	0.54	0.54	0.19	1.00
v/c Ratio	0.50	0.37	0.86	0.44	0.73	0.22
Control Delay	40.3	4.8	32.3	2.8	40.3	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.3	4.8	32.3	2.8	40.3	0.4
LOS	D	A	C	A	D	A
Approach Delay		13.7	21.8		23.5	
Approach LOS		B	C		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 20.5		Intersection LOS: C	
Intersection Capacity Utilization 73.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 17: State Highway 7 (Baseline Road) & Coal Creek Blvd





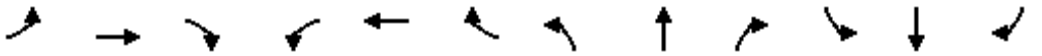
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	146	435	795	437	441	319
Future Volume (veh/h)	146	435	795	437	441	319
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	473	864	475	479	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	226	1336	1101	933	573	
Arrive On Green	0.07	0.71	0.59	0.59	0.17	0.00
Sat Flow, veh/h	3456	1870	1870	1585	3456	1585
Grp Volume(v), veh/h	159	473	864	475	479	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1870	1585	1728	1585
Q Serve(g_s), s	4.5	9.7	35.3	17.6	13.4	0.0
Cycle Q Clear(g_c), s	4.5	9.7	35.3	17.6	13.4	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	226	1336	1101	933	573	
V/C Ratio(X)	0.70	0.35	0.78	0.51	0.84	
Avail Cap(c_a), veh/h	311	1336	1101	933	829	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.8	5.5	15.7	12.1	40.4	0.0
Incr Delay (d2), s/veh	4.3	0.7	5.6	2.0	5.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.8	13.7	5.5	5.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.1	6.2	21.3	14.0	45.5	0.0
LnGrp LOS	D	A	C	B	D	
Approach Vol, veh/h		632	1339		479	A
Approach Delay, s/veh		17.2	18.7		45.5	
Approach LOS		B	B		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			77.4		22.6	12.5	64.9
Change Period (Y+Rc), s			6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s			64.0		24.0	9.0	49.0
Max Q Clear Time (g_c+I1), s			11.7		15.4	6.5	37.3
Green Ext Time (p_c), s			2.7		1.2	0.1	5.6

Intersection Summary		
HCM 6th Ctrl Delay	23.6	
HCM 6th LOS	C	

Notes

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

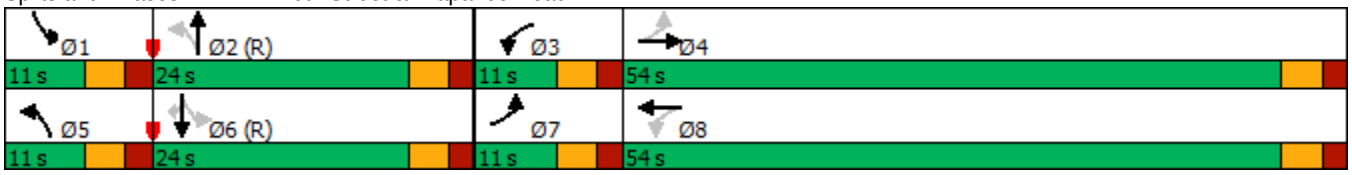


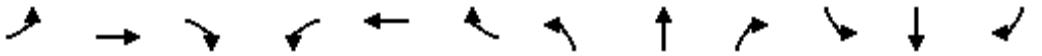
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	420	379	45	286	32	182	229	55	41	223	105
Future Volume (vph)	125	420	379	45	286	32	182	229	55	41	223	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		150	90		150	365		150	90		230
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
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
Frt		0.929			0.985			0.971				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1730	0	1770	1835	0	1770	1809	0	1770	1863	1583
Flt Permitted	0.447			0.083			0.324			0.336		
Satd. Flow (perm)	833	1730	0	155	1835	0	604	1809	0	626	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		66			8			11				131
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		636			2736			2089			552	
Travel Time (s)		10.8			46.6			35.6			9.4	
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
Adj. Flow (vph)	136	457	412	49	311	35	198	249	60	45	242	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	869	0	49	346	0	198	309	0	45	242	114
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	11.0	54.0		11.0	54.0		11.0	24.0		11.0	24.0	24.0
Total Split (%)	11.0%	54.0%		11.0%	54.0%		11.0%	24.0%		11.0%	24.0%	24.0%
Maximum Green (s)	6.0	49.0		6.0	49.0		6.0	19.0		6.0	19.0	19.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-1.0		-1.0	-1.0		-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	3.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	55.1	50.5		54.2	47.3		31.3	27.1		29.0	22.1	22.1
Actuated g/C Ratio	0.55	0.50		0.54	0.47		0.31	0.27		0.29	0.22	0.22
v/c Ratio	0.26	0.96		0.25	0.40		0.71	0.62		0.17	0.59	0.25
Control Delay	10.1	44.8		12.6	17.0		36.1	33.0		26.3	42.7	6.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	10.1	44.8		12.6	17.0		36.1	33.0		26.3	42.7	6.1
LOS	B	D		B	B		D	C		C	D	A
Approach Delay		40.1			16.5			34.2			30.5	
Approach LOS		D			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 84 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 33.1		Intersection LOS: C	
Intersection Capacity Utilization 84.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: N. 119th Street & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	420	379	45	286	32	182	229	55	41	223	105
Future Volume (veh/h)	125	420	379	45	286	32	182	229	55	41	223	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	457	412	49	311	35	198	249	60	45	242	114
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	563	462	417	157	794	89	307	360	87	252	417	353
Arrive On Green	0.07	0.51	0.51	0.05	0.48	0.48	0.07	0.25	0.25	0.05	0.22	0.22
Sat Flow, veh/h	1781	906	817	1781	1651	186	1781	1456	351	1781	1870	1585
Grp Volume(v), veh/h	136	0	869	49	0	346	198	0	309	45	242	114
Grp Sat Flow(s),veh/h/ln	1781	0	1723	1781	0	1837	1781	0	1807	1781	1870	1585
Q Serve(g_s), s	3.7	0.0	49.8	1.3	0.0	12.0	7.0	0.0	15.5	1.9	11.6	6.0
Cycle Q Clear(g_c), s	3.7	0.0	49.8	1.3	0.0	12.0	7.0	0.0	15.5	1.9	11.6	6.0
Prop In Lane	1.00		0.47	1.00		0.10	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	563	0	879	157	0	884	307	0	447	252	417	353
V/C Ratio(X)	0.24	0.00	0.99	0.31	0.00	0.39	0.65	0.00	0.69	0.18	0.58	0.32
Avail Cap(c_a), veh/h	570	0	879	198	0	918	307	0	447	295	417	353
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	0.0	24.2	23.0	0.0	16.6	30.9	0.0	34.2	28.3	34.7	32.5
Incr Delay (d2), s/veh	0.2	0.0	27.5	1.1	0.0	0.3	4.6	0.0	8.5	0.3	5.8	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	24.7	0.5	0.0	4.8	1.4	0.0	7.6	0.8	5.7	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.2	0.0	51.7	24.1	0.0	16.9	35.5	0.0	42.7	28.7	40.5	35.0
LnGrp LOS	B	A	D	C	A	B	D	A	D	C	D	C
Approach Vol, veh/h		1005			395			507			401	
Approach Delay, s/veh		46.4			17.8			39.9			37.6	
Approach LOS		D			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	28.7	8.7	54.0	11.0	26.3	10.6	52.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	6.0	19.0	6.0	49.0	6.0	19.0	6.0	49.0
Max Q Clear Time (g_c+I1), s	3.9	17.5	3.3	51.8	9.0	13.6	5.7	14.0
Green Ext Time (p_c), s	0.0	0.2	0.0	0.0	0.0	0.8	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	38.5
HCM 6th LOS	D

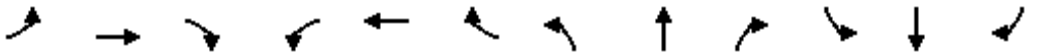
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	81	354	33	10	302	18	21	0	8	5	0	43
Future Vol, veh/h	81	354	33	10	302	18	21	0	8	5	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	250	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	88	385	36	11	328	20	23	0	9	5	0	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	348	0	0	421	0	0	765	949	211	729	957	174
Stage 1	-	-	-	-	-	-	579	579	-	360	360	-
Stage 2	-	-	-	-	-	-	186	370	-	369	597	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1208	-	-	1135	-	-	293	259	794	311	256	839
Stage 1	-	-	-	-	-	-	468	499	-	631	625	-
Stage 2	-	-	-	-	-	-	798	619	-	623	490	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1208	-	-	1135	-	-	259	238	794	288	235	839
Mov Cap-2 Maneuver	-	-	-	-	-	-	259	238	-	288	235	-
Stage 1	-	-	-	-	-	-	434	463	-	585	619	-
Stage 2	-	-	-	-	-	-	746	613	-	571	454	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.2	17.3	10.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	259	794	1208	-	-	1135	-	-	288	839
HCM Lane V/C Ratio	0.088	0.011	0.073	-	-	0.01	-	-	0.019	0.056
HCM Control Delay (s)	20.2	9.6	8.2	-	-	8.2	-	-	17.7	9.5
HCM Lane LOS	C	A	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.3	0	0.2	-	-	0	-	-	0.1	0.2

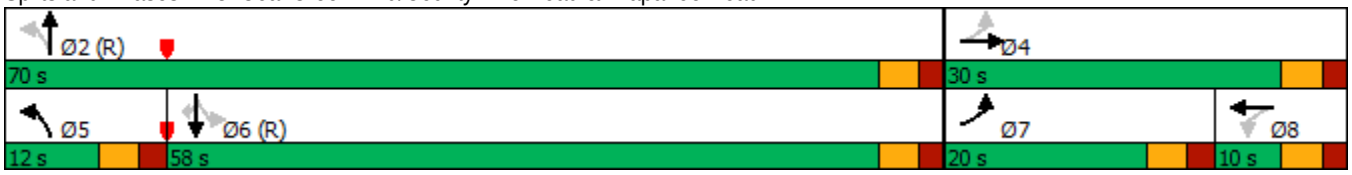


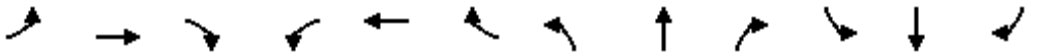
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	1	129	1	1	1	122	490	1	1	421	210
Future Volume (vph)	238	1	129	1	1	1	122	490	1	1	421	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	0		0	150		0	150		150
Storage Lanes	1		0	0		0	2		0	1		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.851			0.955							0.850
Flt Protected	0.950				0.984		0.950			0.950		
Satd. Flow (prot)	1770	1585	0	0	1750	0	1770	3539	0	1770	3539	1583
Flt Permitted	0.667						0.436			0.453		
Satd. Flow (perm)	1242	1585	0	0	1779	0	812	3539	0	844	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		140			1							228
Link Speed (mph)		40			25			45			45	
Link Distance (ft)		1749			776			1338			543	
Travel Time (s)		29.8			21.2			20.3			8.2	
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
Adj. Flow (vph)	259	1	140	1	1	1	133	533	1	1	458	228
Shared Lane Traffic (%)												
Lane Group Flow (vph)	259	141	0	0	3	0	133	534	0	1	458	228
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases	7	4			8		5	2			6	
Permitted Phases	4			8			2			6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	20.0	30.0		10.0	10.0		12.0	70.0		58.0	58.0	58.0
Total Split (%)	20.0%	30.0%		10.0%	10.0%		12.0%	70.0%		58.0%	58.0%	58.0%
Maximum Green (s)	15.0	25.0		5.0	5.0		7.0	65.0		53.0	53.0	53.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)	16.6	16.6			5.1		73.4	73.4		61.3	61.3	61.3
Actuated g/C Ratio	0.17	0.17			0.05		0.73	0.73		0.61	0.61	0.61
v/c Ratio	0.92	0.37			0.03		0.20	0.21		0.00	0.21	0.22
Control Delay	65.3	10.7			41.0		5.2	4.8		10.0	9.5	2.0
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	65.3	10.7			41.0		5.2	4.8		10.0	9.5	2.0
LOS	E	B			D		A	A		A	A	A
Approach Delay		46.0			41.0			4.9			7.0	
Approach LOS		D			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 15.2		Intersection LOS: B	
Intersection Capacity Utilization 50.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Coal Creek Blvd/County Line Road & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	1	129	1	1	1	122	490	1	1	421	210
Future Volume (veh/h)	238	1	129	1	1	1	122	490	1	1	421	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	259	1	140	1	1	1	133	533	1	1	458	228
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	445	3	392	60	42	27	527	2369	4	552	1958	873
Arrive On Green	0.15	0.25	0.25	0.05	0.05	0.05	0.05	0.65	0.65	0.55	0.55	0.55
Sat Flow, veh/h	1781	11	1576	251	847	549	1781	3639	7	870	3554	1585
Grp Volume(v), veh/h	259	0	141	3	0	0	133	260	274	1	458	228
Grp Sat Flow(s),veh/h/ln	1781	0	1587	1646	0	0	1781	1777	1869	870	1777	1585
Q Serve(g_s), s	13.3	0.0	7.3	0.0	0.0	0.0	3.1	6.0	6.0	0.1	6.6	7.5
Cycle Q Clear(g_c), s	13.3	0.0	7.3	0.2	0.0	0.0	3.1	6.0	6.0	0.1	6.6	7.5
Prop In Lane	1.00		0.99	0.33		0.33	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	445	0	395	129	0	0	527	1157	1217	552	1958	873
V/C Ratio(X)	0.58	0.00	0.36	0.02	0.00	0.00	0.25	0.22	0.23	0.00	0.23	0.26
Avail Cap(c_a), veh/h	445	0	397	130	0	0	563	1157	1217	552	1958	873
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	0.0	30.9	45.3	0.0	0.0	8.2	7.1	7.1	10.1	11.6	11.8
Incr Delay (d2), s/veh	1.9	0.0	0.5	0.1	0.0	0.0	0.2	0.5	0.4	0.0	0.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	2.8	0.1	0.0	0.0	1.0	2.0	2.1	0.0	2.4	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.6	0.0	31.5	45.4	0.0	0.0	8.5	7.6	7.6	10.1	11.8	12.5
LnGrp LOS	D	A	C	D	A	A	A	A	A	B	B	B
Approach Vol, veh/h		400			3			667			687	
Approach Delay, s/veh		35.4			45.4			7.8			12.1	
Approach LOS		D			D			A			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		70.1		29.9	10.0	60.1	20.0	9.9				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s		65.0		25.0	7.0	53.0	15.0	5.0				
Max Q Clear Time (g_c+I1), s		8.0		9.3	5.1	9.5	15.3	2.2				
Green Ext Time (p_c), s		3.1		0.6	0.1	3.8	0.0	0.0				

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

Intersection	
Int Delay, s/veh	0.3

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	15	605	1	8	542	3	1	0	5	2	0	8
Future Vol, veh/h	15	605	1	8	542	3	1	0	5	2	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	658	1	9	589	3	1	0	5	2	0	9

Major/Minor	Major1			Major2			Minor2			Minor1		
Conflicting Flow All	592	0	0	659	0	0	970	1300	296	1004	1301	330
Stage 1	-	-	-	-	-	-	609	609	-	691	691	-
Stage 2	-	-	-	-	-	-	361	691	-	313	610	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	980	-	-	925	-	-	208	160	700	196	160	666
Stage 1	-	-	-	-	-	-	449	484	-	401	444	-
Stage 2	-	-	-	-	-	-	630	444	-	672	483	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	980	-	-	925	-	-	201	156	700	191	156	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	201	156	-	191	156	-
Stage 1	-	-	-	-	-	-	442	479	-	395	437	-
Stage 2	-	-	-	-	-	-	612	437	-	660	478	-

Approach	NB	SB	SE	NW
HCM Control Delay, s	0.2	0.1	12.4	13.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBL	NBT	NBR	NWLn1	SELn1	SBL	SBT	SBR
Capacity (veh/h)	980	-	-	445	495	925	-	-
HCM Lane V/C Ratio	0.017	-	-	0.024	0.013	0.009	-	-
HCM Control Delay (s)	8.7	-	-	13.3	12.4	8.9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	603	25	0	544	6	0	0	19	0	0	33
Future Vol, veh/h	0	603	25	0	544	6	0	0	19	0	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	655	27	0	591	7	0	0	21	0	0	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	328	-	-	299
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	668	0	0	697
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	668	-	-	697
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.6	10.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	668	-	-	-	-	697
HCM Lane V/C Ratio	0.031	-	-	-	-	0.051
HCM Control Delay (s)	10.6	-	-	-	-	10.4
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.2

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	1	2	2
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	83	51	806	629
Demand Flow Rate, veh/h	84	52	822	641
Vehicles Circulating, veh/h	663	808	73	165
Vehicles Exiting, veh/h	143	87	674	695
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.4	7.1	9.5	8.6
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	LT	R	LT	R
Assumed Moves	LT	R	LTR	LT	R	LT	R
RT Channelized							
Lane Util	0.250	0.750	1.000	0.966	0.034	0.981	0.019
Follow-Up Headway, s	2.535	2.535	2.609	2.535	2.535	2.535	2.535
Critical Headway, s	4.544	4.544	4.976	4.544	4.544	4.544	4.544
Entry Flow, veh/h	21	63	52	794	28	629	12
Cap Entry Lane, veh/h	777	777	605	1329	1329	1222	1222
Entry HV Adj Factor	0.993	0.984	0.978	0.981	0.964	0.980	1.000
Flow Entry, veh/h	21	62	51	779	27	617	12
Cap Entry, veh/h	772	764	592	1303	1281	1198	1222
V/C Ratio	0.027	0.081	0.086	0.598	0.021	0.515	0.010
Control Delay, s/veh	4.9	5.5	7.1	9.8	3.0	8.7	3.0
LOS	A	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	4	0	3	0

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	49	415	92	88	560
Future Vol, veh/h	55	49	415	92	88	560
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	225	325	-
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	60	53	451	100	96	609

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	948	226	0	0	551	0
Stage 1	451	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	259	777	-	-	1015	-
Stage 1	609	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	234	777	-	-	1015	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	609	-	-	-	-	-
Stage 2	522	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.3	0	1.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	234	777	1015	-
HCM Lane V/C Ratio	-	-	0.255	0.069	0.094	-
HCM Control Delay (s)	-	-	25.6	10	8.9	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.2	0.3	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	41	109	50	13	68	17	29	0	8	15	0	24
Future Vol, veh/h	41	109	50	13	68	17	29	0	8	15	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	118	54	14	74	18	32	0	9	16	0	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	92	0	0	172	0	0	359	355	145	351	373	83
Stage 1	-	-	-	-	-	-	235	235	-	111	111	-
Stage 2	-	-	-	-	-	-	124	120	-	240	262	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1503	-	-	1405	-	-	596	571	902	604	557	976
Stage 1	-	-	-	-	-	-	768	710	-	894	804	-
Stage 2	-	-	-	-	-	-	880	796	-	763	691	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1503	-	-	1405	-	-	561	546	902	578	532	976
Mov Cap-2 Maneuver	-	-	-	-	-	-	561	546	-	578	532	-
Stage 1	-	-	-	-	-	-	743	687	-	864	795	-
Stage 2	-	-	-	-	-	-	847	787	-	731	668	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	1	11.3	9.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	611	1503	-	-	1405	-	-	772
HCM Lane V/C Ratio	0.066	0.03	-	-	0.01	-	-	0.055
HCM Control Delay (s)	11.3	7.5	0	-	7.6	0	-	9.9
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.2

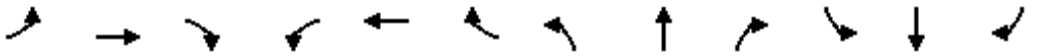
Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	10	1	10	73	26	1	1	5	39	1	13
Future Vol, veh/h	22	10	1	10	73	26	1	1	5	39	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	11	1	11	79	28	1	1	5	42	1	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	107	0	0	12	0	0	183	189	12	178	175	93
Stage 1	-	-	-	-	-	-	60	60	-	115	115	-
Stage 2	-	-	-	-	-	-	123	129	-	63	60	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1484	-	-	1607	-	-	778	706	1069	784	718	964
Stage 1	-	-	-	-	-	-	951	845	-	890	800	-
Stage 2	-	-	-	-	-	-	881	789	-	948	845	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1484	-	-	1607	-	-	752	690	1069	765	701	964
Mov Cap-2 Maneuver	-	-	-	-	-	-	752	690	-	765	701	-
Stage 1	-	-	-	-	-	-	936	831	-	876	794	-
Stage 2	-	-	-	-	-	-	861	783	-	927	831	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5	0.7	8.9	9.8
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	939	1484	-	-	1607	-	-	804
HCM Lane V/C Ratio	0.008	0.016	-	-	0.007	-	-	0.072
HCM Control Delay (s)	8.9	7.5	0	-	7.3	0	-	9.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

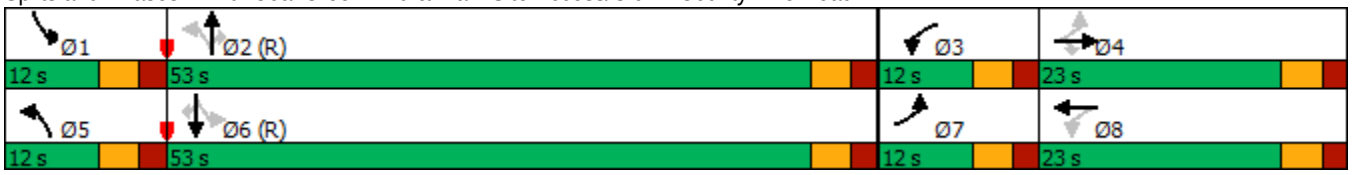


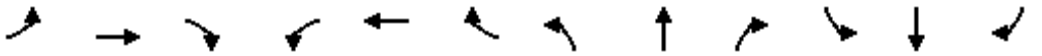
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	1	44	45	1	5	80	725	65	5	577	28
Future Volume (vph)	9	1	44	45	1	5	80	725	65	5	577	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	150		0	355		275	300		275
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.875				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1630	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.754			0.488			0.361			0.349		
Satd. Flow (perm)	1405	1863	1583	909	1630	0	672	3539	1583	650	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			131		5				131			131
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		557			814			864			533	
Travel Time (s)		15.2			22.2			13.1			8.1	
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
Adj. Flow (vph)	10	1	48	49	1	5	87	788	71	5	627	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	1	48	49	6	0	87	788	71	5	627	30
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			18			18	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	23.0	23.0	12.0	23.0		12.0	53.0	53.0	12.0	53.0	53.0
Total Split (%)	12.0%	23.0%	23.0%	12.0%	23.0%		12.0%	53.0%	53.0%	12.0%	53.0%	53.0%
Maximum Green (s)	7.0	18.0	18.0	7.0	18.0		7.0	48.0	48.0	7.0	48.0	48.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	-1.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	10.7	5.8	6.8	14.3	12.9		76.3	75.6	75.6	71.4	68.0	68.0
Actuated g/C Ratio	0.11	0.06	0.07	0.14	0.13		0.76	0.76	0.76	0.71	0.68	0.68
v/c Ratio	0.06	0.01	0.21	0.26	0.03		0.15	0.29	0.06	0.01	0.26	0.03
Control Delay	34.8	44.0	2.1	38.5	27.5		2.9	3.4	0.1	4.2	8.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.8	44.0	2.1	38.5	27.5		2.9	3.4	0.1	4.2	8.9	0.0
LOS	C	D	A	D	C		A	A	A	A	A	A
Approach Delay		8.3			37.3			3.1			8.5	
Approach LOS		A			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay: 6.4		Intersection LOS: A	
Intersection Capacity Utilization 45.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Coal Creek Blvd & Main Site Access/Old E. County Line Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	1	44	45	1	5	80	725	65	5	577	28
Future Volume (veh/h)	9	1	44	45	1	5	80	725	65	5	577	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	1	48	49	1	5	87	788	71	5	627	30
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	153	79	82	195	18	91	623	2538	1132	491	2400	1070
Arrive On Green	0.01	0.04	0.05	0.04	0.07	0.07	0.05	0.71	0.71	0.01	0.68	0.68
Sat Flow, veh/h	1781	1870	1585	1781	271	1355	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	10	1	48	49	0	6	87	788	71	5	627	30
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1626	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.5	0.1	3.0	2.6	0.0	0.3	1.4	8.1	1.3	0.1	7.0	0.6
Cycle Q Clear(g_c), s	0.5	0.1	3.0	2.6	0.0	0.3	1.4	8.1	1.3	0.1	7.0	0.6
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	79	82	195	0	109	623	2538	1132	491	2400	1070
V/C Ratio(X)	0.07	0.01	0.58	0.25	0.00	0.05	0.14	0.31	0.06	0.01	0.26	0.03
Avail Cap(c_a), veh/h	256	337	301	253	0	293	667	2538	1132	604	2400	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	45.9	46.3	43.6	0.0	43.7	4.2	5.2	4.3	5.2	6.4	5.4
Incr Delay (d2), s/veh	0.2	0.1	6.3	0.7	0.0	0.2	0.1	0.3	0.1	0.0	0.3	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	0.2	0.0	1.3	1.2	0.0	0.1	0.4	2.3	0.4	0.0	2.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	46.0	52.7	44.3	0.0	43.9	4.3	5.6	4.4	5.2	6.7	5.4
LnGrp LOS	D	D	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		59			55			946			662	
Approach Delay, s/veh		51.3			44.2			5.4			6.6	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	76.4	8.7	9.2	9.6	72.5	6.2	11.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	48.0	7.0	18.0	7.0	48.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	2.1	10.1	4.6	5.0	3.4	9.0	2.5	2.3
Green Ext Time (p_c), s	0.0	5.9	0.0	0.1	0.0	4.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	38	28	4	2	23
Future Vol, veh/h	33	38	28	4	2	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	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	36	41	30	4	2	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	34	0	-	0	145	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	113	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1578	-	-	-	852	1042
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	1578	-	-	-	832	1042
Mov Cap-2 Maneuver	-	-	-	-	832	-
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	914	-

Approach	EB	WB	SB
HCM Control Delay, s	3.4	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1578	-	-	-	1021
HCM Lane V/C Ratio	0.023	-	-	-	0.027
HCM Control Delay (s)	7.3	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	3	5	4	3	27
Future Vol, veh/h	37	3	5	4	3	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	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	40	3	5	4	3	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	9	0	-	0	90	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	83	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1611	-	-	-	910	1075
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	940	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1611	-	-	-	887	1075
Mov Cap-2 Maneuver	-	-	-	-	887	-
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	940	-

Approach	EB	WB	SB
HCM Control Delay, s	6.7	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1611	-	-	-	1053
HCM Lane V/C Ratio	0.025	-	-	-	0.031
HCM Control Delay (s)	7.3	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	40	43	860	649	15
Future Vol, veh/h	10	40	43	860	649	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	380	-	-	275
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	43	47	935	705	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1267	353	721	0	-	0
Stage 1	705	-	-	-	-	-
Stage 2	562	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	180	*832	1211	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	534	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	173	*832	1211	-	-	-
Mov Cap-2 Maneuver	173	-	-	-	-	-
Stage 1	745	-	-	-	-	-
Stage 2	534	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1211	-	173	832	-	-
HCM Lane V/C Ratio	0.039	-	0.063	0.052	-	-
HCM Control Delay (s)	8.1	-	27.2	9.6	-	-
HCM Lane LOS	A	-	D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0.2	-	-

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

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	17	491	38	34	580
Future Vol, veh/h	0	17	491	38	34	580
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	-	225	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	18	534	41	37	630

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	267	0	0	575	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	*893	-	-	1273	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	-	-	1	-
Mov Cap-1 Maneuver	-	*893	-	-	1273	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	893	1273	-
HCM Lane V/C Ratio	-	-	0.021	0.029	-
HCM Control Delay (s)	-	-	9.1	7.9	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

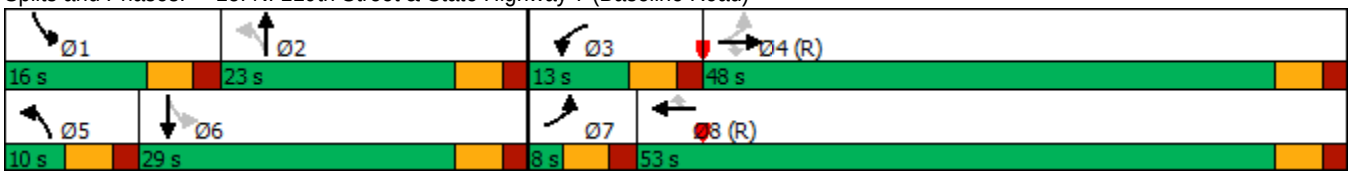
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

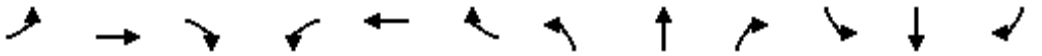
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	639	45	274	901	120	50	276	383	310	199	71
Future Volume (vph)	130	639	45	274	901	120	50	276	383	310	199	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		275	230		275	300		275	530		225
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.092			0.950			0.628			0.207		
Satd. Flow (perm)	171	1863	1583	3433	1863	1583	1170	1863	1583	386	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			207			207			315			267
Link Speed (mph)		55			55			40			40	
Link Distance (ft)		768			363			733			1133	
Travel Time (s)		9.5			4.5			12.5			19.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	135	666	47	285	939	125	52	288	399	323	207	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	135	666	47	285	939	125	52	288	399	323	207	74
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (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
Detector 1 Queue (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
Detector 1 Delay (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
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4			8	2		Free	6		Free

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	2.5	5.0	5.0	5.0	5.0	5.0	4.5	5.0		5.0	5.0	
Minimum Split (s)	8.0	23.5	23.5	10.5	23.5	23.5	10.0	23.0		10.5	23.5	
Total Split (s)	8.0	48.0	48.0	13.0	53.0	53.0	10.0	23.0		16.0	29.0	
Total Split (%)	8.0%	48.0%	48.0%	13.0%	53.0%	53.0%	10.0%	23.0%		16.0%	29.0%	
Maximum Green (s)	2.5	42.5	42.5	7.5	47.5	47.5	4.5	17.5		10.5	23.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.5	-2.5	-2.0	-2.0	-2.5		-2.5	-2.0	
Total Lost Time (s)	3.5	3.5	3.5	3.0	3.0	3.5	3.5	3.0		3.0	3.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	49.7	44.5	44.5	10.6	50.0	49.5	25.4	19.4	100.0	35.4	26.9	100.0
Actuated g/C Ratio	0.50	0.44	0.44	0.11	0.50	0.50	0.25	0.19	1.00	0.35	0.27	1.00
v/c Ratio	0.81	0.80	0.06	0.78	1.01	0.14	0.16	0.80	0.25	1.02	0.41	0.05
Control Delay	52.2	33.0	0.1	38.3	62.5	4.3	23.2	56.1	0.4	82.2	31.8	0.0
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	52.2	33.0	0.1	38.3	62.5	4.3	23.2	56.1	0.4	82.2	31.8	0.0
LOS	D	C	A	D	E	A	C	E	A	F	C	A
Approach Delay		34.2			52.0			23.7			54.9	
Approach LOS		C			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 42.3		Intersection LOS: D	
Intersection Capacity Utilization 99.7%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 15: N. 119th Street & State Highway 7 (Baseline Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	639	45	274	901	120	50	276	383	310	199	71
Future Volume (veh/h)	130	639	45	274	901	120	50	276	383	310	199	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	666	47	285	939	125	52	288	0	323	207	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	845	716	346	948	796	364	361		354	484	
Arrive On Green	0.05	0.45	0.45	0.10	0.51	0.50	0.05	0.19	0.00	0.13	0.26	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	135	666	47	285	939	125	52	288	0	323	207	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.1	30.3	1.7	8.1	49.7	4.3	2.3	14.7	0.0	13.0	9.2	0.0
Cycle Q Clear(g_c), s	4.1	30.3	1.7	8.1	49.7	4.3	2.3	14.7	0.0	13.0	9.2	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	155	845	716	346	948	796	364	361		354	484	
V/C Ratio(X)	0.87	0.79	0.07	0.82	0.99	0.16	0.14	0.80		0.91	0.43	
Avail Cap(c_a), veh/h	155	845	716	346	948	796	383	374		354	484	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.9	23.3	15.5	44.1	24.4	13.5	29.6	38.5	0.0	29.7	30.9	0.0
Incr Delay (d2), s/veh	38.3	7.4	0.2	14.9	27.0	0.4	0.2	11.2	0.0	27.1	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	3.1	13.3	0.6	4.0	25.4	1.4	1.0	7.6	0.0	8.5	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.2	30.7	15.7	59.1	51.4	13.9	29.8	49.6	0.0	56.8	31.5	0.0
LnGrp LOS	E	C	B	E	D	B	C	D		E	C	
Approach Vol, veh/h		848			1349			340	A		530	A
Approach Delay, s/veh		34.9			49.6			46.6			46.9	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	22.3	13.0	48.7	8.9	29.4	8.0	53.7
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	10.5	17.5	7.5	42.5	4.5	23.5	2.5	47.5
Max Q Clear Time (g_c+I1), s	15.0	16.7	10.1	32.3	4.3	11.2	6.1	51.7
Green Ext Time (p_c), s	0.0	0.1	0.0	2.9	0.0	0.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.7
HCM 6th LOS	D

Notes

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

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

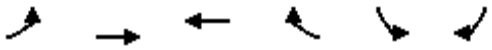
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	1332	1270	20	0	25
Future Vol, veh/h	0	1332	1270	20	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	95	95	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1402	1337	22	0	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

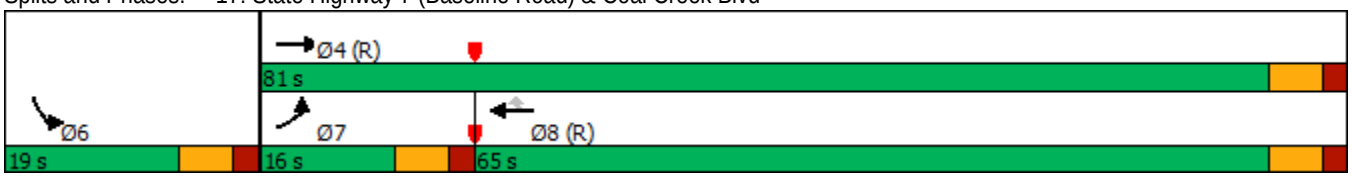


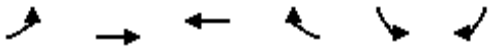
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	362	970	1075	542	474	215
Future Volume (vph)	362	970	1075	542	474	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	580			380	280	0
Storage Lanes	2			1	1	1
Taper Length (ft)	100				100	
Lane Util. Factor	0.97	1.00	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	1863	1863	1583	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	1863	1863	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				571		229
Link Speed (mph)		55	55		45	
Link Distance (ft)		1410	1068		1156	
Travel Time (s)		17.5	13.2		17.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.94
Adj. Flow (vph)	381	1021	1132	571	499	229
Shared Lane Traffic (%)						
Lane Group Flow (vph)	381	1021	1132	571	499	229
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector Phase	7	4	8	8	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	12.0	25.0	24.0	24.0	24.0	
Total Split (s)	16.0	81.0	65.0	65.0	19.0	
Total Split (%)	16.0%	81.0%	65.0%	65.0%	19.0%	
Maximum Green (s)	10.0	75.0	59.0	59.0	13.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	3.9	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	None	
Walk Time (s)		4.0	4.0	4.0	4.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	
Act Effct Green (s)	12.0	77.0	61.0	61.0	15.1	100.0
Actuated g/C Ratio	0.12	0.77	0.61	0.61	0.15	1.00
v/c Ratio	0.93	0.71	1.00	0.48	0.96	0.14
Control Delay	59.7	9.7	46.6	2.2	71.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	9.7	46.6	2.2	71.2	0.2
LOS	E	A	D	A	E	A
Approach Delay		23.3	31.7		48.8	
Approach LOS		C	C		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 31.9		Intersection LOS: C	
Intersection Capacity Utilization 90.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 17: State Highway 7 (Baseline Road) & Coal Creek Blvd





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	362	970	1075	542	474	215
Future Volume (veh/h)	362	970	1075	542	474	215
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	381	1021	1132	571	499	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	415	1440	1141	967	522	
Arrive On Green	0.12	0.77	0.61	0.61	0.15	0.00
Sat Flow, veh/h	3456	1870	1870	1585	3456	1585
Grp Volume(v), veh/h	381	1021	1132	571	499	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1870	1585	1728	1585
Q Serve(g_s), s	10.9	27.6	59.8	22.0	14.3	0.0
Cycle Q Clear(g_c), s	10.9	27.6	59.8	22.0	14.3	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	415	1440	1141	967	522	
V/C Ratio(X)	0.92	0.71	0.99	0.59	0.96	
Avail Cap(c_a), veh/h	415	1440	1141	967	522	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.5	5.8	19.3	11.9	42.1	0.0
Incr Delay (d2), s/veh	25.3	3.0	24.8	2.6	28.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	6.5	27.5	6.8	7.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	68.8	8.8	44.1	14.5	70.7	0.0
LnGrp LOS	E	A	D	B	E	
Approach Vol, veh/h		1402	1703		499	A
Approach Delay, s/veh		25.1	34.2		70.7	
Approach LOS		C	C		E	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	81.0	19.0	16.0	65.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	75.0	13.0	10.0	59.0
Max Q Clear Time (g_c+I1), s	29.6	16.3	12.9	61.8
Green Ext Time (p_c), s	9.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	35.7
HCM 6th LOS	D

Notes

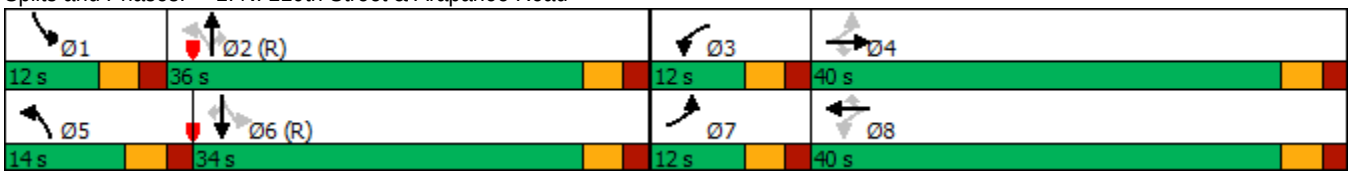
User approved pedestrian interval to be less than phase max green.

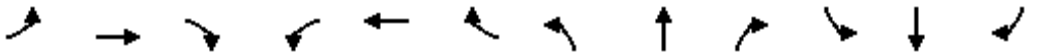
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	175	255	85	495	25	285	245	55	25	515	220
Future Volume (vph)	40	175	255	85	495	25	285	245	55	25	515	220
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	40.0	40.0	12.0	40.0	40.0	14.0	36.0	36.0	12.0	34.0	34.0
Total Split (%)	12.0%	40.0%	40.0%	12.0%	40.0%	40.0%	14.0%	36.0%	36.0%	12.0%	34.0%	34.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	25.0	19.5	19.5	26.1	21.9	21.9	60.9	53.9	53.9	45.6	39.3	39.3
Actuated g/C Ratio	0.25	0.20	0.20	0.26	0.22	0.22	0.61	0.54	0.54	0.46	0.39	0.39
v/c Ratio	0.21	0.28	0.52	0.28	0.70	0.06	0.56	0.14	0.07	0.05	0.40	0.31
Control Delay	24.2	34.0	7.5	26.6	40.4	0.3	21.1	17.4	1.4	12.4	25.5	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.2	34.0	7.5	26.6	40.4	0.3	21.1	17.4	1.4	12.4	25.5	4.8
LOS	C	C	A	C	D	A	C	B	A	B	C	A
Approach Delay		18.8			36.8			17.7			19.1	
Approach LOS		B			D			B			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 84 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 23.1	Intersection LOS: C
Intersection Capacity Utilization 64.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: N. 119th Street & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	175	255	85	495	25	285	245	55	25	515	220
Future Volume (veh/h)	40	175	255	85	495	25	285	245	55	25	515	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	190	277	92	538	27	310	266	60	27	560	239
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	210	734	327	321	808	360	467	1818	811	591	1592	710
Arrive On Green	0.03	0.21	0.21	0.06	0.23	0.23	0.09	0.51	0.51	0.03	0.45	0.45
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	43	190	277	92	538	27	310	266	60	27	560	239
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.9	4.5	16.8	4.0	13.8	1.3	9.0	4.0	1.9	0.8	10.3	9.8
Cycle Q Clear(g_c), s	1.9	4.5	16.8	4.0	13.8	1.3	9.0	4.0	1.9	0.8	10.3	9.8
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	210	734	327	321	808	360	467	1818	811	591	1592	710
V/C Ratio(X)	0.21	0.26	0.85	0.29	0.67	0.07	0.66	0.15	0.07	0.05	0.35	0.34
Avail Cap(c_a), veh/h	272	1244	555	346	1244	555	467	1818	811	669	1592	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	33.3	38.2	28.8	35.2	30.4	13.6	12.9	12.4	14.0	18.1	17.9
Incr Delay (d2), s/veh	0.5	0.2	6.0	0.5	1.0	0.1	3.5	0.2	0.2	0.0	0.6	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.9	6.8	1.7	5.8	0.5	3.8	1.5	0.7	0.3	4.1	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	33.5	44.2	29.3	36.1	30.5	17.1	13.1	12.6	14.1	18.7	19.2
LnGrp LOS	C	C	D	C	D	C	B	B	B	B	B	B
Approach Vol, veh/h		510			657			636			826	
Approach Delay, s/veh		39.0			34.9			15.0			18.7	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	56.2	10.6	25.6	14.0	49.8	8.5	27.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	31.0	7.0	35.0	9.0	29.0	7.0	35.0
Max Q Clear Time (g_c+I1), s	2.8	6.0	6.0	18.8	11.0	12.3	3.9	15.8
Green Ext Time (p_c), s	0.0	1.8	0.0	1.8	0.0	4.0	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	25.8
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	210	470	5	13	84
Future Vol, veh/h	30	210	470	5	13	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	228	511	5	14	91

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	516	0	-	0	694	258
Stage 1	-	-	-	-	514	-
Stage 2	-	-	-	-	180	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1046	-	-	-	377	741
Stage 1	-	-	-	-	565	-
Stage 2	-	-	-	-	833	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1046	-	-	-	365	741
Mov Cap-2 Maneuver	-	-	-	-	365	-
Stage 1	-	-	-	-	547	-
Stage 2	-	-	-	-	833	-

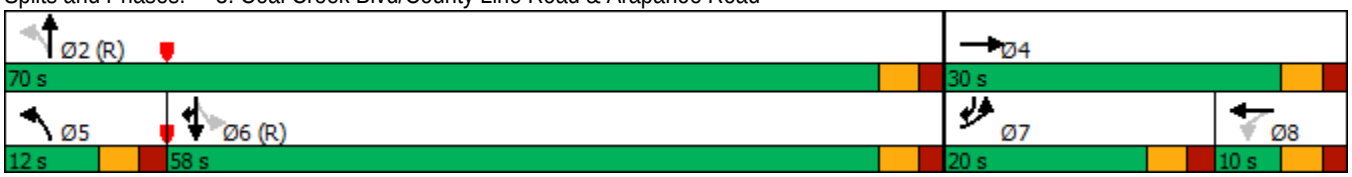
Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	11.1
HCM LOS			B

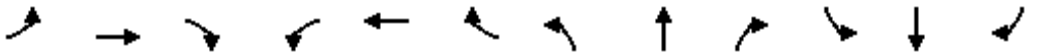
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1046	-	-	-	365	741
HCM Lane V/C Ratio	0.031	-	-	-	0.039	0.123
HCM Control Delay (s)	8.6	-	-	-	15.3	10.5
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	0.4

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	125	1	1	1	225	350	1	440	250
Future Volume (vph)	125	1	1	1	225	350	1	440	250
Turn Type	Prot	NA	Perm	NA	pm+pt	NA	Perm	NA	pt+ov
Protected Phases	7	4		8	5	2		6	6 7
Permitted Phases			8		2		6		
Detector Phase	7	4	8	8	5	2	6	6	6 7
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	20.0	30.0	10.0	10.0	12.0	70.0	58.0	58.0	
Total Split (%)	20.0%	30.0%	10.0%	10.0%	12.0%	70.0%	58.0%	58.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lead		Lag	Lag	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max	
Act Effct Green (s)	9.3	11.6		5.8	78.4	78.4	65.1	65.1	79.5
Actuated g/C Ratio	0.09	0.12		0.06	0.78	0.78	0.65	0.65	0.80
v/c Ratio	0.42	0.38		0.03	0.34	0.14	0.00	0.21	0.21
Control Delay	49.0	11.4		40.0	4.9	3.4	9.0	8.2	0.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.0	11.4		40.0	4.9	3.4	9.0	8.2	0.9
LOS	D	B		D	A	A	A	A	A
Approach Delay		32.7		40.0		4.0		5.6	
Approach LOS		C		D		A		A	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 9.0	Intersection LOS: A
Intersection Capacity Utilization 46.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Coal Creek Blvd/County Line Road & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	1	95	1	1	1	225	350	1	1	440	250
Future Volume (veh/h)	125	1	95	1	1	1	225	350	1	1	440	250
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	1	103	1	1	1	245	380	1	1	478	272
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	206	2	247	60	40	26	595	2702	7	700	2228	1088
Arrive On Green	0.06	0.16	0.16	0.05	0.05	0.05	0.07	0.74	0.74	0.63	0.63	0.63
Sat Flow, veh/h	3456	15	1572	262	841	551	1781	3636	10	1002	3554	1585
Grp Volume(v), veh/h	136	0	104	3	0	0	245	186	195	1	478	272
Grp Sat Flow(s),veh/h/ln	1728	0	1587	1653	0	0	1781	1777	1869	1002	1777	1585
Q Serve(g_s), s	3.9	0.0	5.9	0.0	0.0	0.0	4.6	3.0	3.0	0.0	5.8	6.5
Cycle Q Clear(g_c), s	3.9	0.0	5.9	0.2	0.0	0.0	4.6	3.0	3.0	0.0	5.8	6.5
Prop In Lane	1.00		0.99	0.33		0.33	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	206	0	249	126	0	0	595	1320	1388	700	2228	1088
V/C Ratio(X)	0.66	0.00	0.42	0.02	0.00	0.00	0.41	0.14	0.14	0.00	0.21	0.25
Avail Cap(c_a), veh/h	518	0	397	130	0	0	602	1320	1388	700	2228	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	0.0	38.0	45.4	0.0	0.0	5.2	3.7	3.7	7.0	8.0	5.9
Incr Delay (d2), s/veh	3.6	0.0	1.1	0.1	0.0	0.0	0.5	0.2	0.2	0.0	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.3	0.1	0.0	0.0	1.3	0.8	0.9	0.0	1.9	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.6	0.0	39.1	45.5	0.0	0.0	5.7	3.9	3.9	7.0	8.3	6.5
LnGrp LOS	D	A	D	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		240			3			626			751	
Approach Delay, s/veh		45.1			45.5			4.6			7.6	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		79.3		20.7	11.6	67.7	11.0	9.7				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s		65.0		25.0	7.0	53.0	15.0	5.0				
Max Q Clear Time (g_c+I1), s		5.0		7.9	6.6	8.5	5.9	2.2				
Green Ext Time (p_c), s		2.1		0.4	0.0	4.1	0.2	0.0				

Intersection Summary												
HCM 6th Ctrl Delay			12.1									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.1

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	570	1	3	500	1	7
Future Vol, veh/h	570	1	3	500	1	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	620	1	3	543	1	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	621	0	899	311
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	278	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	956	-	279	685
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	744	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	956	-	278	685
Mov Cap-2 Maneuver	-	-	-	-	278	-
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	742	-

Approach	NB	SB	NW
HCM Control Delay, s	0	0.1	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	SBL	SBT
Capacity (veh/h)	-	-	579	956	-
HCM Lane V/C Ratio	-	-	0.015	0.003	-
HCM Control Delay (s)	-	-	11.3	8.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	550	2	0	500	0	19
Future Vol, veh/h	550	2	0	500	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	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	598	2	0	543	0	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	299
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	-	0	697
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	697
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	697	-	-	-
HCM Lane V/C Ratio	0.03	-	-	-
HCM Control Delay (s)	10.3	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	6.5
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	20	594	543
Demand Flow Rate, veh/h	20	606	554
Vehicles Circulating, veh/h	604	10	13
Vehicles Exiting, veh/h	12	557	611
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.1	6.7	6.3
Approach LOS	A	A	A

Lane	Left	Left	Right	Left
Designated Moves	LR	LT	R	LT
Assumed Moves	LR	LT	R	LT
RT Channelized				
Lane Util	1.000	0.997	0.003	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.535
Critical Headway, s	4.976	4.544	4.544	4.544
Entry Flow, veh/h	20	604	2	554
Cap Entry Lane, veh/h	745	1407	1407	1403
Entry HV Adj Factor	1.000	0.980	1.000	0.981
Flow Entry, veh/h	20	592	2	543
Cap Entry, veh/h	745	1380	1407	1376
V/C Ratio	0.027	0.429	0.001	0.395
Control Delay, s/veh	5.1	6.7	2.6	6.3
LOS	A	A	A	A
95th %tile Queue, veh	0	2	0	2

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	72	57	530	27	20	835
Future Vol, veh/h	72	57	530	27	20	835
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	225	325	-
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	78	62	576	29	22	908

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1074	288	0	0	605	0
Stage 1	576	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*541	709	-	-	969	-
Stage 1	*525	-	-	-	-	-
Stage 2	*698	-	-	-	-	-
Platoon blocked, %	1		-	-		-
Mov Cap-1 Maneuver	*528	709	-	-	969	-
Mov Cap-2 Maneuver	*528	-	-	-	-	-
Stage 1	*525	-	-	-	-	-
Stage 2	*682	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	528	709	969	-
HCM Lane V/C Ratio	-	-	0.148	0.087	0.022	-
HCM Control Delay (s)	-	-	13	10.6	8.8	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	0.1	-

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

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	19	15	4	50	12	43	0	12	16	0	36
Future Vol, veh/h	13	19	15	4	50	12	43	0	12	16	0	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	21	16	4	54	13	47	0	13	17	0	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	67	0	0	37	0	0	145	132	29	133	134	61
Stage 1	-	-	-	-	-	-	57	57	-	69	69	-
Stage 2	-	-	-	-	-	-	88	75	-	64	65	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1535	-	-	1574	-	-	824	759	1046	839	757	1004
Stage 1	-	-	-	-	-	-	955	847	-	941	837	-
Stage 2	-	-	-	-	-	-	920	833	-	947	841	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1535	-	-	1574	-	-	784	750	1046	821	748	1004
Mov Cap-2 Maneuver	-	-	-	-	-	-	784	750	-	821	748	-
Stage 1	-	-	-	-	-	-	946	839	-	933	834	-
Stage 2	-	-	-	-	-	-	881	831	-	927	833	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	0.4	9.7	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	829	1535	-	-	1574	-	-	940
HCM Lane V/C Ratio	0.072	0.009	-	-	0.003	-	-	0.06
HCM Control Delay (s)	9.7	7.4	0	-	7.3	0	-	9.1
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	12	1	4	1	22	1	1	10	54	1	19
Future Vol, veh/h	7	12	1	4	1	22	1	1	10	54	1	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	13	1	4	1	24	1	1	11	59	1	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	25	0	0	14	0	0	62	63	14	57	51	13
Stage 1	-	-	-	-	-	-	30	30	-	21	21	-
Stage 2	-	-	-	-	-	-	32	33	-	36	30	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1589	-	-	1604	-	-	933	828	1066	940	840	1067
Stage 1	-	-	-	-	-	-	987	870	-	998	878	-
Stage 2	-	-	-	-	-	-	984	868	-	980	870	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1589	-	-	1604	-	-	909	821	1066	924	833	1067
Mov Cap-2 Maneuver	-	-	-	-	-	-	909	821	-	924	833	-
Stage 1	-	-	-	-	-	-	982	866	-	993	875	-
Stage 2	-	-	-	-	-	-	961	865	-	964	866	-

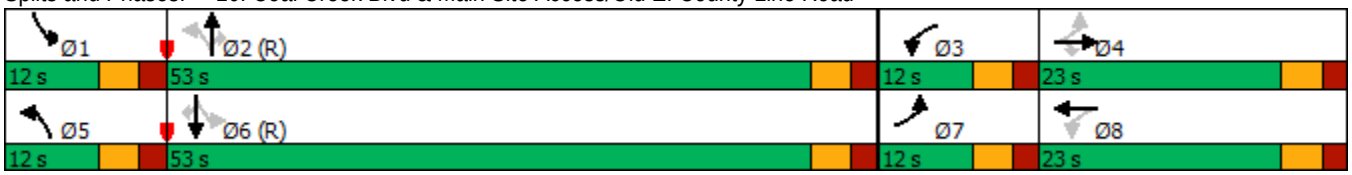
Approach	EB	WB	NB	SB
HCM Control Delay, s	2.5	1.1	8.6	9.1
HCM LOS			A	A

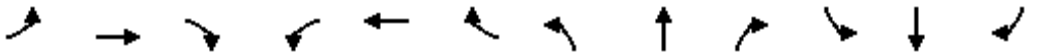
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1026	1589	-	-	1604	-	-	955
HCM Lane V/C Ratio	0.013	0.005	-	-	0.003	-	-	0.084
HCM Control Delay (s)	8.6	7.3	0	-	7.2	0	-	9.1
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	13	1	62	55	1	22	535	25	5	495	5
Future Volume (vph)	13	1	62	55	1	22	535	25	5	495	5
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases	4		4	8		2		2	6		6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	23.0	23.0	12.0	23.0	12.0	53.0	53.0	12.0	53.0	53.0
Total Split (%)	12.0%	23.0%	23.0%	12.0%	23.0%	12.0%	53.0%	53.0%	12.0%	53.0%	53.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	10.8	5.8	6.8	14.4	13.0	75.9	75.6	75.6	74.5	73.2	73.2
Actuated g/C Ratio	0.11	0.06	0.07	0.14	0.13	0.76	0.76	0.76	0.74	0.73	0.73
v/c Ratio	0.08	0.01	0.29	0.32	0.03	0.04	0.22	0.02	0.01	0.21	0.00
Control Delay	35.2	44.0	3.2	39.9	27.5	3.5	4.3	0.0	4.2	6.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	44.0	3.2	39.9	27.5	3.5	4.3	0.0	4.2	6.6	0.0
LOS	D	D	A	D	C	A	A	A	A	A	A
Approach Delay		9.2			38.7		4.1			6.5	
Approach LOS		A			D		A			A	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.32	
Intersection Signal Delay: 7.1	Intersection LOS: A
Intersection Capacity Utilization 36.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: Coal Creek Blvd & Main Site Access/Old E. County Line Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	1	62	55	1	5	22	535	25	5	495	5
Future Volume (veh/h)	13	1	62	55	1	5	22	535	25	5	495	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	1	67	60	1	5	24	582	27	5	538	5
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	181	106	106	222	22	112	650	2469	1101	599	2406	1073
Arrive On Green	0.02	0.06	0.07	0.04	0.08	0.08	0.02	0.69	0.69	0.01	0.68	0.68
Sat Flow, veh/h	1781	1870	1585	1781	271	1355	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	14	1	67	60	0	6	24	582	27	5	538	5
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1626	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	0.1	4.1	3.1	0.0	0.3	0.4	6.0	0.5	0.1	5.8	0.1
Cycle Q Clear(g_c), s	0.7	0.1	4.1	3.1	0.0	0.3	0.4	6.0	0.5	0.1	5.8	0.1
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	106	106	222	0	134	650	2469	1101	599	2406	1073
V/C Ratio(X)	0.08	0.01	0.63	0.27	0.00	0.04	0.04	0.24	0.02	0.01	0.22	0.00
Avail Cap(c_a), veh/h	277	337	301	272	0	293	731	2469	1101	712	2406	1073
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	44.5	45.5	42.0	0.0	42.2	4.7	5.6	4.7	5.1	6.1	5.2
Incr Delay (d2), s/veh	0.2	0.0	6.1	0.6	0.0	0.1	0.0	0.2	0.0	0.0	0.2	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	0.3	0.0	1.8	1.4	0.0	0.1	0.1	1.8	0.2	0.0	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	44.5	51.5	42.7	0.0	42.4	4.7	5.8	4.8	5.1	6.4	5.2
LnGrp LOS	D	D	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		82			66			633			548	
Approach Delay, s/veh		50.1			42.7			5.7			6.3	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	74.5	9.2	10.7	7.4	72.7	6.6	13.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	48.0	7.0	18.0	7.0	48.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	2.1	8.0	5.1	6.1	2.4	7.8	2.7	2.3
Green Ext Time (p_c), s	0.0	4.0	0.0	0.1	0.0	3.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	22	38	1	3	23
Future Vol, veh/h	9	22	38	1	3	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	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	10	24	41	1	3	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	42	0	-	0	86	42
Stage 1	-	-	-	-	42	-
Stage 2	-	-	-	-	44	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1567	-	-	-	920	1029
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	982	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	1567	-	-	-	915	1029
Mov Cap-2 Maneuver	-	-	-	-	915	-
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	982	-

Approach	EB	WB	SB
HCM Control Delay, s	2.1	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1567	-	-	-	1014
HCM Lane V/C Ratio	0.006	-	-	-	0.028
HCM Control Delay (s)	7.3	-	-	-	8.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	14	9	1	4	30
Future Vol, veh/h	11	14	9	1	4	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	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	12	15	10	1	4	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	11	0	-	0	50	11
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	39	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1608	-	-	-	959	1070
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	983	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1608	-	-	-	952	1070
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	983	-

Approach	EB	WB	SB
HCM Control Delay, s	3.2	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1608	-	-	-	1055
HCM Lane V/C Ratio	0.007	-	-	-	0.035
HCM Control Delay (s)	7.3	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	74	13	550	600	9
Future Vol, veh/h	29	74	13	550	600	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	380	-	-	275
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	32	80	14	598	652	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	979	326	662	0	-	0
Stage 1	652	-	-	-	-	-
Stage 2	327	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	285	*863	1223	-	-	-
Stage 1	768	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	282	*863	1223	-	-	-
Mov Cap-2 Maneuver	282	-	-	-	-	-
Stage 1	759	-	-	-	-	-
Stage 2	703	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1223	-	282	863	-	-
HCM Lane V/C Ratio	0.012	-	0.112	0.093	-	-
HCM Control Delay (s)	8	-	19.4	9.6	-	-
HCM Lane LOS	A	-	C	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	0.3	-	-

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

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	43	515	47	40	865
Future Vol, veh/h	0	43	515	47	40	865
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	-	225	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	47	560	51	43	940

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	280	0	0	611	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	*893	-	-	1226	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	-	-	1	-
Mov Cap-1 Maneuver	-	*893	-	-	1226	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.4
HCM LOS	A		

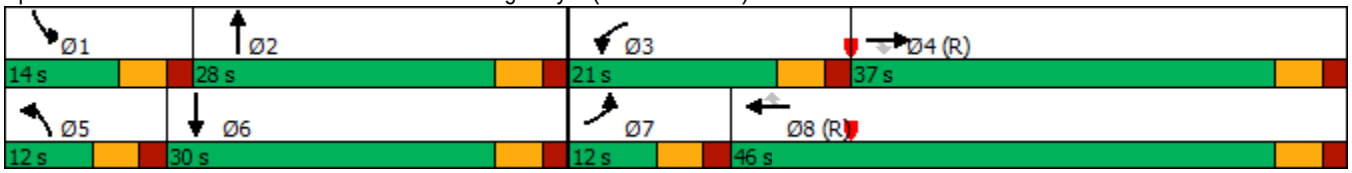
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	893	1226	-
HCM Lane V/C Ratio	-	-	0.052	0.035	-
HCM Control Delay (s)	-	-	9.3	8	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

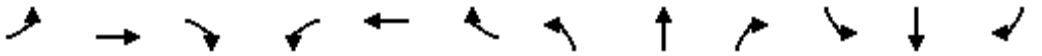
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	425	65	450	835	225	75	215	175	185	525	155
Future Volume (vph)	120	425	65	450	835	225	75	215	175	185	525	155
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			Free			Free
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	10.5	23.5	23.5	10.5	23.5		10.5	23.5	
Total Split (s)	12.0	37.0	37.0	21.0	46.0	46.0	12.0	28.0		14.0	30.0	
Total Split (%)	12.0%	37.0%	37.0%	21.0%	46.0%	46.0%	12.0%	28.0%		14.0%	30.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	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	-1.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5	5.5	5.5	5.5		5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	7.4	34.9	34.9	17.6	44.1	44.1	6.4	18.1	100.0	8.4	22.4	100.0
Actuated g/C Ratio	0.07	0.35	0.35	0.18	0.44	0.44	0.06	0.18	1.00	0.08	0.22	1.00
v/c Ratio	0.51	0.37	0.10	0.81	0.58	0.29	0.38	0.37	0.12	0.70	0.72	0.11
Control Delay	52.1	26.5	0.3	60.6	9.8	1.0	50.0	36.5	0.2	46.6	35.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.1	26.5	0.3	60.6	9.8	1.0	50.0	36.5	0.2	46.6	35.9	0.1
LOS	D	C	A	E	A	A	D	D	A	D	D	A
Approach Delay		28.7			23.6			25.0			31.8	
Approach LOS		C			C			C			C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 48 (48%), Referenced to phase 4:EBT and 8:WBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 26.8	Intersection LOS: C
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: N. 119th Street & State Highway 7 (Baseline Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	425	65	450	835	225	75	215	175	185	525	155
Future Volume (veh/h)	120	425	65	450	835	225	75	215	175	185	525	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	462	71	489	908	245	82	234	0	201	571	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	192	1370	611	570	1724	769	155	576		267	691	
Arrive On Green	0.06	0.39	0.39	0.17	0.49	0.49	0.04	0.16	0.00	0.08	0.19	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	130	462	71	489	908	245	82	234	0	201	571	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	3.7	9.2	2.9	13.8	17.7	9.4	2.3	5.9	0.0	5.7	15.4	0.0
Cycle Q Clear(g_c), s	3.7	9.2	2.9	13.8	17.7	9.4	2.3	5.9	0.0	5.7	15.4	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	192	1370	611	570	1724	769	155	576		267	691	
V/C Ratio(X)	0.68	0.34	0.12	0.86	0.53	0.32	0.53	0.41		0.75	0.83	
Avail Cap(c_a), veh/h	225	1370	611	570	1724	769	225	800		294	871	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.3	21.7	19.8	40.6	17.8	15.7	46.7	37.6	0.0	45.2	38.7	0.0
Incr Delay (d2), s/veh	6.4	0.7	0.4	12.4	1.2	1.1	2.8	0.5	0.0	9.6	5.3	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	1.7	3.6	1.0	6.4	6.6	3.2	1.0	2.5	0.0	2.7	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.7	22.4	20.1	53.0	19.0	16.8	49.5	38.0	0.0	54.8	44.0	0.0
LnGrp LOS	D	C	C	D	B	B	D	D		D	D	
Approach Vol, veh/h		663			1642			316	A		772	A
Approach Delay, s/veh		28.1			28.8			41.0			46.8	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	21.7	21.0	44.1	10.0	24.9	11.1	54.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	8.5	22.5	15.5	31.5	6.5	24.5	6.5	40.5
Max Q Clear Time (g_c+I1), s	7.7	7.9	15.8	11.2	4.3	17.4	5.7	19.7
Green Ext Time (p_c), s	0.1	1.1	0.0	2.7	0.0	2.0	0.0	6.4

Intersection Summary	
HCM 6th Ctrl Delay	33.9
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	785	1450	48	0	59
Future Vol, veh/h	0	785	1450	48	0	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	853	1576	52	0	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

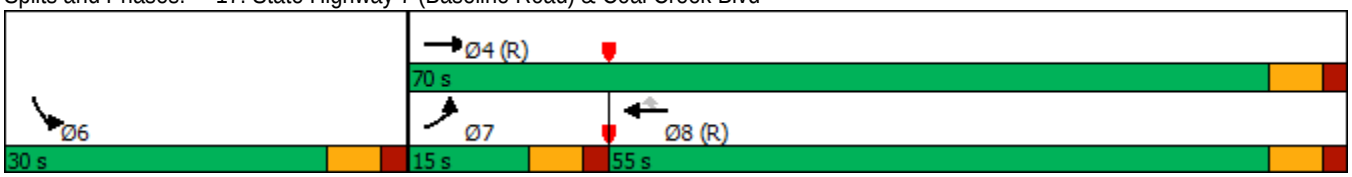
Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

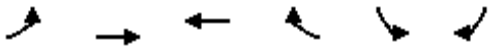
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	110	675	1225	455	400	275
Future Volume (vph)	110	675	1225	455	400	275
Turn Type	Prot	NA	NA	Perm	Prot	Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Detector Phase	7	4	8	8	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	12.0	25.0	24.0	24.0	24.0	
Total Split (s)	15.0	70.0	55.0	55.0	30.0	
Total Split (%)	15.0%	70.0%	55.0%	55.0%	30.0%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	None	
Act Effct Green (s)	8.7	70.2	55.4	55.4	17.8	100.0
Actuated g/C Ratio	0.09	0.70	0.55	0.55	0.18	1.00
v/c Ratio	0.40	0.30	0.68	0.45	0.71	0.19
Control Delay	49.6	1.9	19.1	2.7	43.1	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.6	1.9	19.1	2.7	43.1	0.3
LOS	D	A	B	A	D	A
Approach Delay		8.6	14.7		25.6	
Approach LOS		A	B		C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 15.5	Intersection LOS: B
Intersection Capacity Utilization 64.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: State Highway 7 (Baseline Road) & Coal Creek Blvd





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	110	675	1225	455	400	275
Future Volume (veh/h)	110	675	1225	455	400	275
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	734	1332	495	435	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	183	2583	2182	973	529	
Arrive On Green	0.05	0.73	0.61	0.61	0.15	0.00
Sat Flow, veh/h	3456	3647	3647	1585	3456	1585
Grp Volume(v), veh/h	120	734	1332	495	435	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1777	1585	1728	1585
Q Serve(g_s), s	3.4	7.1	23.1	17.5	12.2	0.0
Cycle Q Clear(g_c), s	3.4	7.1	23.1	17.5	12.2	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	183	2583	2182	973	529	
V/C Ratio(X)	0.65	0.28	0.61	0.51	0.82	
Avail Cap(c_a), veh/h	311	2583	2182	973	829	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.5	4.7	11.9	10.8	41.0	0.0
Incr Delay (d2), s/veh	3.9	0.3	1.3	1.9	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.8	7.6	5.4	5.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.4	5.0	13.2	12.7	44.9	0.0
LnGrp LOS	D	A	B	B	D	
Approach Vol, veh/h		854	1827		435	A
Approach Delay, s/veh		11.4	13.1		44.9	
Approach LOS		B	B		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			78.7		21.3	11.3	67.4
Change Period (Y+Rc), s			6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s			64.0		24.0	9.0	49.0
Max Q Clear Time (g_c+I1), s			9.1		14.2	5.4	25.1
Green Ext Time (p_c), s			4.9		1.1	0.1	11.7

Intersection Summary	
HCM 6th Ctrl Delay	17.0
HCM 6th LOS	B

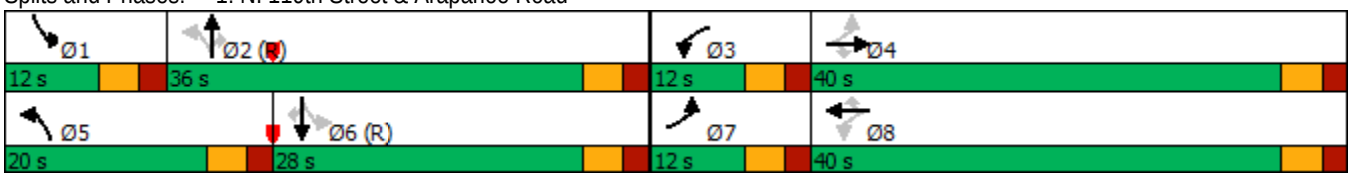
Notes

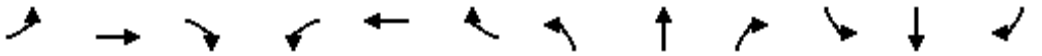
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	445	475	60	300	25	290	480	65	30	415	190
Future Volume (vph)	220	445	475	60	300	25	290	480	65	30	415	190
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	40.0	40.0	12.0	40.0	40.0	20.0	36.0	36.0	12.0	28.0	28.0
Total Split (%)	12.0%	40.0%	40.0%	12.0%	40.0%	40.0%	20.0%	36.0%	36.0%	12.0%	28.0%	28.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	29.7	24.1	25.1	28.4	21.7	21.7	56.3	49.1	49.1	42.8	36.3	36.3
Actuated g/C Ratio	0.30	0.24	0.25	0.28	0.22	0.22	0.56	0.49	0.49	0.43	0.36	0.36
v/c Ratio	0.76	0.57	0.71	0.25	0.43	0.06	0.57	0.30	0.08	0.08	0.35	0.29
Control Delay	43.0	35.7	11.1	24.0	34.8	0.2	8.4	9.7	2.4	14.1	26.9	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.0	35.7	11.1	24.0	34.8	0.2	8.4	9.7	2.4	14.1	26.9	5.6
LOS	D	D	B	C	C	A	A	A	A	B	C	A
Approach Delay		26.9			30.9			8.7			19.9	
Approach LOS		C			C			A			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 84 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 20.8	Intersection LOS: C
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: N. 119th Street & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	445	475	60	300	25	290	480	65	30	415	190
Future Volume (veh/h)	220	445	475	60	300	25	290	480	65	30	415	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	239	484	516	65	326	27	315	522	71	33	451	207
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	448	1215	558	281	1115	497	456	1373	612	351	975	435
Arrive On Green	0.07	0.34	0.35	0.04	0.31	0.31	0.14	0.39	0.39	0.03	0.27	0.27
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	239	484	516	65	326	27	315	522	71	33	451	207
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	7.0	10.4	31.3	2.4	6.9	1.2	12.1	10.6	2.9	1.3	10.5	10.9
Cycle Q Clear(g_c), s	7.0	10.4	31.3	2.4	6.9	1.2	12.1	10.6	2.9	1.3	10.5	10.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	448	1215	558	281	1115	497	456	1373	612	351	975	435
V/C Ratio(X)	0.53	0.40	0.93	0.23	0.29	0.05	0.69	0.38	0.12	0.09	0.46	0.48
Avail Cap(c_a), veh/h	448	1244	571	331	1244	555	470	1373	612	423	975	435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	25.1	31.1	21.9	25.9	24.0	20.6	22.1	19.7	24.7	30.2	30.3
Incr Delay (d2), s/veh	1.2	0.2	20.9	0.4	0.1	0.0	4.1	0.8	0.4	0.1	1.6	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.2	14.4	1.0	2.8	0.4	5.2	4.3	1.1	0.5	4.6	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	25.3	52.0	22.3	26.1	24.0	24.8	22.9	20.1	24.8	31.7	34.0
LnGrp LOS	C	C	D	C	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1239			418			908			691	
Approach Delay, s/veh		36.4			25.4			23.3			32.1	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	43.6	9.2	39.2	19.2	32.4	12.0	36.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	31.0	7.0	35.0	15.0	23.0	7.0	35.0
Max Q Clear Time (g_c+I1), s	3.3	12.6	4.4	33.3	14.1	12.9	9.0	8.9
Green Ext Time (p_c), s	0.0	3.3	0.0	0.9	0.1	2.5	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	81	395	330	18	5	43
Future Vol, veh/h	81	395	330	18	5	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	88	429	359	20	5	47

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	379	0	-	0	760	190
Stage 1	-	-	-	-	369	-
Stage 2	-	-	-	-	391	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1176	-	-	-	342	820
Stage 1	-	-	-	-	670	-
Stage 2	-	-	-	-	653	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1176	-	-	-	316	820
Mov Cap-2 Maneuver	-	-	-	-	316	-
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	653	-

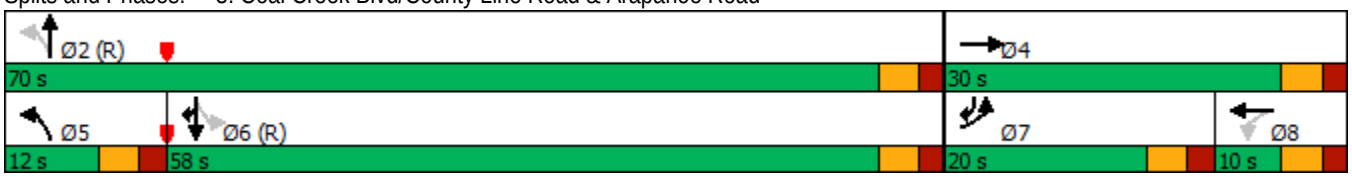
Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	10.4
HCM LOS			B

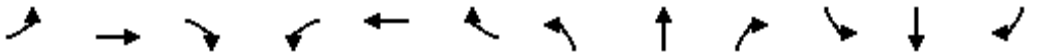
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1176	-	-	-	316	820
HCM Lane V/C Ratio	0.075	-	-	-	0.017	0.057
HCM Control Delay (s)	8.3	-	-	-	16.6	9.7
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.2

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	260	1	1	1	125	585	1	495	225
Future Volume (vph)	260	1	1	1	125	585	1	495	225
Turn Type	Prot	NA	Perm	NA	pm+pt	NA	Perm	NA	pt+ov
Protected Phases	7	4		8	5	2		6	6 7
Permitted Phases			8		2		6		
Detector Phase	7	4	8	8	5	2	6	6	6 7
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	20.0	30.0	10.0	10.0	12.0	70.0	58.0	58.0	
Total Split (%)	20.0%	30.0%	10.0%	10.0%	12.0%	70.0%	58.0%	58.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lead		Lag	Lag	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max	
Act Effct Green (s)	13.1	15.1		5.3	74.9	74.9	62.9	62.9	80.9
Actuated g/C Ratio	0.13	0.15		0.05	0.75	0.75	0.63	0.63	0.81
v/c Ratio	0.63	0.42		0.03	0.22	0.24	0.00	0.24	0.18
Control Delay	26.6	3.8		41.0	5.1	4.7	10.0	9.3	0.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.6	3.8		41.0	5.1	4.7	10.0	9.3	0.8
LOS	C	A		D	A	A	A	A	A
Approach Delay		18.6		41.0		4.7		6.6	
Approach LOS		B		D		A		A	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 8.6	Intersection LOS: A
Intersection Capacity Utilization 47.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Coal Creek Blvd/County Line Road & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	1	140	1	1	1	125	585	1	1	495	225
Future Volume (veh/h)	260	1	140	1	1	1	125	585	1	1	495	225
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	283	1	152	1	1	1	136	636	1	1	538	245
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	360	2	321	60	42	27	522	2536	4	545	2124	1112
Arrive On Green	0.10	0.20	0.20	0.05	0.05	0.05	0.05	0.70	0.70	0.60	0.60	0.60
Sat Flow, veh/h	3456	10	1576	249	847	548	1781	3640	6	791	3554	1585
Grp Volume(v), veh/h	283	0	153	3	0	0	136	310	327	1	538	245
Grp Sat Flow(s),veh/h/ln	1728	0	1587	1643	0	0	1781	1777	1869	791	1777	1585
Q Serve(g_s), s	8.0	0.0	8.5	0.0	0.0	0.0	2.8	6.4	6.4	0.1	7.2	5.5
Cycle Q Clear(g_c), s	8.0	0.0	8.5	0.2	0.0	0.0	2.8	6.4	6.4	0.1	7.2	5.5
Prop In Lane	1.00		0.99	0.33		0.33	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	0	323	129	0	0	522	1238	1302	545	2124	1112
V/C Ratio(X)	0.79	0.00	0.47	0.02	0.00	0.00	0.26	0.25	0.25	0.00	0.25	0.22
Avail Cap(c_a), veh/h	518	0	397	130	0	0	560	1238	1302	545	2124	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	35.1	45.3	0.0	0.0	6.5	5.6	5.6	8.1	9.5	5.3
Incr Delay (d2), s/veh	5.0	0.0	1.1	0.1	0.0	0.0	0.3	0.5	0.5	0.0	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	3.3	0.1	0.0	0.0	0.9	2.0	2.1	0.0	2.5	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	0.0	36.2	45.3	0.0	0.0	6.8	6.1	6.0	8.1	9.8	5.7
LnGrp LOS	D	A	D	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		436			3			773			784	
Approach Delay, s/veh		44.3			45.3			6.2			8.5	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		74.7		25.3	9.9	64.8	15.4	9.9				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s		65.0		25.0	7.0	53.0	15.0	5.0				
Max Q Clear Time (g_c+I1), s		8.4		10.5	4.8	9.2	10.0	2.2				
Green Ext Time (p_c), s		3.8		0.6	0.1	4.5	0.4	0.0				

Intersection Summary												
HCM 6th Ctrl Delay			15.5									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.1

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	705	1	8	625	1	5
Future Vol, veh/h	705	1	8	625	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	766	1	9	679	1	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	767	0	1125	384
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	358	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	842	-	199	614
Stage 1	-	-	-	-	419	-
Stage 2	-	-	-	-	678	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	842	-	197	614
Mov Cap-2 Maneuver	-	-	-	-	197	-
Stage 1	-	-	-	-	419	-
Stage 2	-	-	-	-	671	-

Approach	NB	SB	NW
HCM Control Delay, s	0	0.1	13
HCM LOS			B

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	SBL	SBT
Capacity (veh/h)	-	-	454	842	-
HCM Lane V/C Ratio	-	-	0.014	0.01	-
HCM Control Delay (s)	-	-	13	9.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	695	6	0	625	0	13
Future Vol, veh/h	695	6	0	625	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	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	755	7	0	679	0	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	378
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	-	0	620
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	620
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	620	-	-	-
HCM Lane V/C Ratio	0.023	-	-	-
HCM Control Delay (s)	10.9	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	13	768	680
Demand Flow Rate, veh/h	13	783	694
Vehicles Circulating, veh/h	776	29	9
Vehicles Exiting, veh/h	36	674	780
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.0	8.7	7.6
Approach LOS	A	A	A

Lane	Left	Left	Right	Left
Designated Moves	LR	LT	R	LT
Assumed Moves	LR	LT	R	LT
RT Channelized				
Lane Util	1.000	0.991	0.009	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.535
Critical Headway, s	4.976	4.544	4.544	4.544
Entry Flow, veh/h	13	776	7	694
Cap Entry Lane, veh/h	625	1383	1383	1409
Entry HV Adj Factor	1.000	0.980	1.000	0.980
Flow Entry, veh/h	13	761	7	680
Cap Entry, veh/h	625	1356	1383	1380
V/C Ratio	0.021	0.561	0.005	0.493
Control Delay, s/veh	6.0	8.8	2.6	7.6
LOS	A	A	A	A
95th %tile Queue, veh	0	4	0	3

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	62	38	800	96	65	885
Future Vol, veh/h	62	38	800	96	65	885
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	225	325	-
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	67	41	870	104	71	962

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1493	435	0	0	974	0
Stage 1	870	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*223	569	-	-	704	-
Stage 1	*370	-	-	-	-	-
Stage 2	*698	-	-	-	-	-
Platoon blocked, %	1		-	-		-
Mov Cap-1 Maneuver	*200	569	-	-	704	-
Mov Cap-2 Maneuver	*200	-	-	-	-	-
Stage 1	*370	-	-	-	-	-
Stage 2	*628	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.3	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	200	569	704	-
HCM Lane V/C Ratio	-	-	0.337	0.073	0.1	-
HCM Control Delay (s)	-	-	31.9	11.8	10.7	-
HCM Lane LOS	-	-	D	B	B	-
HCM 95th %tile Q(veh)	-	-	1.4	0.2	0.3	-

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

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	41	70	50	13	47	17	29	0	8	15	0	24
Future Vol, veh/h	41	70	50	13	47	17	29	0	8	15	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	76	54	14	51	18	32	0	9	16	0	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	69	0	0	130	0	0	294	290	103	286	308	60
Stage 1	-	-	-	-	-	-	193	193	-	88	88	-
Stage 2	-	-	-	-	-	-	101	97	-	198	220	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1532	-	-	1455	-	-	658	620	952	666	606	1005
Stage 1	-	-	-	-	-	-	809	741	-	920	822	-
Stage 2	-	-	-	-	-	-	905	815	-	804	721	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1532	-	-	1455	-	-	620	594	952	639	581	1005
Mov Cap-2 Maneuver	-	-	-	-	-	-	620	594	-	639	581	-
Stage 1	-	-	-	-	-	-	783	717	-	891	814	-
Stage 2	-	-	-	-	-	-	873	807	-	771	698	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	1.3	10.7	9.6
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	671	1532	-	-	1455	-	-	824
HCM Lane V/C Ratio	0.06	0.029	-	-	0.01	-	-	0.051
HCM Control Delay (s)	10.7	7.4	0	-	7.5	0	-	9.6
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	8	1	10	51	26	1	1	5	39	1	13
Future Vol, veh/h	22	8	1	10	51	26	1	1	5	39	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	9	1	11	55	28	1	1	5	42	1	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	83	0	0	10	0	0	157	163	10	152	149	69
Stage 1	-	-	-	-	-	-	58	58	-	91	91	-
Stage 2	-	-	-	-	-	-	99	105	-	61	58	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1514	-	-	1610	-	-	809	729	1071	815	743	994
Stage 1	-	-	-	-	-	-	954	847	-	916	820	-
Stage 2	-	-	-	-	-	-	907	808	-	950	847	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1514	-	-	1610	-	-	782	712	1071	795	726	994
Mov Cap-2 Maneuver	-	-	-	-	-	-	782	712	-	795	726	-
Stage 1	-	-	-	-	-	-	939	833	-	901	814	-
Stage 2	-	-	-	-	-	-	887	802	-	929	833	-

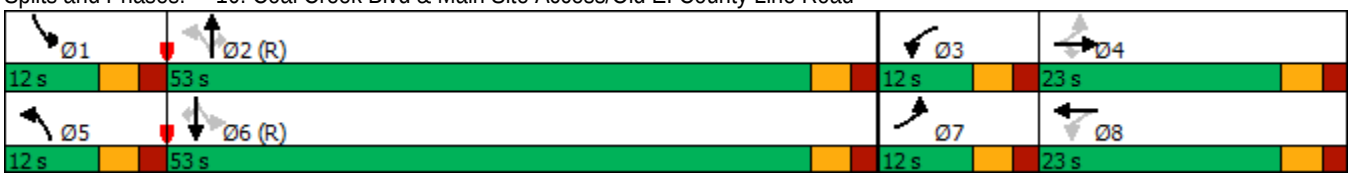
Approach	EB	WB	NB	SB
HCM Control Delay, s	5.3	0.8	8.8	9.6
HCM LOS			A	A

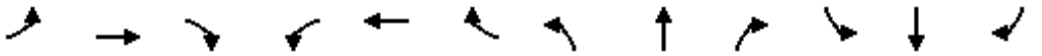
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	952	1514	-	-	1610	-	-	834
HCM Lane V/C Ratio	0.008	0.016	-	-	0.007	-	-	0.069
HCM Control Delay (s)	8.8	7.4	0	-	7.3	0	-	9.6
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	9	1	42	55	1	71	700	75	5	595	15
Future Volume (vph)	9	1	42	55	1	71	700	75	5	595	15
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases	4		4	8		2		2	6		6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	23.0	23.0	12.0	23.0	12.0	53.0	53.0	12.0	53.0	53.0
Total Split (%)	12.0%	23.0%	23.0%	12.0%	23.0%	12.0%	53.0%	53.0%	12.0%	53.0%	53.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	9.6	5.8	6.8	12.3	10.9	78.3	77.7	77.7	73.8	70.3	70.3
Actuated g/C Ratio	0.10	0.06	0.07	0.12	0.11	0.78	0.78	0.78	0.74	0.70	0.70
v/c Ratio	0.06	0.01	0.20	0.37	0.03	0.13	0.28	0.07	0.01	0.26	0.01
Control Delay	34.9	44.0	2.0	42.9	27.5	2.8	3.3	0.1	4.2	8.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	44.0	2.0	42.9	27.5	2.8	3.3	0.1	4.2	8.2	0.0
LOS	C	D	A	D	C	A	A	A	A	A	A
Approach Delay		8.5			41.5		3.0			7.9	
Approach LOS		A			D		A			A	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay: 6.6	Intersection LOS: A
Intersection Capacity Utilization 45.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: Coal Creek Blvd & Main Site Access/Old E. County Line Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	1	42	55	1	5	71	700	75	5	595	15
Future Volume (veh/h)	9	1	42	55	1	5	71	700	75	5	595	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	1	46	60	1	5	77	761	82	5	647	16
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	152	77	81	203	19	97	613	2523	1125	495	2389	1066
Arrive On Green	0.01	0.04	0.05	0.04	0.07	0.07	0.04	0.71	0.71	0.01	0.67	0.67
Sat Flow, veh/h	1781	1870	1585	1781	271	1355	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	10	1	46	60	0	6	77	761	82	5	647	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1626	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.5	0.1	2.8	3.2	0.0	0.3	1.2	7.9	1.6	0.1	7.3	0.3
Cycle Q Clear(g_c), s	0.5	0.1	2.8	3.2	0.0	0.3	1.2	7.9	1.6	0.1	7.3	0.3
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	77	81	203	0	116	613	2523	1125	495	2389	1066
V/C Ratio(X)	0.07	0.01	0.57	0.30	0.00	0.05	0.13	0.30	0.07	0.01	0.27	0.02
Avail Cap(c_a), veh/h	255	337	301	252	0	293	660	2523	1125	609	2389	1066
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	46.0	46.3	43.4	0.0	43.3	4.3	5.4	4.4	5.3	6.6	5.4
Incr Delay (d2), s/veh	0.2	0.1	6.0	0.8	0.0	0.2	0.1	0.3	0.1	0.0	0.3	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	0.2	0.0	1.3	1.5	0.0	0.1	0.3	2.3	0.5	0.0	2.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	46.0	52.4	44.2	0.0	43.5	4.4	5.7	4.6	5.3	6.8	5.4
LnGrp LOS	D	D	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		57			66			920			668	
Approach Delay, s/veh		51.0			44.2			5.5			6.8	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	76.0	9.2	9.1	9.4	72.2	6.2	12.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	48.0	7.0	18.0	7.0	48.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	2.1	9.9	5.2	4.8	3.2	9.3	2.5	2.3
Green Ext Time (p_c), s	0.0	5.7	0.0	0.1	0.0	4.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	48	38	4	2	23
Future Vol, veh/h	33	48	38	4	2	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	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	36	52	41	4	2	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	45	0	-	0	167	43
Stage 1	-	-	-	-	43	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1563	-	-	-	828	1027
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	904	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	1563	-	-	-	809	1027
Mov Cap-2 Maneuver	-	-	-	-	809	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	904	-

Approach	EB	WB	SB
HCM Control Delay, s	3	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1563	-	-	-	1005
HCM Lane V/C Ratio	0.023	-	-	-	0.027
HCM Control Delay (s)	7.4	-	-	-	8.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	13	15	4	3	27
Future Vol, veh/h	37	13	15	4	3	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	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	40	14	16	4	3	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	20	0	-	0	112	18
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	94	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1596	-	-	-	885	1061
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1596	-	-	-	863	1061
Mov Cap-2 Maneuver	-	-	-	-	863	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	930	-

Approach	EB	WB	SB
HCM Control Delay, s	5.4	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1596	-	-	-	1037
HCM Lane V/C Ratio	0.025	-	-	-	0.031
HCM Control Delay (s)	7.3	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	88	118	43	760	665	28
Future Vol, veh/h	88	118	43	760	665	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	0	380	-	-	275
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	96	128	47	826	723	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1230	362	753	0	-	0
Stage 1	723	-	-	-	-	-
Stage 2	507	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	191	*832	1170	-	-	-
Stage 1	754	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	183	*832	1170	-	-	-
Mov Cap-2 Maneuver	183	-	-	-	-	-
Stage 1	724	-	-	-	-	-
Stage 2	570	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.8	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1170	-	183	832	-	-
HCM Lane V/C Ratio	0.04	-	0.523	0.154	-	-
HCM Control Delay (s)	8.2	-	44.4	10.1	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	2.6	0.5	-	-

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

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	114	780	146	124	825
Future Vol, veh/h	0	114	780	146	124	825
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	-	225	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	124	848	159	135	897

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	424	0	0	1007	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	*770	-	-	976	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	-	-	1	-
Mov Cap-1 Maneuver	-	*770	-	-	976	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	1.2
HCM LOS	B		

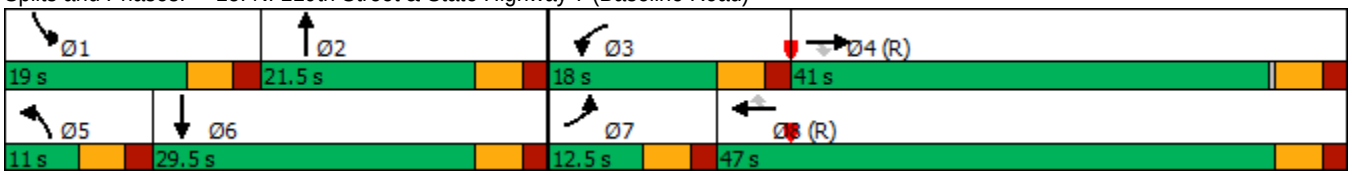
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	770	976	-
HCM Lane V/C Ratio	-	-	0.161	0.138	-
HCM Control Delay (s)	-	-	10.6	9.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.5	-

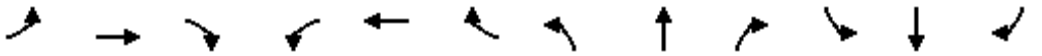
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	250	895	75	330	1385	275	100	485	415	465	250	110
Future Volume (vph)	250	895	75	330	1385	275	100	485	415	465	250	110
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			Free			Free
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	10.5	23.5	23.5	10.5	23.5		10.5	23.5	
Total Split (s)	12.5	41.0	41.0	18.0	47.0	47.0	11.0	21.5		19.0	29.5	
Total Split (%)	12.5%	41.0%	41.0%	18.0%	47.0%	47.0%	11.0%	21.5%		19.0%	29.5%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	9.1	38.3	38.3	14.3	43.5	43.5	7.5	17.9	100.0	15.5	25.9	100.0
Actuated g/C Ratio	0.09	0.38	0.38	0.14	0.44	0.44	0.08	0.18	1.00	0.16	0.26	1.00
v/c Ratio	0.87	0.72	0.11	0.73	0.98	0.35	0.42	0.83	0.28	0.95	0.30	0.08
Control Delay	73.0	30.0	0.3	32.9	59.0	15.1	49.6	52.3	0.5	77.6	30.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.0	30.0	0.3	32.9	59.0	15.1	49.6	52.3	0.5	77.6	30.8	0.1
LOS	E	C	A	C	E	B	D	D	A	E	C	A
Approach Delay		37.0			48.6			30.5			53.1	
Approach LOS		D			D			C			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 42.9	Intersection LOS: D
Intersection Capacity Utilization 85.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: N. 119th Street & State Highway 7 (Baseline Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	895	75	330	1385	275	100	485	415	465	250	110
Future Volume (veh/h)	250	895	75	330	1385	275	100	485	415	465	250	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	272	973	82	359	1505	299	109	527	0	505	272	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	311	1367	610	485	1546	689	235	640		536	949	
Arrive On Green	0.09	0.38	0.38	0.14	0.44	0.44	0.07	0.18	0.00	0.16	0.27	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	272	973	82	359	1505	299	109	527	0	505	272	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	7.8	23.2	3.4	10.0	41.5	13.1	3.0	14.3	0.0	14.5	6.1	0.0
Cycle Q Clear(g_c), s	7.8	23.2	3.4	10.0	41.5	13.1	3.0	14.3	0.0	14.5	6.1	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	311	1367	610	485	1546	689	235	640		536	949	
V/C Ratio(X)	0.87	0.71	0.13	0.74	0.97	0.43	0.46	0.82		0.94	0.29	
Avail Cap(c_a), veh/h	311	1367	610	501	1546	689	259	640		536	949	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.9	26.1	20.0	41.2	27.7	19.7	44.8	39.5	0.0	41.8	29.1	0.0
Incr Delay (d2), s/veh	23.0	3.2	0.5	5.6	17.4	2.0	1.4	8.6	0.0	25.4	0.2	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	4.1	9.4	1.2	4.4	19.0	4.7	1.3	6.8	0.0	7.8	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.0	29.3	20.4	46.8	45.1	21.7	46.3	48.1	0.0	67.2	29.3	0.0
LnGrp LOS	E	C	C	D	D	C	D	D		E	C	
Approach Vol, veh/h		1327			2163			636	A		777	A
Approach Delay, s/veh		36.6			42.1			47.8			53.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	21.5	17.5	42.0	10.3	30.2	12.5	47.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	13.5	16.0	12.5	35.5	5.5	24.0	7.0	41.5
Max Q Clear Time (g_c+I1), s	16.5	16.3	12.0	25.2	5.0	8.1	9.8	43.5
Green Ext Time (p_c), s	0.0	0.0	0.1	4.4	0.0	1.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D

Notes

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

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

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	1775	1850	151	0	142
Future Vol, veh/h	0	1775	1850	151	0	142
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1929	2011	164	0	154

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

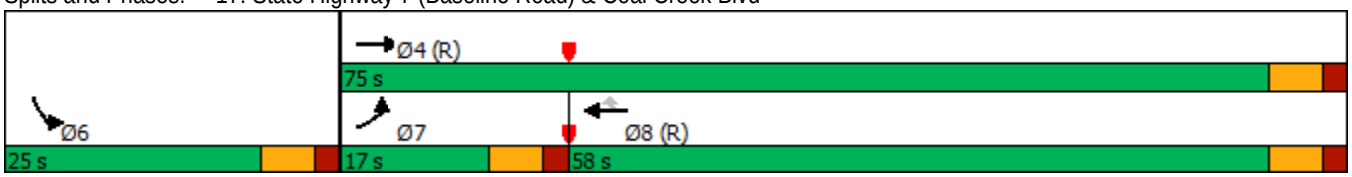
Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

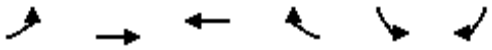
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	300	1475	1750	505	535	250
Future Volume (vph)	300	1475	1750	505	535	250
Turn Type	Prot	NA	NA	Perm	Prot	Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free
Detector Phase	7	4	8	8	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	12.0	25.0	24.0	24.0	24.0	
Total Split (s)	17.0	75.0	58.0	58.0	25.0	
Total Split (%)	17.0%	75.0%	58.0%	58.0%	25.0%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-1.0	-2.0	-1.0	-2.0	
Total Lost Time (s)	4.0	5.0	4.0	5.0	4.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	None	
Act Effct Green (s)	13.0	70.4	54.4	53.4	20.6	100.0
Actuated g/C Ratio	0.13	0.70	0.54	0.53	0.21	1.00
v/c Ratio	0.73	0.64	0.99	0.50	0.82	0.17
Control Delay	38.0	12.6	41.2	2.8	45.9	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.0	12.6	41.2	2.8	45.9	0.2
LOS	D	B	D	A	D	A
Approach Delay		16.9	32.6		31.3	
Approach LOS		B	C		C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 26.6	Intersection LOS: C
Intersection Capacity Utilization 82.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 17: State Highway 7 (Baseline Road) & Coal Creek Blvd





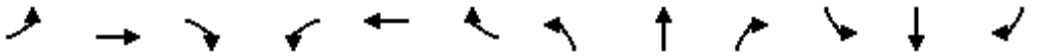
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	300	1475	1750	505	535	250
Future Volume (veh/h)	300	1475	1750	505	535	250
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	326	1603	1902	549	582	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	449	2510	1942	850	704	
Arrive On Green	0.13	0.71	0.55	0.54	0.20	0.00
Sat Flow, veh/h	3456	3647	3647	1585	3456	1585
Grp Volume(v), veh/h	326	1603	1902	549	582	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1777	1585	1728	1585
Q Serve(g_s), s	9.1	24.1	52.2	24.6	16.1	0.0
Cycle Q Clear(g_c), s	9.1	24.1	52.2	24.6	16.1	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	449	2510	1942	850	704	
V/C Ratio(X)	0.73	0.64	0.98	0.65	0.83	
Avail Cap(c_a), veh/h	449	2510	1942	850	726	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.8	7.9	22.1	16.4	38.1	0.0
Incr Delay (d2), s/veh	5.8	1.3	16.1	3.8	7.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	6.5	21.9	8.3	7.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	47.6	9.1	38.3	20.2	45.8	0.0
LnGrp LOS	D	A	D	C	D	
Approach Vol, veh/h		1929	2451		582	A
Approach Delay, s/veh		15.6	34.2		45.8	
Approach LOS		B	C		D	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	75.6	24.4	17.0	58.6
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	69.0	19.0	11.0	52.0
Max Q Clear Time (g_c+I1), s	26.1	18.1	11.1	54.2
Green Ext Time (p_c), s	15.4	0.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

Notes

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

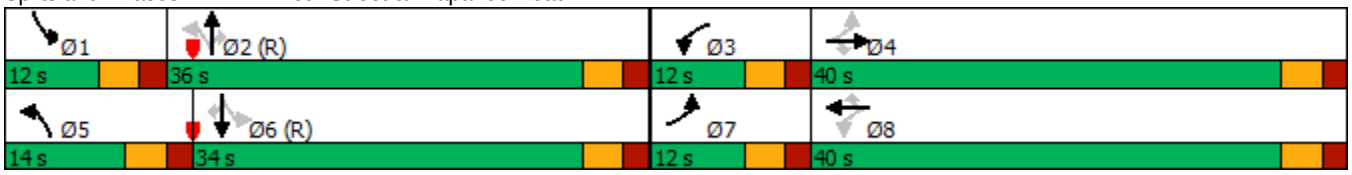


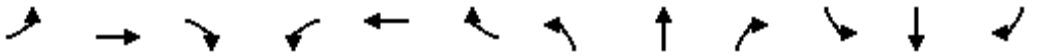
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	185	269	85	532	48	296	251	55	30	527	220
Future Volume (vph)	40	185	269	85	532	48	296	251	55	30	527	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		150	90		150	365		150	90		230
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
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	1770	3539	1583	1770	3539	1583
Flt Permitted	0.248			0.587			0.293			0.584		
Satd. Flow (perm)	462	3539	1583	1093	3539	1583	546	3539	1583	1088	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			292			131			131			239
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		636			2736			2089			552	
Travel Time (s)		10.8			46.6			35.6			9.4	
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
Adj. Flow (vph)	43	201	292	92	578	52	322	273	60	33	573	239
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	201	292	92	578	52	322	273	60	33	573	239
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (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
Detector 1 Queue (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
Detector 1 Delay (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
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	40.0	40.0	12.0	40.0	40.0	14.0	36.0	36.0	12.0	34.0	34.0
Total Split (%)	12.0%	40.0%	40.0%	12.0%	40.0%	40.0%	14.0%	36.0%	36.0%	12.0%	34.0%	34.0%
Maximum Green (s)	7.0	35.0	35.0	7.0	35.0	35.0	9.0	31.0	31.0	7.0	29.0	29.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	26.1	20.6	20.6	27.2	23.0	23.0	59.8	52.6	52.6	43.3	36.9	36.9
Actuated g/C Ratio	0.26	0.21	0.21	0.27	0.23	0.23	0.60	0.53	0.53	0.43	0.37	0.37
v/c Ratio	0.21	0.28	0.52	0.27	0.71	0.11	0.59	0.15	0.07	0.06	0.44	0.33
Control Delay	23.4	33.1	7.1	25.7	39.9	0.6	18.6	13.6	3.1	13.0	27.2	5.0
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	23.4	33.1	7.1	25.7	39.9	0.6	18.6	13.6	3.1	13.0	27.2	5.0
LOS	C	C	A	C	D	A	B	B	A	B	C	A
Approach Delay		18.2			35.2			15.1			20.4	
Approach LOS		B			D			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 84 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 22.6		Intersection LOS: C	
Intersection Capacity Utilization 66.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: N. 119th Street & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	185	269	85	532	48	296	251	55	30	527	220
Future Volume (veh/h)	40	185	269	85	532	48	296	251	55	30	527	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	201	292	92	578	52	322	273	60	33	573	239
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	204	768	343	323	841	375	455	1772	790	579	1559	695
Arrive On Green	0.03	0.22	0.22	0.06	0.24	0.24	0.03	0.16	0.16	0.03	0.44	0.44
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	43	201	292	92	578	52	322	273	60	33	573	239
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.9	4.7	17.7	4.0	14.8	2.6	9.0	6.6	3.2	1.0	10.8	10.0
Cycle Q Clear(g_c), s	1.9	4.7	17.7	4.0	14.8	2.6	9.0	6.6	3.2	1.0	10.8	10.0
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	204	768	343	323	841	375	455	1772	790	579	1559	695
V/C Ratio(X)	0.21	0.26	0.85	0.28	0.69	0.14	0.71	0.15	0.08	0.06	0.37	0.34
Avail Cap(c_a), veh/h	267	1244	555	350	1244	555	455	1772	790	650	1559	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	32.6	37.7	28.1	34.8	30.1	15.2	23.7	22.3	14.4	18.8	18.6
Incr Delay (d2), s/veh	0.5	0.2	7.0	0.5	1.0	0.2	4.9	0.2	0.2	0.0	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.0	7.3	1.7	6.3	1.0	4.5	2.8	1.2	0.4	4.3	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	32.7	44.7	28.6	35.8	30.3	20.2	23.9	22.5	14.4	19.5	19.9
LnGrp LOS	C	C	D	C	D	C	C	C	C	B	B	B
Approach Vol, veh/h		536			722			655			845	
Approach Delay, s/veh		39.0			34.5			21.9			19.4	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	54.9	10.5	26.6	14.0	48.9	8.5	28.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	31.0	7.0	35.0	9.0	29.0	7.0	35.0
Max Q Clear Time (g_c+I1), s	3.0	8.6	6.0	19.7	11.0	12.8	3.9	16.8
Green Ext Time (p_c), s	0.0	1.8	0.0	1.9	0.0	4.0	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	27.8
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	214	11	3	499	5	31	0	12	13	0	84
Future Vol, veh/h	30	214	11	3	499	5	31	0	12	13	0	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	250	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	233	12	3	542	5	34	0	13	14	0	91

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	547	0	0	245	0	0	582	858	123	734	862	274
Stage 1	-	-	-	-	-	-	305	305	-	551	551	-
Stage 2	-	-	-	-	-	-	277	553	-	183	311	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1018	-	-	1318	-	-	396	293	905	308	291	724
Stage 1	-	-	-	-	-	-	680	661	-	486	514	-
Stage 2	-	-	-	-	-	-	706	513	-	801	657	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1018	-	-	1318	-	-	337	283	905	296	281	724
Mov Cap-2 Maneuver	-	-	-	-	-	-	337	283	-	296	281	-
Stage 1	-	-	-	-	-	-	658	640	-	470	513	-
Stage 2	-	-	-	-	-	-	616	512	-	764	636	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0	14.7	11.7
HCM LOS			B	B

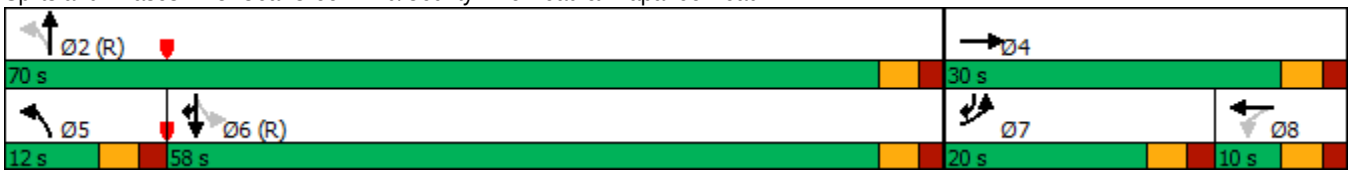
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	337	905	1018	-	-	1318	-	-	296	724
HCM Lane V/C Ratio	0.1	0.014	0.032	-	-	0.002	-	-	0.048	0.126
HCM Control Delay (s)	16.9	9	8.7	-	-	7.7	-	-	17.8	10.7
HCM Lane LOS	C	A	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.3	0	0.1	-	-	0	-	-	0.1	0.4

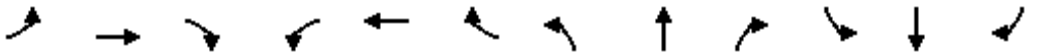
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	137	1	99	1	1	1	254	378	1	1	458	253
Future Volume (vph)	137	1	99	1	1	1	254	378	1	1	458	253
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	0		0	150		0	150		150
Storage Lanes	1		0	0		0	2		0	1		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.851			0.955							0.850
Flt Protected	0.950				0.984		0.950			0.950		
Satd. Flow (prot)	3433	1585	0	0	1750	0	1770	3539	0	1770	3539	1583
Flt Permitted	0.950						0.421			0.510		
Satd. Flow (perm)	3433	1585	0	0	1779	0	784	3539	0	950	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		108			1							275
Link Speed (mph)		40			25			45			45	
Link Distance (ft)		1749			776			1338			543	
Travel Time (s)		29.8			21.2			20.3			8.2	
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
Adj. Flow (vph)	149	1	108	1	1	1	276	411	1	1	498	275
Shared Lane Traffic (%)												
Lane Group Flow (vph)	149	109	0	0	3	0	276	412	0	1	498	275
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Perm	NA		pm+pt	NA		Perm	NA	pt+ov
Protected Phases	7	4			8		5	2			6	6 7
Permitted Phases				8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2		6	6	6 7
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Total Split (s)	20.0	30.0		10.0	10.0		12.0	70.0		58.0	58.0	
Total Split (%)	20.0%	30.0%		10.0%	10.0%		12.0%	70.0%		58.0%	58.0%	
Maximum Green (s)	15.0	25.0		5.0	5.0		7.0	65.0		53.0	53.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Act Effct Green (s)	9.7	12.0			5.8		78.0	78.0		64.5	64.5	79.2
Actuated g/C Ratio	0.10	0.12			0.06		0.78	0.78		0.64	0.64	0.79
v/c Ratio	0.45	0.38			0.03		0.40	0.15		0.00	0.22	0.21
Control Delay	47.2	10.7			40.0		5.5	3.5		9.0	8.6	0.9
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	47.2	10.7			40.0		5.5	3.5		9.0	8.6	0.9
LOS	D	B			D		A	A		A	A	A
Approach Delay		31.8			40.0			4.3			5.8	
Approach LOS		C			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 9.2		Intersection LOS: A	
Intersection Capacity Utilization 49.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Coal Creek Blvd/County Line Road & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	1	99	1	1	1	254	378	1	1	458	253
Future Volume (veh/h)	137	1	99	1	1	1	254	378	1	1	458	253
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	149	1	108	1	1	1	276	411	1	1	498	275
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	220	2	254	60	40	26	584	2685	7	674	2198	1081
Arrive On Green	0.06	0.16	0.16	0.05	0.05	0.05	0.07	0.74	0.74	0.62	0.62	0.62
Sat Flow, veh/h	3456	15	1573	260	842	551	1781	3637	9	974	3554	1585
Grp Volume(v), veh/h	149	0	109	3	0	0	276	201	211	1	498	275
Grp Sat Flow(s),veh/h/ln	1728	0	1587	1653	0	0	1781	1777	1869	974	1777	1585
Q Serve(g_s), s	4.2	0.0	6.2	0.0	0.0	0.0	5.3	3.3	3.3	0.0	6.2	6.7
Cycle Q Clear(g_c), s	4.2	0.0	6.2	0.2	0.0	0.0	5.3	3.3	3.3	0.0	6.2	6.7
Prop In Lane	1.00		0.99	0.33		0.33	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	0	256	127	0	0	584	1312	1380	674	2198	1081
V/C Ratio(X)	0.68	0.00	0.43	0.02	0.00	0.00	0.47	0.15	0.15	0.00	0.23	0.25
Avail Cap(c_a), veh/h	518	0	397	130	0	0	584	1312	1380	674	2198	1081
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	0.0	37.7	45.4	0.0	0.0	5.6	3.9	3.9	7.3	8.5	6.1
Incr Delay (d2), s/veh	3.6	0.0	1.1	0.1	0.0	0.0	0.6	0.2	0.2	0.0	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	2.4	0.1	0.0	0.0	1.6	0.9	1.0	0.0	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.4	0.0	38.9	45.5	0.0	0.0	6.2	4.1	4.1	7.3	8.7	6.7
LnGrp LOS	D	A	D	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		258			3			688			774	
Approach Delay, s/veh		44.9			45.5			4.9			8.0	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		78.8		21.2	12.0	66.8	11.4	9.8				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s		65.0		25.0	7.0	53.0	15.0	5.0				
Max Q Clear Time (g_c+I1), s		5.3		8.2	7.3	8.7	6.2	2.2				
Green Ext Time (p_c), s		2.3		0.4	0.0	4.3	0.3	0.0				

Intersection Summary												
HCM 6th Ctrl Delay			12.4									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.3

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	5	624	1	3	521	1	1	0	7	3	0	12
Future Vol, veh/h	5	624	1	3	521	1	1	0	7	3	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	678	1	3	566	1	1	0	8	3	0	13

Major/Minor	Major1			Major2			Minor2			Minor1		
Conflicting Flow All	567	0	0	679	0	0	922	1262	284	978	1262	340
Stage 1	-	-	-	-	-	-	573	573	-	689	689	-
Stage 2	-	-	-	-	-	-	349	689	-	289	573	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1001	-	-	909	-	-	225	169	713	205	169	656
Stage 1	-	-	-	-	-	-	472	502	-	402	445	-
Stage 2	-	-	-	-	-	-	640	445	-	694	502	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1001	-	-	909	-	-	219	168	713	202	168	656
Mov Cap-2 Maneuver	-	-	-	-	-	-	219	168	-	202	168	-
Stage 1	-	-	-	-	-	-	470	500	-	400	443	-
Stage 2	-	-	-	-	-	-	624	443	-	684	500	-

Approach	NB	SB	SE	NW
HCM Control Delay, s	0.1	0.1	11.6	13.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBL	NBT	NBR	NWLn1	SELn1	SBL	SBT	SBR
Capacity (veh/h)	1001	-	-	453	556	909	-	-
HCM Lane V/C Ratio	0.005	-	-	0.036	0.016	0.004	-	-
HCM Control Delay (s)	8.6	-	-	13.2	11.6	9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	600	8	0	531	2	0	0	28	0	0	50
Future Vol, veh/h	0	600	8	0	531	2	0	0	28	0	0	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	652	9	0	577	2	0	0	30	0	0	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	326	-	-	290
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	670	0	0	707
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	670	-	-	707
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.6	10.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	670	-	-	-	-	707
HCM Lane V/C Ratio	0.045	-	-	-	-	0.077
HCM Control Delay (s)	10.6	-	-	-	-	10.5
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.2

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	1	2	2
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	277	109	663	634
Demand Flow Rate, veh/h	283	111	676	646
Vehicles Circulating, veh/h	678	719	106	146
Vehicles Exiting, veh/h	114	63	855	684
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.1	7.5	8.4	8.3
Approach LOS	A	A	A	A

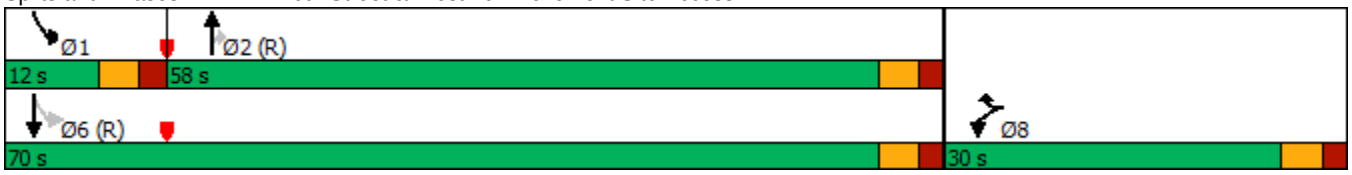
Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	LT	R	LT	R
Assumed Moves	LT	R	LTR	LT	R	LT	R
RT Channelized							
Lane Util	0.318	0.682	1.000	0.987	0.013	0.971	0.029
Follow-Up Headway, s	2.535	2.535	2.609	2.535	2.535	2.535	2.535
Critical Headway, s	4.544	4.544	4.976	4.544	4.544	4.544	4.544
Entry Flow, veh/h	90	193	111	667	9	627	19
Cap Entry Lane, veh/h	766	766	663	1290	1290	1243	1243
Entry HV Adj Factor	0.981	0.979	0.983	0.980	1.000	0.981	1.000
Flow Entry, veh/h	88	189	109	654	9	615	19
Cap Entry, veh/h	751	750	652	1264	1290	1220	1243
V/C Ratio	0.117	0.252	0.167	0.517	0.007	0.504	0.015
Control Delay, s/veh	6.0	7.7	7.5	8.4	2.8	8.4	3.0
LOS	A	A	A	A	A	A	A
95th %tile Queue, veh	0	1	1	3	0	3	0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	86	74	530	32	46	835
Future Volume (vph)	86	74	530	32	46	835
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0		225	325	
Storage Lanes	1	1		1	1	
Taper Length (ft)	100				100	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.399	
Satd. Flow (perm)	1770	1583	3539	1583	743	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		80		35		
Link Speed (mph)	25		40			40
Link Distance (ft)	491		2094			2089
Travel Time (s)	13.4		35.7			35.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	93	80	576	35	50	908
Shared Lane Traffic (%)						
Lane Group Flow (vph)	93	80	576	35	50	908
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		24			24
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Prot	NA	Perm	pm+pt	NA
Protected Phases	8	8	2		1	6
Permitted Phases				2	6	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	30.0	30.0	58.0	58.0	12.0	70.0
Total Split (%)	30.0%	30.0%	58.0%	58.0%	12.0%	70.0%
Maximum Green (s)	25.0	25.0	53.0	53.0	7.0	65.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	10.6	10.6	70.4	70.4	79.4	79.4
Actuated g/C Ratio	0.11	0.11	0.70	0.70	0.79	0.79
v/c Ratio	0.50	0.33	0.23	0.03	0.08	0.32
Control Delay	50.5	13.1	5.9	2.6	1.1	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.5	13.1	5.9	2.6	1.1	1.6
LOS	D	B	A	A	A	A
Approach Delay	33.2		5.7			1.5
Approach LOS	C		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 32 (32%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 36.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: N. 119th Street & West Full Movement Site Access



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	86	74	530	32	46	835
Future Volume (veh/h)	86	74	530	32	46	835
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	80	576	35	50	908
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	133	119	2621	1169	696	2932
Arrive On Green	0.07	0.07	0.74	0.74	0.04	0.83
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	93	80	576	35	50	908
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	5.1	4.9	5.1	0.6	0.6	6.0
Cycle Q Clear(g_c), s	5.1	4.9	5.1	0.6	0.6	6.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	133	119	2621	1169	696	2932
V/C Ratio(X)	0.70	0.67	0.22	0.03	0.07	0.31
Avail Cap(c_a), veh/h	445	396	2621	1169	753	2932
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.89	0.89
Uniform Delay (d), s/veh	45.2	45.1	4.1	3.5	2.4	2.1
Incr Delay (d2), s/veh	6.4	6.5	0.2	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.2	1.4	0.2	0.1	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.6	51.6	4.3	3.6	2.5	2.3
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	173		611			958
Approach Delay, s/veh	51.6		4.3			2.3
Approach LOS	D		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.8	78.8			87.5	12.5
Change Period (Y+Rc), s	5.0	5.0			5.0	5.0
Max Green Setting (Gmax), s	7.0	53.0			65.0	25.0
Max Q Clear Time (g_c+I1), s	2.6	7.1			8.0	7.1
Green Ext Time (p_c), s	0.0	4.2			7.4	0.4

Intersection Summary	
HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	50	15	4	81	1	43	0	12	1	0	36
Future Vol, veh/h	13	50	15	4	81	1	43	0	12	1	0	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	54	16	4	88	1	47	0	13	1	0	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	89	0	0	70	0	0	206	187	62	194	195	89
Stage 1	-	-	-	-	-	-	90	90	-	97	97	-
Stage 2	-	-	-	-	-	-	116	97	-	97	98	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1506	-	-	1531	-	-	752	708	1003	765	700	969
Stage 1	-	-	-	-	-	-	917	820	-	910	815	-
Stage 2	-	-	-	-	-	-	889	815	-	910	814	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1506	-	-	1531	-	-	714	699	1003	747	691	969
Mov Cap-2 Maneuver	-	-	-	-	-	-	714	699	-	747	691	-
Stage 1	-	-	-	-	-	-	908	812	-	901	813	-
Stage 2	-	-	-	-	-	-	851	813	-	889	806	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0.3	10.1	8.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	762	1506	-	-	1531	-	-	961
HCM Lane V/C Ratio	0.078	0.009	-	-	0.003	-	-	0.042
HCM Control Delay (s)	10.1	7.4	0	-	7.4	0	-	8.9
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	15	1	5	83	22	1	1	10	54	1	19
Future Vol, veh/h	7	15	1	5	83	22	1	1	10	54	1	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	16	1	5	90	24	1	1	11	59	1	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	114	0	0	17	0	0	156	157	17	151	145	102
Stage 1	-	-	-	-	-	-	33	33	-	112	112	-
Stage 2	-	-	-	-	-	-	123	124	-	39	33	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1475	-	-	1600	-	-	810	735	1062	816	746	953
Stage 1	-	-	-	-	-	-	983	868	-	893	803	-
Stage 2	-	-	-	-	-	-	881	793	-	976	868	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1475	-	-	1600	-	-	787	729	1062	802	740	953
Mov Cap-2 Maneuver	-	-	-	-	-	-	787	729	-	802	740	-
Stage 1	-	-	-	-	-	-	978	864	-	889	801	-
Stage 2	-	-	-	-	-	-	858	791	-	960	864	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	0.3	8.7	9.8
HCM LOS			A	A

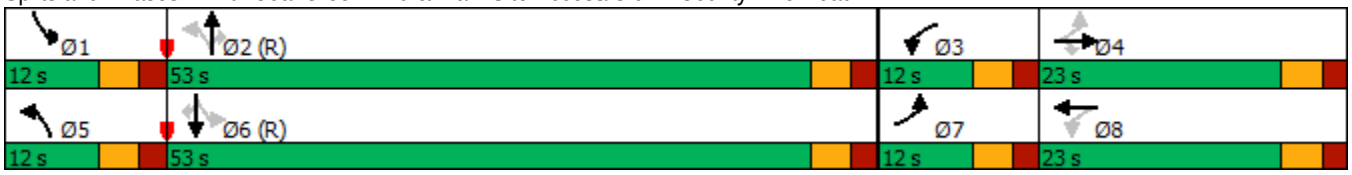
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	995	1475	-	-	1600	-	-	835
HCM Lane V/C Ratio	0.013	0.005	-	-	0.003	-	-	0.096
HCM Control Delay (s)	8.7	7.5	0	-	7.3	0	-	9.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

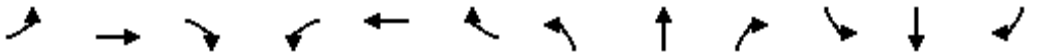
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	1	65	55	1	5	53	587	25	5	672	56
Future Volume (vph)	13	1	65	55	1	5	53	587	25	5	672	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	150		0	355		275	300		275
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.875				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1630	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.754			0.490			0.320			0.410		
Satd. Flow (perm)	1405	1863	1583	913	1630	0	596	3539	1583	764	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			131		5				131			131
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		557			814			864			533	
Travel Time (s)		15.2			22.2			13.1			8.1	
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
Adj. Flow (vph)	14	1	71	60	1	5	58	638	27	5	730	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	1	71	60	6	0	58	638	27	5	730	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			18			18	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	23.0	23.0	12.0	23.0		12.0	53.0	53.0	12.0	53.0	53.0
Total Split (%)	12.0%	23.0%	23.0%	12.0%	23.0%		12.0%	53.0%	53.0%	12.0%	53.0%	53.0%
Maximum Green (s)	7.0	18.0	18.0	7.0	18.0		7.0	48.0	48.0	7.0	48.0	48.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	-1.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	10.8	5.8	6.8	14.4	13.0		76.1	75.6	75.6	71.9	68.4	68.4
Actuated g/C Ratio	0.11	0.06	0.07	0.14	0.13		0.76	0.76	0.76	0.72	0.68	0.68
v/c Ratio	0.08	0.01	0.31	0.32	0.03		0.11	0.24	0.02	0.01	0.30	0.05
Control Delay	35.2	44.0	4.1	39.9	27.5		3.2	3.5	0.0	4.2	9.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	44.0	4.1	39.9	27.5		3.2	3.5	0.0	4.2	9.0	0.1
LOS	D	D	A	D	C		A	A	A	A	A	A
Approach Delay		9.6			38.7			3.4			8.3	
Approach LOS		A			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay: 7.4		Intersection LOS: A	
Intersection Capacity Utilization 45.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Coal Creek Blvd & Main Site Access/Old E. County Line Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	1	65	55	1	5	53	587	25	5	672	56
Future Volume (veh/h)	13	1	65	55	1	5	53	587	25	5	672	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	1	71	60	1	5	58	638	27	5	730	61
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	185	112	111	225	23	116	534	2459	1097	591	2340	1044
Arrive On Green	0.02	0.06	0.07	0.04	0.09	0.09	0.08	1.00	1.00	0.01	0.66	0.66
Sat Flow, veh/h	1781	1870	1585	1781	271	1355	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	14	1	71	60	0	6	58	638	27	5	730	61
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1626	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	0.1	4.4	3.1	0.0	0.3	1.0	0.0	0.0	0.1	8.8	1.4
Cycle Q Clear(g_c), s	0.7	0.1	4.4	3.1	0.0	0.3	1.0	0.0	0.0	0.1	8.8	1.4
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	112	111	225	0	139	534	2459	1097	591	2340	1044
V/C Ratio(X)	0.08	0.01	0.64	0.27	0.00	0.04	0.11	0.26	0.02	0.01	0.31	0.06
Avail Cap(c_a), veh/h	281	337	301	275	0	293	588	2459	1097	704	2340	1044
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	44.2	45.3	41.8	0.0	42.0	4.8	0.0	0.0	5.6	7.3	6.1
Incr Delay (d2), s/veh	0.2	0.0	6.1	0.6	0.0	0.1	0.1	0.3	0.0	0.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.9	1.4	0.0	0.1	0.3	0.1	0.0	0.0	2.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	44.3	51.4	42.4	0.0	42.1	4.9	0.3	0.0	5.6	7.7	6.2
LnGrp LOS	D	D	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		86			66			723			796	
Approach Delay, s/veh		50.0			42.4			0.6			7.6	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	74.2	9.2	11.0	9.0	70.8	6.6	13.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	48.0	7.0	18.0	7.0	48.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	2.1	2.0	5.1	6.4	3.0	10.8	2.7	2.3
Green Ext Time (p_c), s	0.0	4.5	0.0	0.1	0.0	5.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	22	38	1	3	23
Future Vol, veh/h	9	22	38	1	3	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	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	10	24	41	1	3	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	42	0	-	0	86	42
Stage 1	-	-	-	-	42	-
Stage 2	-	-	-	-	44	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1567	-	-	-	920	1029
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	982	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	1567	-	-	-	915	1029
Mov Cap-2 Maneuver	-	-	-	-	915	-
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	982	-

Approach	EB	WB	SB
HCM Control Delay, s	2.1	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1567	-	-	-	1014
HCM Lane V/C Ratio	0.006	-	-	-	0.028
HCM Control Delay (s)	7.3	-	-	-	8.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

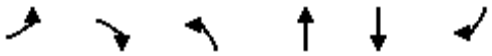
Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	14	9	1	4	30
Future Vol, veh/h	11	14	9	1	4	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	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	12	15	10	1	4	33

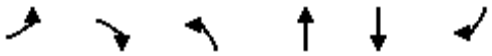
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	11	0	-	0	50	11
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	39	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1608	-	-	-	959	1070
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	983	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1608	-	-	-	952	1070
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	983	-

Approach	EB	WB	SB
HCM Control Delay, s	3.2	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1608	-	-	-	1055
HCM Lane V/C Ratio	0.007	-	-	-	0.035
HCM Control Delay (s)	7.3	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1



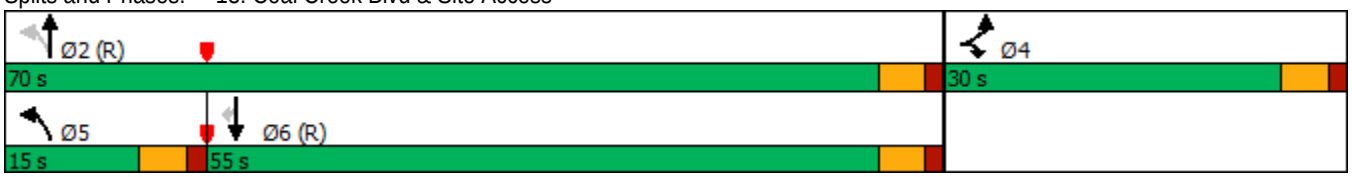
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	29	74	13	633	780	9
Future Volume (vph)	29	74	13	633	780	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	380			275
Storage Lanes	1	1	1			1
Taper Length (ft)	100		100			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.303			
Satd. Flow (perm)	1770	1583	564	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		80				10
Link Speed (mph)	25			45	45	
Link Distance (ft)	387			1156	864	
Travel Time (s)	10.6			17.5	13.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	80	14	688	848	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	32	80	14	688	848	10
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			18	18	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Prot	pm+pt	NA	NA	Perm
Protected Phases	4	4	5	2	6	
Permitted Phases			2			6

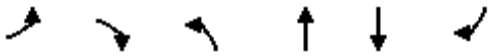


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	10.0	23.0	23.0	23.0
Total Split (s)	30.0	30.0	15.0	70.0	55.0	55.0
Total Split (%)	30.0%	30.0%	15.0%	70.0%	55.0%	55.0%
Maximum Green (s)	25.0	25.0	10.0	65.0	50.0	50.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	7.4	7.4	84.7	85.7	83.5	83.5
Actuated g/C Ratio	0.07	0.07	0.85	0.86	0.84	0.84
v/c Ratio	0.24	0.42	0.03	0.23	0.29	0.01
Control Delay	47.5	17.0	1.5	1.4	1.9	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	17.0	1.5	1.4	1.9	1.0
LOS	D	B	A	A	A	A
Approach Delay	25.7			1.4	1.9	
Approach LOS	C			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 5 (5%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 3.3		Intersection LOS: A	
Intersection Capacity Utilization 34.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: Coal Creek Blvd & Site Access





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	29	74	13	633	780	9
Future Volume (veh/h)	29	74	13	633	780	9
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	80	14	688	848	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	123	109	593	2953	2718	1212
Arrive On Green	0.07	0.07	0.02	0.83	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	32	80	14	688	848	10
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	1.7	4.9	0.2	4.1	0.0	0.0
Cycle Q Clear(g_c), s	1.7	4.9	0.2	4.1	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	123	109	593	2953	2718	1212
V/C Ratio(X)	0.26	0.73	0.02	0.23	0.31	0.01
Avail Cap(c_a), veh/h	445	396	743	2953	2718	1212
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.86	0.86	0.96	0.96
Uniform Delay (d), s/veh	44.1	45.6	2.0	1.8	0.0	0.0
Incr Delay (d2), s/veh	1.1	9.0	0.0	0.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.6	0.0	0.5	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.2	54.7	2.0	1.9	0.3	0.0
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	112			702	858	
Approach Delay, s/veh	52.0			1.9	0.3	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		88.1		11.9	6.6	81.5
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		65.0		25.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		6.1		6.9	2.2	2.0
Green Ext Time (p_c), s		4.9		0.3	0.0	6.4

Intersection Summary	
HCM 6th Ctrl Delay	4.4
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	0.5

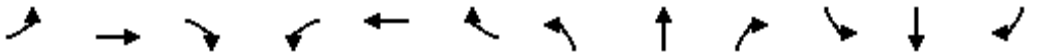
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	43	520	47	40	879
Future Vol, veh/h	0	43	520	47	40	879
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	225	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	47	565	51	43	955

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	283	0	0	616	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	*893	-	-	1221	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	-	-	1	-
Mov Cap-1 Maneuver	-	*893	-	-	1221	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	893	1221	-
HCM Lane V/C Ratio	-	-	0.052	0.036	-
HCM Control Delay (s)	-	-	9.3	8.1	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

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

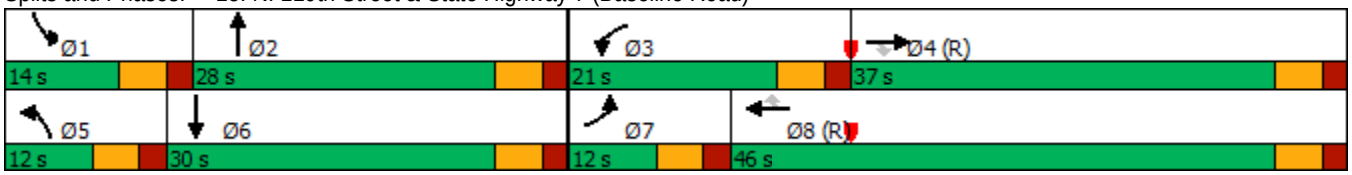


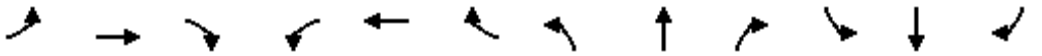
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	123	450	65	492	887	225	75	217	197	185	530	164
Future Volume (vph)	123	450	65	492	887	225	75	217	197	185	530	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		275	230		275	300		275	530		225
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			207			245			267			267
Link Speed (mph)		55			55			40			40	
Link Distance (ft)		768			363			733			1133	
Travel Time (s)		9.5			4.5			12.5			19.3	
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
Adj. Flow (vph)	134	489	71	535	964	245	82	236	214	201	576	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	134	489	71	535	964	245	82	236	214	201	576	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (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
Detector 1 Queue (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
Detector 1 Delay (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
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			Free			Free

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	10.5	23.5	23.5	10.5	23.5		10.5	23.5	
Total Split (s)	12.0	37.0	37.0	21.0	46.0	46.0	12.0	28.0		14.0	30.0	
Total Split (%)	12.0%	37.0%	37.0%	21.0%	46.0%	46.0%	12.0%	28.0%		14.0%	30.0%	
Maximum Green (s)	6.5	31.5	31.5	15.5	40.5	40.5	6.5	22.5		8.5	24.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	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	-1.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5	5.5	5.5	5.5		5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	7.4	33.9	33.9	18.5	44.0	44.0	6.4	18.2	100.0	8.4	22.5	100.0
Actuated g/C Ratio	0.07	0.34	0.34	0.18	0.44	0.44	0.06	0.18	1.00	0.08	0.22	1.00
v/c Ratio	0.53	0.41	0.11	0.84	0.62	0.29	0.38	0.37	0.14	0.70	0.72	0.11
Control Delay	52.7	27.5	0.3	64.1	9.1	0.8	50.0	36.4	0.2	44.9	36.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.7	27.5	0.3	64.1	9.1	0.8	50.0	36.4	0.2	44.9	36.1	0.1
LOS	D	C	A	E	A	A	D	D	A	D	D	A
Approach Delay		29.6			24.8			23.9			31.2	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 48 (48%), Referenced to phase 4:EBT and 8:WBT, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 27.1		Intersection LOS: C	
Intersection Capacity Utilization 65.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 15: N. 119th Street & State Highway 7 (Baseline Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	450	65	492	887	225	75	217	197	185	530	164
Future Volume (veh/h)	123	450	65	492	887	225	75	217	197	185	530	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	489	71	535	964	245	82	236	0	201	576	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	197	1366	609	570	1715	765	155	581		267	696	
Arrive On Green	0.06	0.38	0.38	0.17	0.48	0.48	0.04	0.16	0.00	0.08	0.20	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	134	489	71	535	964	245	82	236	0	201	576	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	3.8	9.8	2.9	15.3	19.3	9.5	2.3	6.0	0.0	5.7	15.6	0.0
Cycle Q Clear(g_c), s	3.8	9.8	2.9	15.3	19.3	9.5	2.3	6.0	0.0	5.7	15.6	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	197	1366	609	570	1715	765	155	581		267	696	
V/C Ratio(X)	0.68	0.36	0.12	0.94	0.56	0.32	0.53	0.41		0.75	0.83	
Avail Cap(c_a), veh/h	225	1366	609	570	1715	765	225	800		294	871	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.3	22.0	19.8	41.2	18.4	15.8	46.7	37.5	0.0	45.2	38.6	0.0
Incr Delay (d2), s/veh	6.9	0.7	0.4	23.5	1.3	1.1	2.8	0.5	0.0	9.6	5.5	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	1.7	3.8	1.0	7.9	7.2	3.2	1.0	2.6	0.0	2.7	7.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.2	22.7	20.2	64.7	19.7	16.9	49.5	37.9	0.0	54.8	44.1	0.0
LnGrp LOS	D	C	C	E	B	B	D	D		D	D	
Approach Vol, veh/h		694			1744			318	A		777	A
Approach Delay, s/veh		28.3			33.1			40.9			46.8	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	21.8	21.0	43.9	10.0	25.1	11.2	53.8
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	8.5	22.5	15.5	31.5	6.5	24.5	6.5	40.5
Max Q Clear Time (g_c+I1), s	7.7	8.0	17.3	11.8	4.3	17.6	5.8	21.3
Green Ext Time (p_c), s	0.1	1.1	0.0	2.8	0.0	2.0	0.0	6.6

Intersection Summary	
HCM 6th Ctrl Delay	35.9
HCM 6th LOS	D

Notes

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

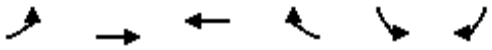
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	831	1544	48	0	59
Future Vol, veh/h	0	831	1544	48	0	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	903	1678	52	0	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

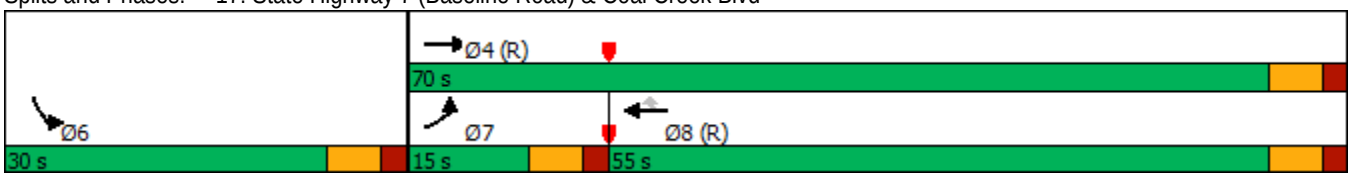


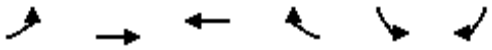
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	156	675	1225	492	486	369
Future Volume (vph)	156	675	1225	492	486	369
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	580			380	280	0
Storage Lanes	2			1	1	1
Taper Length (ft)	100				100	
Lane Util. Factor	0.97	0.95	0.95	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	3539	3539	1583	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	3539	3539	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				535		401
Link Speed (mph)		55	55		45	
Link Distance (ft)		1410	1068		1156	
Travel Time (s)		17.5	13.2		17.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	170	734	1332	535	528	401
Shared Lane Traffic (%)						
Lane Group Flow (vph)	170	734	1332	535	528	401
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector Phase	7	4	8	8	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	12.0	25.0	24.0	24.0	24.0	
Total Split (s)	15.0	70.0	55.0	55.0	30.0	
Total Split (%)	15.0%	70.0%	55.0%	55.0%	30.0%	
Maximum Green (s)	9.0	64.0	49.0	49.0	24.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	None	
Walk Time (s)		7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	
Act Effct Green (s)	9.3	67.8	52.5	52.5	20.2	100.0
Actuated g/C Ratio	0.09	0.68	0.52	0.52	0.20	1.00
v/c Ratio	0.54	0.31	0.72	0.49	0.76	0.25
Control Delay	47.7	2.5	21.5	3.0	42.1	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.7	2.5	21.5	3.0	42.1	0.5
LOS	D	A	C	A	D	A
Approach Delay		11.0	16.2		24.2	
Approach LOS		B	B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 67.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 17: State Highway 7 (Baseline Road) & Coal Creek Blvd





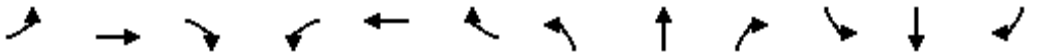
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	156	675	1225	492	486	369
Future Volume (veh/h)	156	675	1225	492	486	369
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	170	734	1332	535	528	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	237	2489	2032	906	621	
Arrive On Green	0.07	0.70	0.57	0.57	0.18	0.00
Sat Flow, veh/h	3456	3647	3647	1585	3456	1585
Grp Volume(v), veh/h	170	734	1332	535	528	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1777	1585	1728	1585
Q Serve(g_s), s	4.8	7.8	25.7	21.8	14.8	0.0
Cycle Q Clear(g_c), s	4.8	7.8	25.7	21.8	14.8	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	237	2489	2032	906	621	
V/C Ratio(X)	0.72	0.29	0.66	0.59	0.85	
Avail Cap(c_a), veh/h	311	2489	2032	906	829	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.96	0.00
Uniform Delay (d), s/veh	45.6	5.7	14.7	13.8	39.7	0.0
Incr Delay (d2), s/veh	5.4	0.3	1.7	2.8	6.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	2.1	8.9	7.1	6.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.0	6.0	16.3	16.7	45.9	0.0
LnGrp LOS	D	A	B	B	D	
Approach Vol, veh/h		904	1867		528	A
Approach Delay, s/veh		14.4	16.4		45.9	
Approach LOS		B	B		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			76.0		24.0	12.9	63.2
Change Period (Y+Rc), s			6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s			64.0		24.0	9.0	49.0
Max Q Clear Time (g_c+I1), s			9.8		16.8	6.8	27.7
Green Ext Time (p_c), s			4.9		1.2	0.1	11.3

Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

Notes

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

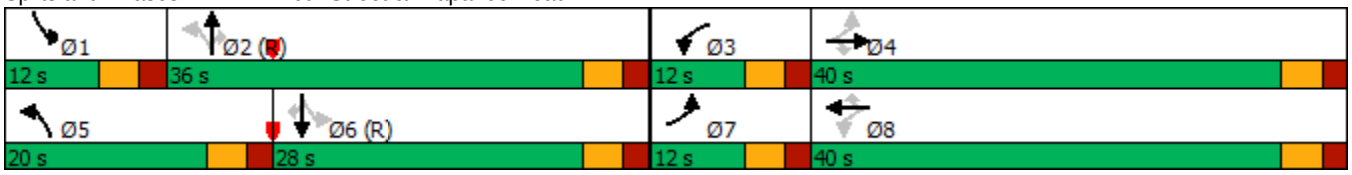


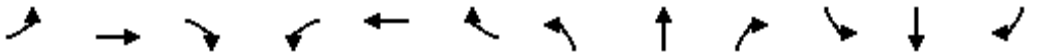
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	475	489	60	321	37	297	484	65	46	423	190
Future Volume (vph)	220	475	489	60	321	37	297	484	65	46	423	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		150	90		150	365		150	90		230
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
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	1770	3539	1583	1770	3539	1583
Flt Permitted	0.435			0.330			0.358			0.457		
Satd. Flow (perm)	810	3539	1583	615	3539	1583	667	3539	1583	851	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			440			185			131			207
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		636			2736			2089			552	
Travel Time (s)		10.8			46.6			35.6			9.4	
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
Adj. Flow (vph)	239	516	532	65	349	40	323	526	71	50	460	207
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	516	532	65	349	40	323	526	71	50	460	207
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (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
Detector 1 Queue (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
Detector 1 Delay (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
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	40.0	40.0	12.0	40.0	40.0	20.0	36.0	36.0	12.0	28.0	28.0
Total Split (%)	12.0%	40.0%	40.0%	12.0%	40.0%	40.0%	20.0%	36.0%	36.0%	12.0%	28.0%	28.0%
Maximum Green (s)	7.0	35.0	35.0	7.0	35.0	35.0	15.0	31.0	31.0	7.0	23.0	23.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	31.0	25.4	26.4	29.7	23.0	23.0	55.0	45.3	45.3	41.6	34.8	34.8
Actuated g/C Ratio	0.31	0.25	0.26	0.30	0.23	0.23	0.55	0.45	0.45	0.42	0.35	0.35
v/c Ratio	0.75	0.57	0.72	0.25	0.43	0.08	0.60	0.33	0.09	0.12	0.37	0.30
Control Delay	41.0	34.8	12.0	23.1	33.9	0.3	8.6	9.5	3.1	15.0	28.1	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	34.8	12.0	23.1	33.9	0.3	8.6	9.5	3.1	15.0	28.1	5.8
LOS	D	C	B	C	C	A	A	A	A	B	C	A
Approach Delay		26.5			29.4			8.7			20.8	
Approach LOS		C			C			A			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 84 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 20.8		Intersection LOS: C	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: N. 119th Street & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	475	489	60	321	37	297	484	65	46	423	190
Future Volume (veh/h)	220	475	489	60	321	37	297	484	65	46	423	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	239	516	532	65	349	40	323	526	71	50	460	207
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	441	1236	567	274	1135	506	449	1325	591	333	951	424
Arrive On Green	0.07	0.35	0.36	0.04	0.32	0.32	0.05	0.12	0.12	0.04	0.27	0.27
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	239	516	532	65	349	40	323	526	71	50	460	207
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	7.0	11.1	32.4	2.4	7.4	1.8	12.2	13.6	4.0	2.0	10.9	11.0
Cycle Q Clear(g_c), s	7.0	11.1	32.4	2.4	7.4	1.8	12.2	13.6	4.0	2.0	10.9	11.0
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	441	1236	567	274	1135	506	449	1325	591	333	951	424
V/C Ratio(X)	0.54	0.42	0.94	0.24	0.31	0.08	0.72	0.40	0.12	0.15	0.48	0.49
Avail Cap(c_a), veh/h	441	1244	571	324	1244	555	461	1325	591	391	951	424
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	24.9	31.0	21.6	25.7	23.8	23.6	33.5	29.2	24.9	30.8	30.9
Incr Delay (d2), s/veh	1.4	0.2	23.4	0.4	0.2	0.1	5.0	0.8	0.4	0.2	1.8	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	4.5	15.3	1.0	3.0	0.6	6.2	6.6	1.6	0.8	4.7	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	25.1	54.5	22.0	25.8	23.8	28.6	34.3	29.6	25.1	32.6	34.8
LnGrp LOS	C	C	D	C	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1287			454			920			717	
Approach Delay, s/veh		37.2			25.1			32.0			32.7	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	42.3	9.2	39.8	19.3	31.8	12.0	36.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	31.0	7.0	35.0	15.0	23.0	7.0	35.0
Max Q Clear Time (g_c+I1), s	4.0	15.6	4.4	34.4	14.2	13.0	9.0	9.4
Green Ext Time (p_c), s	0.0	3.1	0.0	0.3	0.1	2.6	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	33.2
HCM 6th LOS	C

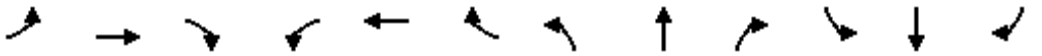
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	81	409	33	10	342	18	21	0	8	5	0	43
Future Vol, veh/h	81	409	33	10	342	18	21	0	8	5	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	250	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	88	445	36	11	372	20	23	0	9	5	0	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	392	0	0	481	0	0	847	1053	241	803	1061	196
Stage 1	-	-	-	-	-	-	639	639	-	404	404	-
Stage 2	-	-	-	-	-	-	208	414	-	399	657	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1163	-	-	1078	-	-	255	225	760	275	222	812
Stage 1	-	-	-	-	-	-	431	469	-	594	598	-
Stage 2	-	-	-	-	-	-	775	591	-	598	460	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1163	-	-	1078	-	-	225	206	760	254	203	812
Mov Cap-2 Maneuver	-	-	-	-	-	-	225	206	-	254	203	-
Stage 1	-	-	-	-	-	-	398	433	-	549	592	-
Stage 2	-	-	-	-	-	-	723	585	-	546	425	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.2	19.2	10.7
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	225	760	1163	-	-	1078	-	-	254	812
HCM Lane V/C Ratio	0.101	0.011	0.076	-	-	0.01	-	-	0.021	0.058
HCM Control Delay (s)	22.8	9.8	8.3	-	-	8.4	-	-	19.5	9.7
HCM Lane LOS	C	A	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.3	0	0.2	-	-	0	-	-	0.1	0.2

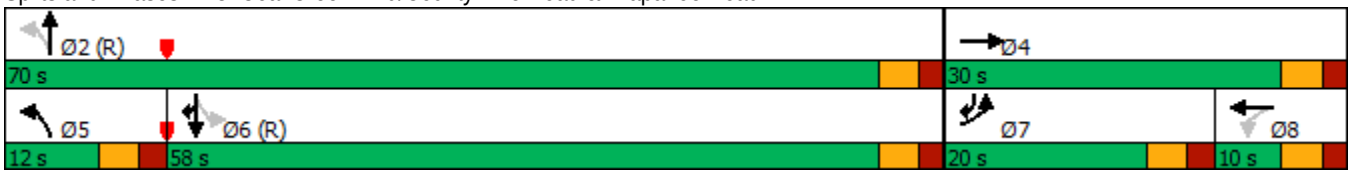


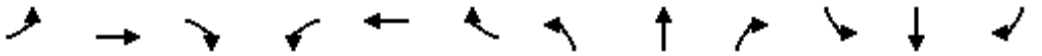
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	1	154	1	1	1	137	600	1	1	521	235
Future Volume (vph)	268	1	154	1	1	1	137	600	1	1	521	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	0		0	150		0	150		150
Storage Lanes	1		0	0		0	2		0	1		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.851			0.955							0.850
Flt Protected	0.950				0.984		0.950			0.950		
Satd. Flow (prot)	3433	1585	0	0	1750	0	1770	3539	0	1770	3539	1583
Flt Permitted	0.950						0.383			0.404		
Satd. Flow (perm)	3433	1585	0	0	1779	0	713	3539	0	753	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		167			1							255
Link Speed (mph)		40			25			45			45	
Link Distance (ft)		1749			776			1338			543	
Travel Time (s)		29.8			21.2			20.3			8.2	
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
Adj. Flow (vph)	291	1	167	1	1	1	149	652	1	1	566	255
Shared Lane Traffic (%)												
Lane Group Flow (vph)	291	168	0	0	3	0	149	653	0	1	566	255
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Perm	NA		pm+pt	NA		Perm	NA	pt+ov
Protected Phases	7	4			8		5	2			6	6 7
Permitted Phases				8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2		6	6	6 7
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Total Split (s)	20.0	30.0		10.0	10.0		12.0	70.0		58.0	58.0	
Total Split (%)	20.0%	30.0%		10.0%	10.0%		12.0%	70.0%		58.0%	58.0%	
Maximum Green (s)	15.0	25.0		5.0	5.0		7.0	65.0		53.0	53.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Act Effct Green (s)	13.2	15.2			5.3		74.8	74.8		62.6	62.6	80.8
Actuated g/C Ratio	0.13	0.15			0.05		0.75	0.75		0.63	0.63	0.81
v/c Ratio	0.64	0.44			0.03		0.24	0.25		0.00	0.26	0.19
Control Delay	30.3	4.3			41.0		5.3	4.7		10.0	9.5	0.8
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	30.3	4.3			41.0		5.3	4.7		10.0	9.5	0.8
LOS	C	A			D		A	A		A	A	A
Approach Delay		20.7			41.0			4.8			6.8	
Approach LOS		C			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 9.2		Intersection LOS: A	
Intersection Capacity Utilization 48.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Coal Creek Blvd/County Line Road & Arapahoe Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	268	1	154	1	1	1	137	600	1	1	521	235
Future Volume (veh/h)	268	1	154	1	1	1	137	600	1	1	521	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	291	1	167	1	1	1	149	652	1	1	566	255
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	368	2	325	60	42	27	506	2527	4	535	2109	1109
Arrive On Green	0.11	0.21	0.21	0.05	0.05	0.05	0.05	0.69	0.69	0.59	0.59	0.59
Sat Flow, veh/h	3456	9	1577	247	847	547	1781	3641	6	779	3554	1585
Grp Volume(v), veh/h	291	0	168	3	0	0	149	318	335	1	566	255
Grp Sat Flow(s),veh/h/ln	1728	0	1586	1640	0	0	1781	1777	1869	779	1777	1585
Q Serve(g_s), s	8.2	0.0	9.4	0.0	0.0	0.0	3.1	6.7	6.7	0.1	7.7	5.8
Cycle Q Clear(g_c), s	8.2	0.0	9.4	0.2	0.0	0.0	3.1	6.7	6.7	0.1	7.7	5.8
Prop In Lane	1.00		0.99	0.33		0.33	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	368	0	327	129	0	0	506	1233	1297	535	2109	1109
V/C Ratio(X)	0.79	0.00	0.51	0.02	0.00	0.00	0.29	0.26	0.26	0.00	0.27	0.23
Avail Cap(c_a), veh/h	518	0	397	130	0	0	541	1233	1297	535	2109	1109
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	0.0	35.3	45.2	0.0	0.0	6.8	5.7	5.7	8.3	9.8	5.4
Incr Delay (d2), s/veh	5.5	0.0	1.3	0.1	0.0	0.0	0.3	0.5	0.5	0.0	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	3.6	0.1	0.0	0.0	1.0	2.1	2.2	0.0	2.7	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	0.0	36.5	45.3	0.0	0.0	7.1	6.2	6.2	8.3	10.1	5.8
LnGrp LOS	D	A	D	D	A	A	A	A	A	A	B	A
Approach Vol, veh/h		459			3			802			822	
Approach Delay, s/veh		44.5			45.3			6.4			8.8	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		74.4		25.6	10.0	64.4	15.6	10.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s		65.0		25.0	7.0	53.0	15.0	5.0				
Max Q Clear Time (g_c+I1), s		8.7		11.4	5.1	9.7	10.2	2.2				
Green Ext Time (p_c), s		3.9		0.7	0.1	4.8	0.4	0.0				

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

Intersection	
Int Delay, s/veh	0.3

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	15	730	1	8	662	3	1	0	5	2	0	12
Future Vol, veh/h	15	730	1	8	662	3	1	0	5	2	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	793	1	9	720	3	1	0	5	2	0	13

Major/Minor	Major1			Major2			Minor2			Minor1		
Conflicting Flow All	723	0	0	794	0	0	1169	1566	362	1204	1567	397
Stage 1	-	-	-	-	-	-	740	740	-	826	826	-
Stage 2	-	-	-	-	-	-	429	826	-	378	741	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	875	-	-	823	-	-	148	110	635	140	110	602
Stage 1	-	-	-	-	-	-	375	421	-	332	385	-
Stage 2	-	-	-	-	-	-	574	385	-	616	421	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	875	-	-	823	-	-	142	107	635	136	107	602
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	107	-	136	107	-
Stage 1	-	-	-	-	-	-	368	416	-	326	378	-
Stage 2	-	-	-	-	-	-	551	378	-	604	416	-

Approach	NB	SB	SE	NW
HCM Control Delay, s	0.2	0.1	14.1	14.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBL	NBT	NBR	NWLn1	SELn1	SBL	SBT	SBR
Capacity (veh/h)	875	-	-	404	402	823	-	-
HCM Lane V/C Ratio	0.019	-	-	0.038	0.016	0.011	-	-
HCM Control Delay (s)	9.2	-	-	14.3	14.1	9.4	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	729	25	0	664	6	0	0	19	0	0	33
Future Vol, veh/h	0	729	25	0	664	6	0	0	19	0	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	792	27	0	722	7	0	0	21	0	0	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	396	-	-	365
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	603	0	0	632
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	603	-	-	632
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	11.2	11
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	603	-	-	-	-	632
HCM Lane V/C Ratio	0.034	-	-	-	-	0.057
HCM Control Delay (s)	11.2	-	-	-	-	11
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.2

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	2	1	2	2
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	83	51	947	760
Demand Flow Rate, veh/h	84	52	966	775
Vehicles Circulating, veh/h	797	952	73	165
Vehicles Exiting, veh/h	143	87	808	839
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.1	8.3	12.3	10.9
Approach LOS	A	A	B	B

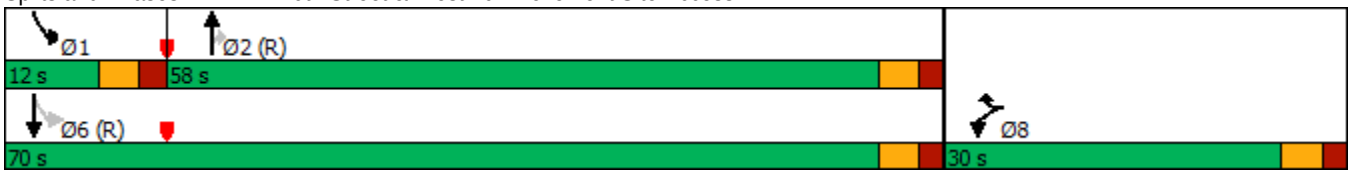
Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	LT	R	LT	R
Assumed Moves	LT	R	LTR	LT	R	LT	R
RT Channelized							
Lane Util	0.250	0.750	1.000	0.971	0.029	0.985	0.015
Follow-Up Headway, s	2.535	2.535	2.609	2.535	2.535	2.535	2.535
Critical Headway, s	4.544	4.544	4.976	4.544	4.544	4.544	4.544
Entry Flow, veh/h	21	63	52	938	28	763	12
Cap Entry Lane, veh/h	688	688	523	1329	1329	1222	1222
Entry HV Adj Factor	0.993	0.984	0.978	0.981	0.964	0.980	1.000
Flow Entry, veh/h	21	62	51	920	27	748	12
Cap Entry, veh/h	683	677	511	1303	1281	1198	1222
V/C Ratio	0.031	0.092	0.100	0.706	0.021	0.624	0.010
Control Delay, s/veh	5.6	6.3	8.3	12.6	3.0	11.0	3.0
LOS	A	A	A	B	A	B	A
95th %tile Queue, veh	0	0	0	6	0	5	0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	72	49	800	112	88	885
Future Volume (vph)	72	49	800	112	88	885
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0		225	325	
Storage Lanes	1	1		1	1	
Taper Length (ft)	100				100	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.283	
Satd. Flow (perm)	1770	1583	3539	1583	527	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		53		122		
Link Speed (mph)	25		40			40
Link Distance (ft)	491		2094			2089
Travel Time (s)	13.4		35.7			35.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	78	53	870	122	96	962
Shared Lane Traffic (%)						
Lane Group Flow (vph)	78	53	870	122	96	962
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		24			24
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Prot	NA	Perm	pm+pt	NA
Protected Phases	8	8	2		1	6
Permitted Phases				2	6	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	30.0	30.0	58.0	58.0	12.0	70.0
Total Split (%)	30.0%	30.0%	58.0%	58.0%	12.0%	70.0%
Maximum Green (s)	25.0	25.0	53.0	53.0	7.0	65.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	9.8	9.8	73.9	73.9	82.4	83.4
Actuated g/C Ratio	0.10	0.10	0.74	0.74	0.82	0.83
v/c Ratio	0.45	0.26	0.33	0.10	0.19	0.33
Control Delay	50.1	14.7	3.0	0.3	1.7	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.1	14.7	3.0	0.3	1.7	1.4
LOS	D	B	A	A	A	A
Approach Delay	35.7		2.7			1.4
Approach LOS	D		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 32 (32%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 4.0		Intersection LOS: A	
Intersection Capacity Utilization 43.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: N. 119th Street & West Full Movement Site Access



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	72	49	800	112	88	885
Future Volume (veh/h)	72	49	800	112	88	885
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	53	870	122	96	962
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	115	102	2627	1172	526	2970
Arrive On Green	0.06	0.06	0.74	0.74	0.03	0.56
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	78	53	870	122	96	962
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	4.3	3.2	8.5	2.2	1.1	14.6
Cycle Q Clear(g_c), s	4.3	3.2	8.5	2.2	1.1	14.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	115	102	2627	1172	526	2970
V/C Ratio(X)	0.68	0.52	0.33	0.10	0.18	0.32
Avail Cap(c_a), veh/h	445	396	2627	1172	568	2970
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.83	0.83
Uniform Delay (d), s/veh	45.8	45.3	4.5	3.7	2.7	6.8
Incr Delay (d2), s/veh	6.9	4.1	0.3	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.4	2.4	0.6	0.2	5.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	52.7	49.3	4.8	3.9	2.8	7.1
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	131		992			1058
Approach Delay, s/veh	51.3		4.7			6.7
Approach LOS	D		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.7	78.9			88.6	11.4
Change Period (Y+Rc), s	5.0	5.0			5.0	5.0
Max Green Setting (Gmax), s	7.0	53.0			65.0	25.0
Max Q Clear Time (g_c+I1), s	3.1	10.5			16.6	6.3
Green Ext Time (p_c), s	0.1	7.4			8.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	41	109	50	13	68	17	29	0	8	15	0	24
Future Vol, veh/h	41	109	50	13	68	17	29	0	8	15	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	118	54	14	74	18	32	0	9	16	0	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	92	0	0	172	0	0	359	355	145	351	373	83
Stage 1	-	-	-	-	-	-	235	235	-	111	111	-
Stage 2	-	-	-	-	-	-	124	120	-	240	262	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1503	-	-	1405	-	-	596	571	902	604	557	976
Stage 1	-	-	-	-	-	-	768	710	-	894	804	-
Stage 2	-	-	-	-	-	-	880	796	-	763	691	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1503	-	-	1405	-	-	561	546	902	578	532	976
Mov Cap-2 Maneuver	-	-	-	-	-	-	561	546	-	578	532	-
Stage 1	-	-	-	-	-	-	743	687	-	864	795	-
Stage 2	-	-	-	-	-	-	847	787	-	731	668	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	1	11.3	9.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	611	1503	-	-	1405	-	-	772
HCM Lane V/C Ratio	0.066	0.03	-	-	0.01	-	-	0.055
HCM Control Delay (s)	11.3	7.5	0	-	7.6	0	-	9.9
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	10	1	10	73	26	1	1	5	39	1	13
Future Vol, veh/h	22	10	1	10	73	26	1	1	5	39	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	11	1	11	79	28	1	1	5	42	1	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	107	0	0	12	0	0	183	189	12	178	175	93
Stage 1	-	-	-	-	-	-	60	60	-	115	115	-
Stage 2	-	-	-	-	-	-	123	129	-	63	60	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1484	-	-	1607	-	-	778	706	1069	784	718	964
Stage 1	-	-	-	-	-	-	951	845	-	890	800	-
Stage 2	-	-	-	-	-	-	881	789	-	948	845	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1484	-	-	1607	-	-	752	690	1069	765	701	964
Mov Cap-2 Maneuver	-	-	-	-	-	-	752	690	-	765	701	-
Stage 1	-	-	-	-	-	-	936	831	-	876	794	-
Stage 2	-	-	-	-	-	-	861	783	-	927	831	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5	0.7	8.9	9.8
HCM LOS			A	A

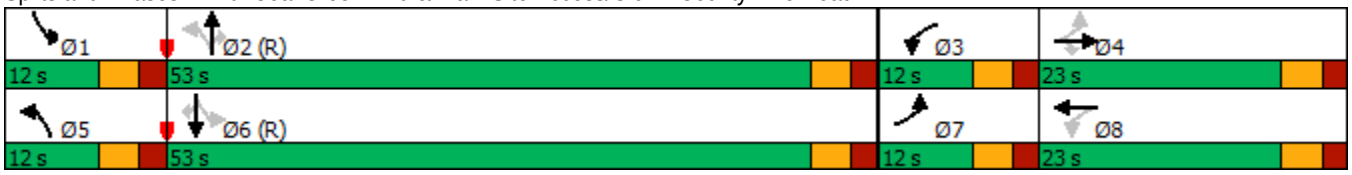
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	939	1484	-	-	1607	-	-	804
HCM Lane V/C Ratio	0.008	0.016	-	-	0.007	-	-	0.072
HCM Control Delay (s)	8.9	7.5	0	-	7.3	0	-	9.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

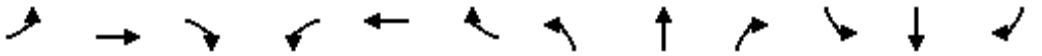
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	1	44	55	1	5	80	865	75	5	702	28
Future Volume (vph)	9	1	44	55	1	5	80	865	75	5	702	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	150		0	355		275	300		275
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.875				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1630	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.754			0.490			0.302			0.287		
Satd. Flow (perm)	1405	1863	1583	913	1630	0	563	3539	1583	535	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			131		5				131			131
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		557			814			864			533	
Travel Time (s)		15.2			22.2			13.1			8.1	
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
Adj. Flow (vph)	10	1	48	60	1	5	87	940	82	5	763	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	1	48	60	6	0	87	940	82	5	763	30
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			18			18	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	12.0	23.0	23.0	12.0	23.0		12.0	53.0	53.0	12.0	53.0	53.0
Total Split (%)	12.0%	23.0%	23.0%	12.0%	23.0%		12.0%	53.0%	53.0%	12.0%	53.0%	53.0%
Maximum Green (s)	7.0	18.0	18.0	7.0	18.0		7.0	48.0	48.0	7.0	48.0	48.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	-1.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	10.7	5.8	6.8	14.4	13.0		76.2	75.6	75.6	71.4	67.9	67.9
Actuated g/C Ratio	0.11	0.06	0.07	0.14	0.13		0.76	0.76	0.76	0.71	0.68	0.68
v/c Ratio	0.06	0.01	0.21	0.32	0.03		0.17	0.35	0.07	0.01	0.32	0.03
Control Delay	34.8	44.0	2.1	39.9	27.5		2.7	3.0	0.1	4.4	9.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.8	44.0	2.1	39.9	27.5		2.7	3.0	0.1	4.4	9.4	0.0
LOS	C	D	A	D	C		A	A	A	A	A	A
Approach Delay		8.3			38.7			2.8			9.0	
Approach LOS		A			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 6.6		Intersection LOS: A	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Coal Creek Blvd & Main Site Access/Old E. County Line Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	1	44	55	1	5	80	865	75	5	702	28
Future Volume (veh/h)	9	1	44	55	1	5	80	865	75	5	702	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	1	48	60	1	5	87	940	82	5	763	30
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	153	79	82	204	20	98	550	2520	1124	453	2382	1062
Arrive On Green	0.01	0.04	0.05	0.04	0.07	0.07	0.09	1.00	1.00	0.01	0.67	0.67
Sat Flow, veh/h	1781	1870	1585	1781	271	1355	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	10	1	48	60	0	6	87	940	82	5	763	30
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1626	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.5	0.1	3.0	3.2	0.0	0.3	1.4	0.0	0.0	0.1	9.0	0.6
Cycle Q Clear(g_c), s	0.5	0.1	3.0	3.2	0.0	0.3	1.4	0.0	0.0	0.1	9.0	0.6
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	79	82	204	0	117	550	2520	1124	453	2382	1062
V/C Ratio(X)	0.07	0.01	0.58	0.29	0.00	0.05	0.16	0.37	0.07	0.01	0.32	0.03
Avail Cap(c_a), veh/h	256	337	301	253	0	293	593	2520	1124	566	2382	1062
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	45.9	46.3	43.4	0.0	43.2	4.3	0.0	0.0	5.2	6.9	5.5
Incr Delay (d2), s/veh	0.2	0.1	6.3	0.8	0.0	0.2	0.1	0.4	0.1	0.0	0.4	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	0.2	0.0	1.3	1.5	0.0	0.1	0.4	0.1	0.0	0.0	2.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	46.0	52.7	44.2	0.0	43.4	4.4	0.4	0.1	5.3	7.3	5.6
LnGrp LOS	D	D	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		59			66			1109			798	
Approach Delay, s/veh		51.3			44.1			0.7			7.2	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	75.9	9.2	9.2	9.6	72.0	6.2	12.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	48.0	7.0	18.0	7.0	48.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	2.1	2.0	5.2	5.0	3.4	11.0	2.5	2.3
Green Ext Time (p_c), s	0.0	7.7	0.0	0.1	0.0	5.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	48	38	4	2	23
Future Vol, veh/h	33	48	38	4	2	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	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	36	52	41	4	2	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	45	0	-	0	167	43
Stage 1	-	-	-	-	43	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1563	-	-	-	828	1027
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	904	-
Platoon blocked, %		-	-	-	1	
Mov Cap-1 Maneuver	1563	-	-	-	809	1027
Mov Cap-2 Maneuver	-	-	-	-	809	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	904	-

Approach	EB	WB	SB
HCM Control Delay, s	3	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1563	-	-	-	1005
HCM Lane V/C Ratio	0.023	-	-	-	0.027
HCM Control Delay (s)	7.4	-	-	-	8.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

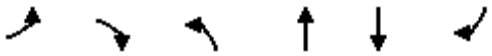
Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	13	15	4	3	27
Future Vol, veh/h	37	13	15	4	3	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	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	40	14	16	4	3	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	20	0	-	0	112	18
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	94	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1596	-	-	-	885	1061
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1596	-	-	-	863	1061
Mov Cap-2 Maneuver	-	-	-	-	863	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	930	-

Approach	EB	WB	SB
HCM Control Delay, s	5.4	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1596	-	-	-	1037
HCM Lane V/C Ratio	0.025	-	-	-	0.031
HCM Control Delay (s)	7.3	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

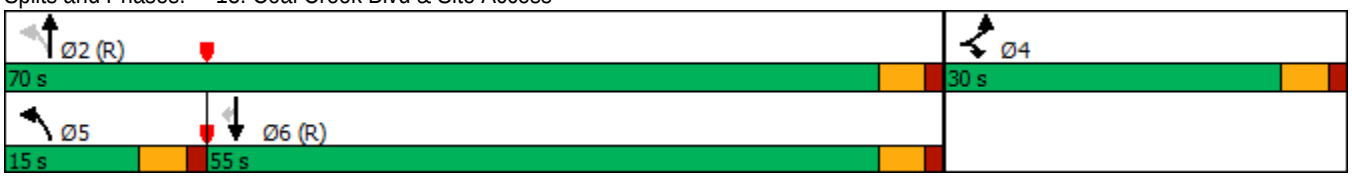


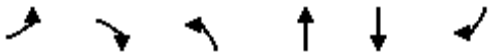
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	88	118	43	935	774	28
Future Volume (vph)	88	118	43	935	774	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	380			275
Storage Lanes	1	1	1			1
Taper Length (ft)	100		100			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.292			
Satd. Flow (perm)	1770	1583	544	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		128				30
Link Speed (mph)	25			45	45	
Link Distance (ft)	387			1156	864	
Travel Time (s)	10.6			17.5	13.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	96	128	47	1016	841	30
Shared Lane Traffic (%)						
Lane Group Flow (vph)	96	128	47	1016	841	30
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			18	18	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Prot	pm+pt	NA	NA	Perm
Protected Phases	4	4	5	2	6	
Permitted Phases			2			6

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	10.0	23.0	23.0	23.0
Total Split (s)	30.0	30.0	15.0	70.0	55.0	55.0
Total Split (%)	30.0%	30.0%	15.0%	70.0%	55.0%	55.0%
Maximum Green (s)	25.0	25.0	10.0	65.0	50.0	50.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	10.8	10.8	79.2	79.2	72.4	72.4
Actuated g/C Ratio	0.11	0.11	0.79	0.79	0.72	0.72
v/c Ratio	0.51	0.45	0.09	0.36	0.33	0.03
Control Delay	50.6	12.5	1.8	2.4	3.3	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	12.5	1.8	2.4	3.3	0.5
LOS	D	B	A	A	A	A
Approach Delay	28.9			2.3	3.2	
Approach LOS	C			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 5 (5%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 5.5		Intersection LOS: A	
Intersection Capacity Utilization 42.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: Coal Creek Blvd & Site Access





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	88	118	43	935	774	28
Future Volume (veh/h)	88	118	43	935	774	28
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	128	47	1016	841	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	186	165	588	2828	2520	1124
Arrive On Green	0.10	0.10	0.04	0.80	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	96	128	47	1016	841	30
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	5.1	7.9	0.6	8.2	0.0	0.0
Cycle Q Clear(g_c), s	5.1	7.9	0.6	8.2	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	186	165	588	2828	2520	1124
V/C Ratio(X)	0.52	0.77	0.08	0.36	0.33	0.03
Avail Cap(c_a), veh/h	445	396	701	2828	2520	1124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.63	0.63	0.96	0.96
Uniform Delay (d), s/veh	42.4	43.6	2.8	2.9	0.0	0.0
Incr Delay (d2), s/veh	2.2	7.5	0.0	0.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	7.1	0.1	1.6	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.6	51.1	2.9	3.1	0.3	0.0
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	224			1063	871	
Approach Delay, s/veh	48.3			3.1	0.3	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		84.6		15.4	8.6	75.9
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		65.0		25.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		10.2		9.9	2.6	2.0
Green Ext Time (p_c), s		8.3		0.6	0.0	6.4

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	1.2

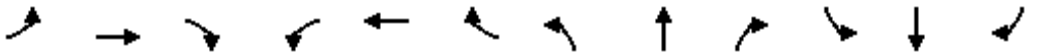
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	114	796	146	124	835
Future Vol, veh/h	0	114	796	146	124	835
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	225	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	124	865	159	135	908

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	433	0	0	1024	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	*770	-	-	956	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	-	-	1	-
Mov Cap-1 Maneuver	-	*770	-	-	956	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	770	956	-
HCM Lane V/C Ratio	-	-	0.161	0.141	-
HCM Control Delay (s)	-	-	10.6	9.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.5	-

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

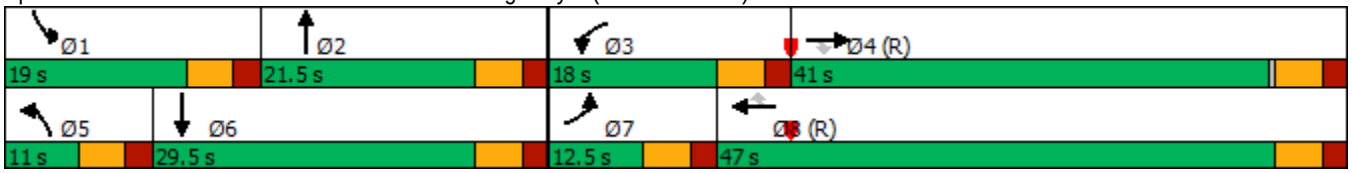


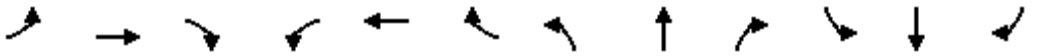
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	260	944	75	354	1416	275	100	491	453	465	254	116
Future Volume (vph)	260	944	75	354	1416	275	100	491	453	465	254	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		275	230		275	300		275	530		225
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			207			282			391			267
Link Speed (mph)		55			55			40			40	
Link Distance (ft)		768			363			733			1133	
Travel Time (s)		9.5			4.5			12.5			19.3	
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
Adj. Flow (vph)	283	1026	82	385	1539	299	109	534	492	505	276	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	283	1026	82	385	1539	299	109	534	492	505	276	126
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (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
Detector 1 Queue (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
Detector 1 Delay (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
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			Free			Free

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	10.5	23.5	23.5	10.5	23.5		10.5	23.5	
Total Split (s)	12.5	41.0	41.0	18.0	47.0	47.0	11.0	21.5		19.0	29.5	
Total Split (%)	12.5%	41.0%	41.0%	18.0%	47.0%	47.0%	11.0%	21.5%		19.0%	29.5%	
Maximum Green (s)	7.0	35.5	35.5	12.5	41.5	41.5	5.5	16.0		13.5	24.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	9.1	38.1	38.1	14.5	43.5	43.5	7.5	17.9	100.0	15.5	25.9	100.0
Actuated g/C Ratio	0.09	0.38	0.38	0.14	0.44	0.44	0.08	0.18	1.00	0.16	0.26	1.00
v/c Ratio	0.91	0.76	0.11	0.78	1.00	0.35	0.42	0.84	0.31	0.95	0.30	0.08
Control Delay	79.2	31.5	0.3	34.5	64.5	16.0	49.6	53.0	0.5	79.7	29.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.2	31.5	0.3	34.5	64.5	16.0	49.6	53.0	0.5	79.7	29.5	0.1
LOS	E	C	A	C	E	B	D	D	A	E	C	A
Approach Delay		39.4			52.7			29.9			53.4	
Approach LOS		D			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 45.0		Intersection LOS: D	
Intersection Capacity Utilization 86.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 15: N. 119th Street & State Highway 7 (Baseline Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	944	75	354	1416	275	100	491	453	465	254	116
Future Volume (veh/h)	260	944	75	354	1416	275	100	491	453	465	254	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	283	1026	82	385	1539	299	109	534	0	505	276	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	311	1350	602	501	1546	689	235	640		536	949	
Arrive On Green	0.09	0.38	0.38	0.14	0.44	0.44	0.07	0.18	0.00	0.16	0.27	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	283	1026	82	385	1539	299	109	534	0	505	276	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	8.1	25.2	3.4	10.7	43.2	13.1	3.0	14.5	0.0	14.5	6.2	0.0
Cycle Q Clear(g_c), s	8.1	25.2	3.4	10.7	43.2	13.1	3.0	14.5	0.0	14.5	6.2	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	311	1350	602	501	1546	689	235	640		536	949	
V/C Ratio(X)	0.91	0.76	0.14	0.77	1.00	0.43	0.46	0.83		0.94	0.29	
Avail Cap(c_a), veh/h	311	1350	602	501	1546	689	259	640		536	949	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.1	27.0	20.3	41.1	28.2	19.7	44.8	39.6	0.0	41.8	29.1	0.0
Incr Delay (d2), s/veh	29.2	4.1	0.5	7.1	21.9	2.0	1.4	9.4	0.0	25.4	0.2	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	4.5	10.3	1.2	4.8	20.6	4.7	1.3	6.9	0.0	7.8	2.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.3	31.1	20.7	48.2	50.0	21.7	46.3	48.9	0.0	67.2	29.3	0.0
LnGrp LOS	E	C	C	D	D	C	D	D		E	C	
Approach Vol, veh/h		1391			2223			643	A		781	A
Approach Delay, s/veh		39.3			45.9			48.5			53.8	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	21.5	18.0	41.5	10.3	30.2	12.5	47.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	13.5	16.0	12.5	35.5	5.5	24.0	7.0	41.5
Max Q Clear Time (g_c+I1), s	16.5	16.5	12.7	27.2	5.0	8.2	10.1	45.2
Green Ext Time (p_c), s	0.0	0.0	0.0	4.0	0.0	1.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	45.6
HCM 6th LOS	D

Notes

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

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

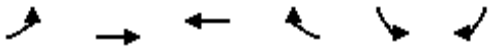
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	1862	1905	151	0	142
Future Vol, veh/h	0	1862	1905	151	0	142
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2024	2071	164	0	154

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

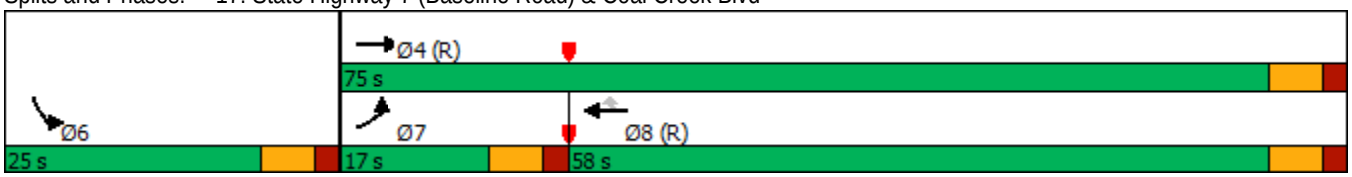


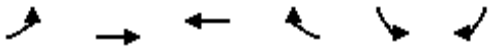
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	387	1475	1750	592	589	305
Future Volume (vph)	387	1475	1750	592	589	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	580			380	280	0
Storage Lanes	2			1	1	1
Taper Length (ft)	100				100	
Lane Util. Factor	0.97	0.95	0.95	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	3539	3539	1583	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	3539	3539	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				643		332
Link Speed (mph)		55	55		45	
Link Distance (ft)		1410	1068		1156	
Travel Time (s)		17.5	13.2		17.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	421	1603	1902	643	640	332
Shared Lane Traffic (%)						
Lane Group Flow (vph)	421	1603	1902	643	640	332
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Free
Protected Phases	7	4	8		6	
Permitted Phases				8		Free

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector Phase	7	4	8	8	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	12.0	25.0	24.0	24.0	24.0	
Total Split (s)	17.0	75.0	58.0	58.0	25.0	
Total Split (%)	17.0%	75.0%	58.0%	58.0%	25.0%	
Maximum Green (s)	11.0	69.0	52.0	52.0	19.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-1.0	-2.0	-1.0	-2.0	
Total Lost Time (s)	4.0	5.0	4.0	5.0	4.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	None	
Walk Time (s)		7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	
Act Effct Green (s)	13.0	70.0	54.0	53.0	21.0	100.0
Actuated g/C Ratio	0.13	0.70	0.54	0.53	0.21	1.00
v/c Ratio	0.94	0.65	1.00	0.56	0.89	0.21
Control Delay	57.9	13.2	43.2	3.2	52.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.9	13.2	43.2	3.2	52.2	0.3
LOS	E	B	D	A	D	A
Approach Delay		22.5	33.1		34.4	
Approach LOS		C	C		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 29.5		Intersection LOS: C	
Intersection Capacity Utilization 86.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 17: State Highway 7 (Baseline Road) & Coal Creek Blvd





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	387	1475	1750	592	589	305
Future Volume (veh/h)	387	1475	1750	592	589	305
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	421	1603	1902	643	640	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	449	2488	1919	840	726	
Arrive On Green	0.13	0.70	0.54	0.53	0.21	0.00
Sat Flow, veh/h	3456	3647	3647	1585	3456	1585
Grp Volume(v), veh/h	421	1603	1902	643	640	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1777	1585	1728	1585
Q Serve(g_s), s	12.1	24.7	53.0	32.1	18.0	0.0
Cycle Q Clear(g_c), s	12.1	24.7	53.0	32.1	18.0	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	449	2488	1919	840	726	
V/C Ratio(X)	0.94	0.64	0.99	0.77	0.88	
Avail Cap(c_a), veh/h	449	2488	1919	840	726	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.95	0.00
Uniform Delay (d), s/veh	43.1	8.2	22.8	18.6	38.3	0.0
Incr Delay (d2), s/veh	27.4	1.3	18.6	6.6	11.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	6.8	22.9	11.3	8.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	70.5	9.5	41.3	25.2	50.0	0.0
LnGrp LOS	E	A	D	C	D	
Approach Vol, veh/h		2024	2545		640	A
Approach Delay, s/veh		22.2	37.2		50.0	
Approach LOS		C	D		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			75.0		25.0	17.0	58.0
Change Period (Y+Rc), s			6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s			69.0		19.0	11.0	52.0
Max Q Clear Time (g_c+I1), s			26.7		20.0	14.1	55.0
Green Ext Time (p_c), s			15.4		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.0
HCM 6th LOS	C

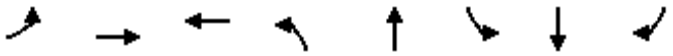
Notes

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

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	27	330	82	565	208	235	27	350	136
v/c Ratio	0.15	0.58	0.25	0.92	0.53	0.30	0.05	0.53	0.21
Control Delay	16.9	27.7	18.3	51.6	19.7	19.0	16.6	31.3	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.9	27.7	18.3	51.6	19.7	19.0	16.6	31.3	5.7
Queue Length 50th (ft)	9	136	28	329	74	86	10	195	0
Queue Length 95th (ft)	24	221	53	#520	116	134	26	293	43
Internal Link Dist (ft)		556		2656		2009		472	
Turn Bay Length (ft)	175		90		365		90		230
Base Capacity (vph)	193	639	328	649	397	777	531	666	653
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.52	0.25	0.87	0.52	0.30	0.05	0.53	0.21

Intersection Summary

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



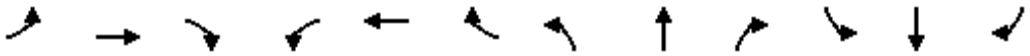
Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	133	87	3	265	336	1	405	248
v/c Ratio	0.62	0.29	0.03	0.36	0.13	0.00	0.18	0.19
Control Delay	58.7	12.3	41.0	5.8	4.1	10.0	9.2	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.7	12.3	41.0	5.8	4.1	10.0	9.2	0.8
Queue Length 50th (ft)	75	6	1	37	22	0	52	0
Queue Length 95th (ft)	127	24	11	99	56	3	96	18
Internal Link Dist (ft)		1669	696		1258		463	
Turn Bay Length (ft)	260			150		150		150
Base Capacity (vph)	265	461	96	737	2681	636	2202	1345
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.19	0.03	0.36	0.13	0.00	0.18	0.18

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	14	1	71	52	6	58	557	22	5	643	61
v/c Ratio	0.08	0.01	0.31	0.28	0.03	0.10	0.21	0.02	0.01	0.27	0.05
Control Delay	35.2	44.0	4.1	38.9	27.5	3.4	3.9	0.0	4.2	8.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	44.0	4.1	38.9	27.5	3.4	3.9	0.0	4.2	8.7	0.1
Queue Length 50th (ft)	8	1	0	28	1	7	37	0	1	94	0
Queue Length 95th (ft)	25	6	5	62	14	15	73	m0	4	133	0
Internal Link Dist (ft)		477			734		784			453	
Turn Bay Length (ft)	150		150	150		355		275	300		275
Base Capacity (vph)	189	335	406	193	297	585	2676	1228	668	2422	1124
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.00	0.17	0.27	0.02	0.10	0.21	0.02	0.01	0.27	0.05

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

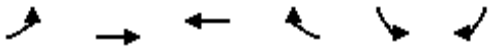


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	68	310	43	442	665	141	38	165	171	152	359	113
v/c Ratio	0.26	0.23	0.06	0.80	0.73	0.17	0.20	0.48	0.11	0.48	0.77	0.07
Control Delay	14.6	23.3	0.1	65.2	15.7	0.6	24.5	39.3	0.1	29.2	45.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	23.3	0.1	65.2	15.7	0.6	24.5	39.3	0.1	29.2	45.3	0.1
Queue Length 50th (ft)	20	76	0	131	195	1	16	89	0	69	221	0
Queue Length 95th (ft)	42	111	0	m#173	m#534	m0	37	148	0	107	327	0
Internal Link Dist (ft)		688			283			653			1053	
Turn Bay Length (ft)	250		275	230		275	300		275	530		225
Base Capacity (vph)	270	1338	727	554	905	844	187	456	1583	314	493	1583
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	0.25	0.23	0.06	0.80	0.73	0.17	0.20	0.36	0.11	0.48	0.73	0.07

Intersection Summary

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

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	159	473	864	475	479	347
v/c Ratio	0.50	0.37	0.86	0.44	0.73	0.22
Control Delay	40.3	4.8	32.3	2.8	40.3	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.3	4.8	32.3	2.8	40.3	0.4
Queue Length 50th (ft)	34	27	459	0	151	0
Queue Length 95th (ft)	53	229	#777	50	195	3
Internal Link Dist (ft)		1330	988		1076	
Turn Bay Length (ft)	580			380	280	
Base Capacity (vph)	331	1284	1000	1069	823	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.37	0.86	0.44	0.58	0.22

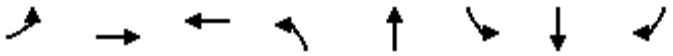
Intersection Summary

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

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	136	869	49	346	198	309	45	242	114
v/c Ratio	0.26	0.96	0.25	0.40	0.71	0.62	0.17	0.59	0.25
Control Delay	10.1	44.8	12.6	17.0	36.1	33.0	26.3	42.7	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	44.8	12.6	17.0	36.1	33.0	26.3	42.7	6.1
Queue Length 50th (ft)	34	477	12	119	107	199	20	143	0
Queue Length 95th (ft)	59	#764	30	165	m#175	m#300	46	226	35
Internal Link Dist (ft)		556		2656		2009		472	
Turn Bay Length (ft)	175		90		365		90		230
Base Capacity (vph)	524	914	197	921	278	498	262	411	451
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.95	0.25	0.38	0.71	0.62	0.17	0.59	0.25

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	259	141	3	133	534	1	458	228
v/c Ratio	0.92	0.37	0.03	0.20	0.21	0.00	0.21	0.22
Control Delay	65.3	10.7	41.0	5.2	4.8	10.0	9.5	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.3	10.7	41.0	5.2	4.8	10.0	9.5	2.0
Queue Length 50th (ft)	156	13	1	19	43	0	60	0
Queue Length 95th (ft)	m146	m14	11	51	90	3	108	34
Internal Link Dist (ft)		1669	696		1258		463	
Turn Bay Length (ft)	260			150		150		150
Base Capacity (vph)	290	501	91	666	2597	517	2169	1058
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.28	0.03	0.20	0.21	0.00	0.21	0.22

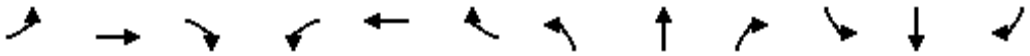
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	10	1	48	49	6	87	788	71	5	627	30
v/c Ratio	0.06	0.01	0.21	0.26	0.03	0.15	0.29	0.06	0.01	0.26	0.03
Control Delay	34.8	44.0	2.1	38.5	27.5	2.9	3.4	0.1	4.2	8.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.8	44.0	2.1	38.5	27.5	2.9	3.4	0.1	4.2	8.9	0.0
Queue Length 50th (ft)	5	1	0	27	1	8	44	0	1	93	0
Queue Length 95th (ft)	20	6	0	59	14	m14	m82	m0	4	132	0
Internal Link Dist (ft)		477			734		784			453	
Turn Bay Length (ft)	150		150	150		355		275	300		275
Base Capacity (vph)	189	335	406	193	297	593	2675	1228	549	2405	1117
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.00	0.12	0.25	0.02	0.15	0.29	0.06	0.01	0.26	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



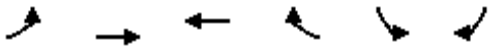
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	135	666	47	285	939	125	52	288	399	323	207	74
v/c Ratio	0.81	0.80	0.06	0.78	1.01	0.14	0.16	0.80	0.25	1.02	0.41	0.05
Control Delay	52.2	33.0	0.1	38.3	62.5	4.3	23.2	56.1	0.4	82.2	31.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.2	33.0	0.1	38.3	62.5	4.3	23.2	56.1	0.4	82.2	31.8	0.0
Queue Length 50th (ft)	37	356	0	88	~582	1	22	175	0	~194	108	0
Queue Length 95th (ft)	#145	514	0	m96	m#670	m7	48	#298	0	m#251	m152	m0
Internal Link Dist (ft)		688			283			653			1053	
Turn Bay Length (ft)	250		275	230		275	300		275	530		225
Base Capacity (vph)	166	830	820	364	931	888	335	372	1583	316	500	1583
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	0.81	0.80	0.06	0.78	1.01	0.14	0.16	0.77	0.25	1.02	0.41	0.05

Intersection Summary

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

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

m Volume for 95th percentile queue is metered by upstream signal.

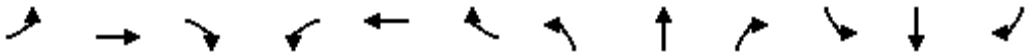


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	381	1021	1132	571	499	229
v/c Ratio	0.93	0.71	1.00	0.48	0.96	0.14
Control Delay	59.7	9.7	46.6	2.2	71.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	9.7	46.6	2.2	71.2	0.2
Queue Length 50th (ft)	118	306	662	0	168	0
Queue Length 95th (ft)	m#174	m453	#1000	39	#271	0
Internal Link Dist (ft)		1330	988		1076	
Turn Bay Length (ft)	580			380	280	
Base Capacity (vph)	411	1434	1136	1188	518	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.71	1.00	0.48	0.96	0.14

Intersection Summary

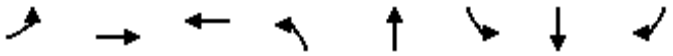
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	43	201	292	92	578	52	322	273	60	33	573	239
v/c Ratio	0.21	0.28	0.52	0.27	0.71	0.11	0.59	0.15	0.07	0.06	0.44	0.33
Control Delay	23.4	33.1	7.1	25.7	39.9	0.6	18.6	13.6	3.1	13.0	27.2	5.0
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	23.4	33.1	7.1	25.7	39.9	0.6	18.6	13.6	3.1	13.0	27.2	5.0
Queue Length 50th (ft)	18	55	0	39	180	0	116	54	0	9	158	0
Queue Length 95th (ft)	38	80	61	72	198	0	211	87	11	26	217	55
Internal Link Dist (ft)		556			2656			2009			472	
Turn Bay Length (ft)	175		150	90		150	365		150	90		230
Base Capacity (vph)	212	1238	743	344	1238	639	546	1862	895	527	1304	734
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	0.20	0.16	0.39	0.27	0.47	0.08	0.59	0.15	0.07	0.06	0.44	0.33

Intersection Summary



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	149	109	3	276	412	1	498	275
v/c Ratio	0.45	0.38	0.03	0.40	0.15	0.00	0.22	0.21
Control Delay	47.2	10.7	40.0	5.5	3.5	9.0	8.6	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.2	10.7	40.0	5.5	3.5	9.0	8.6	0.9
Queue Length 50th (ft)	38	1	1	31	23	0	58	0
Queue Length 95th (ft)	53	3	10	98	66	3	118	22
Internal Link Dist (ft)		1669	696		1258		463	
Turn Bay Length (ft)	260			150		150		150
Base Capacity (vph)	514	477	103	696	2761	612	2282	1380
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.23	0.03	0.40	0.15	0.00	0.22	0.20

Intersection Summary

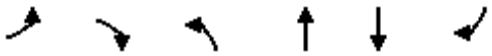
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	93	80	576	35	50	908
v/c Ratio	0.50	0.33	0.23	0.03	0.08	0.32
Control Delay	50.5	13.1	5.9	2.6	1.1	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.5	13.1	5.9	2.6	1.1	1.6
Queue Length 50th (ft)	57	0	49	0	2	17
Queue Length 95th (ft)	103	41	100	m10	5	26
Internal Link Dist (ft)	411		2014			2009
Turn Bay Length (ft)	200			225	325	
Base Capacity (vph)	442	455	2490	1124	661	2809
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.18	0.23	0.03	0.08	0.32

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	14	1	71	60	6	58	638	27	5	730	61
v/c Ratio	0.08	0.01	0.31	0.32	0.03	0.11	0.24	0.02	0.01	0.30	0.05
Control Delay	35.2	44.0	4.1	39.9	27.5	3.2	3.5	0.0	4.2	9.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	44.0	4.1	39.9	27.5	3.2	3.5	0.0	4.2	9.0	0.1
Queue Length 50th (ft)	8	1	0	33	1	6	34	0	1	111	0
Queue Length 95th (ft)	25	6	5	69	14	12	55	0	4	154	0
Internal Link Dist (ft)		477			734		784			453	
Turn Bay Length (ft)	150		150	150		355		275	300		275
Base Capacity (vph)	189	335	406	193	297	536	2674	1228	628	2420	1124
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.00	0.17	0.31	0.02	0.11	0.24	0.02	0.01	0.30	0.05

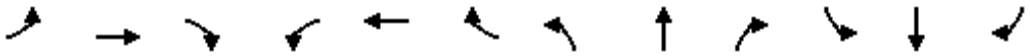
Intersection Summary



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	32	80	14	688	848	10
v/c Ratio	0.24	0.42	0.03	0.23	0.29	0.01
Control Delay	47.5	17.0	1.5	1.4	1.9	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	17.0	1.5	1.4	1.9	1.0
Queue Length 50th (ft)	20	0	1	25	38	0
Queue Length 95th (ft)	48	43	m2	36	55	m1
Internal Link Dist (ft)	307			1076	784	
Turn Bay Length (ft)			380			275
Base Capacity (vph)	442	455	598	3032	2955	1323
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.18	0.02	0.23	0.29	0.01

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

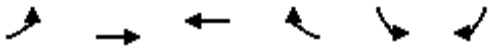


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	134	489	71	535	964	245	82	236	214	201	576	178
v/c Ratio	0.53	0.41	0.11	0.84	0.62	0.29	0.38	0.37	0.14	0.70	0.72	0.11
Control Delay	52.7	27.5	0.3	64.1	9.1	0.8	50.0	36.4	0.2	44.9	36.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.7	27.5	0.3	64.1	9.1	0.8	50.0	36.4	0.2	44.9	36.1	0.1
Queue Length 50th (ft)	42	129	0	155	106	0	26	68	0	60	190	0
Queue Length 95th (ft)	74	177	0	#267	71	m0	50	101	0	#95	247	0
Internal Link Dist (ft)		688			283			653			1053	
Turn Bay Length (ft)	250		275	230		275	300		275	530		225
Base Capacity (vph)	254	1198	672	635	1556	833	223	796	1583	291	867	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.41	0.11	0.84	0.62	0.29	0.37	0.30	0.14	0.69	0.66	0.11

Intersection Summary

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

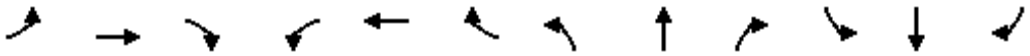
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	170	734	1332	535	528	401
v/c Ratio	0.54	0.31	0.72	0.49	0.76	0.25
Control Delay	47.7	2.5	21.5	3.0	42.1	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.7	2.5	21.5	3.0	42.1	0.5
Queue Length 50th (ft)	37	17	334	0	171	0
Queue Length 95th (ft)	m65	25	440	53	229	4
Internal Link Dist (ft)		1330	988		1076	
Turn Bay Length (ft)	580			380	280	
Base Capacity (vph)	328	2399	1859	1085	823	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.31	0.72	0.49	0.64	0.25

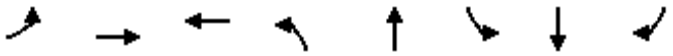
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	239	516	532	65	349	40	323	526	71	50	460	207
v/c Ratio	0.75	0.57	0.72	0.25	0.43	0.08	0.60	0.33	0.09	0.12	0.37	0.30
Control Delay	41.0	34.8	12.0	23.1	33.9	0.3	8.6	9.5	3.1	15.0	28.1	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	34.8	12.0	23.1	33.9	0.3	8.6	9.5	3.1	15.0	28.1	5.8
Queue Length 50th (ft)	112	155	47	28	94	0	10	111	7	14	117	0
Queue Length 95th (ft)	148	181	145	52	122	0	67	210	33	40	189	57
Internal Link Dist (ft)		556			2656			2009			472	
Turn Bay Length (ft)	175		150	90		150	365		150	90		230
Base Capacity (vph)	318	1238	851	265	1238	674	548	1601	788	426	1230	685
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	0.75	0.42	0.63	0.25	0.28	0.06	0.59	0.33	0.09	0.12	0.37	0.30

Intersection Summary



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	291	168	3	149	653	1	566	255
v/c Ratio	0.64	0.44	0.03	0.24	0.25	0.00	0.26	0.19
Control Delay	30.3	4.3	41.0	5.3	4.7	10.0	9.5	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.3	4.3	41.0	5.3	4.7	10.0	9.5	0.8
Queue Length 50th (ft)	34	1	1	20	52	0	74	0
Queue Length 95th (ft)	65	2	11	57	112	3	135	19
Internal Link Dist (ft)		1669	696		1258		463	
Turn Bay Length (ft)	260			150		150		150
Base Capacity (vph)	514	521	95	611	2648	471	2216	1352
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.32	0.03	0.24	0.25	0.00	0.26	0.19

Intersection Summary

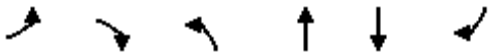
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	78	53	870	122	96	962
v/c Ratio	0.45	0.26	0.33	0.10	0.19	0.33
Control Delay	50.1	14.7	3.0	0.3	1.7	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.1	14.7	3.0	0.3	1.7	1.4
Queue Length 50th (ft)	48	0	26	0	4	22
Queue Length 95th (ft)	91	35	m126	m0	m9	37
Internal Link Dist (ft)	411		2014			2009
Turn Bay Length (ft)	200			225	325	
Base Capacity (vph)	442	435	2613	1201	524	2952
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.12	0.33	0.10	0.18	0.33

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	10	1	48	60	6	87	940	82	5	763	30
v/c Ratio	0.06	0.01	0.21	0.32	0.03	0.17	0.35	0.07	0.01	0.32	0.03
Control Delay	34.8	44.0	2.1	39.9	27.5	2.7	3.0	0.1	4.4	9.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.8	44.0	2.1	39.9	27.5	2.7	3.0	0.1	4.4	9.4	0.0
Queue Length 50th (ft)	5	1	0	33	1	7	38	0	1	118	0
Queue Length 95th (ft)	20	6	0	69	14	12	81	0	4	166	0
Internal Link Dist (ft)		477			734		784			453	
Turn Bay Length (ft)	150		150	150		355		275	300		275
Base Capacity (vph)	189	335	406	193	297	517	2674	1228	474	2404	1117
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.00	0.12	0.31	0.02	0.17	0.35	0.07	0.01	0.32	0.03

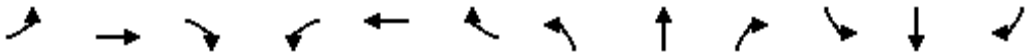
Intersection Summary



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	96	128	47	1016	841	30
v/c Ratio	0.51	0.45	0.09	0.36	0.33	0.03
Control Delay	50.6	12.5	1.8	2.4	3.3	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	12.5	1.8	2.4	3.3	0.5
Queue Length 50th (ft)	59	0	3	40	42	1
Queue Length 95th (ft)	106	51	m5	m54	52	0
Internal Link Dist (ft)	307			1076	784	
Turn Bay Length (ft)			380			275
Base Capacity (vph)	442	491	553	2804	2561	1154
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.26	0.08	0.36	0.33	0.03

Intersection Summary

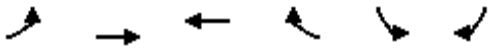
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	283	1026	82	385	1539	299	109	534	492	505	276	126
v/c Ratio	0.91	0.76	0.11	0.78	1.00	0.35	0.42	0.84	0.31	0.95	0.30	0.08
Control Delay	79.2	31.5	0.3	34.5	64.5	16.0	49.6	53.0	0.5	79.7	29.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.2	31.5	0.3	34.5	64.5	16.0	49.6	53.0	0.5	79.7	29.5	0.1
Queue Length 50th (ft)	93	296	0	127	547	88	35	174	0	179	53	0
Queue Length 95th (ft)	#171	375	0	m138	m#583	m106	62	#257	0	#277	112	0
Internal Link Dist (ft)		688			283			653			1053	
Turn Bay Length (ft)	250		275	230		275	300		275	530		225
Base Capacity (vph)	310	1347	730	497	1539	847	257	637	1583	532	920	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.76	0.11	0.77	1.00	0.35	0.42	0.84	0.31	0.95	0.30	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	421	1603	1902	643	640	332
v/c Ratio	0.94	0.65	1.00	0.56	0.89	0.21
Control Delay	57.9	13.2	43.2	3.2	52.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.9	13.2	43.2	3.2	52.2	0.3
Queue Length 50th (ft)	141	329	601	0	221	0
Queue Length 95th (ft)	m#215	m413	#802	51	#310	0
Internal Link Dist (ft)		1330	988		1076	
Turn Bay Length (ft)	580			380	280	
Base Capacity (vph)	446	2477	1911	1141	720	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.65	1.00	0.56	0.89	0.21

Intersection Summary

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

m Volume for 95th percentile queue is metered by upstream signal.

Ecological Resource Consultants, Inc.
2820 Wilderness Place, Suite A ~ Boulder, CO 80301 ~ (303) 679-4820

Date: March 29, 2021

To: OEO2, LLC
Attn: Corey Elliot

Project: **Parkdale North Project Site–Cultural Historic Resources Screening (ERC Project #1000-2101)**

Ecological Resource Consultants, Inc. (ERC), on behalf of OEO2, LLC, completed an initial cultural/historic resource screening for the survey area and the area of potential effect (APE), which for this report comprised the specific 100-acre survey area only (See **Figure 1** below). The APE is located directly along the south side of Arapahoe Road and west of East County Line Road in unincorporated Boulder County, Colorado. More specifically, the survey area is located in **Section 36, Township 1 North, Range 69 West**, in Boulder County **(latitude 40.0122° north, longitude -105.0588° west).**

The National Register of Historic Places (NRHP), The Colorado Historical Society Office of Archaeology and Historic Preservation (OAHP) Cultural Resource Database (Compass), and US Geological Survey (USGS) topographic maps were evaluated to identify any listed or eligible historic properties on or within the APE (NPS 2021, OAHP 2021). The results of the screening are summarized as follows:

- The 100-acre survey area and/or APE were visually inspected and contains no noticeable existing historic buildings or structures. Other infrastructure within the APE include seven residential homes which, per aerial imagery from GoogleEarth, occur within the APE in June of 1993 at the earliest. These homes were located in the central portion of the APE as well as the western portion of the APE. Other infrastructure within the APE include the gravel driveway in the center portion of the survey area which is connected to East County Line Road and a separate gravel drive which is connected to Arapahoe Road directly to the North. An irrigation ditch, which appears in aerial imagery in October of 1999 was observed on site. Per Boulder County Assessor records, one parcel does contain buildings that are more than 50 years old and include a warehouse and cold storage facility that reportedly were built in 1965 and is located on the parcel at 12420 Arapahoe Road, adjacent to the APE. No other infrastructure or any evidence of historic infrastructure was observed directly within the APE.
- The APE is not located within or directly adjacent to a historic district or any other area that would be eligible for listing on the NRHP.
- The Compass Database Search did not identify any potentially eligible or listed cultural resources within the NRHP or within the APE.

Previous Cultural/Historic Resource Investigations

The A&B records (**Attachment A**) did identify four reports and seven cultural resources that are located within Section 36, however none of these surveys or resources were within the APE. No disturbance is proposed to occur near any of these resources as part of the project.

This preliminary screening does not represent a formal cultural/historic resource survey that conforms to the Secretary of the Interior's Professional Qualification Standards. Should potential impacts from any

potential future land use changes be determined to be an adverse effect to lands located within the APE, more detailed evaluation and/or specific clearances from the SHPO would be warranted. Copies of the records from the OAHP Compass database are provided below.

If you have any questions or require additional information, please feel free to contact me.

Sincerely,

ECOLOGICAL RESOURCE CONSULTANTS, INC.

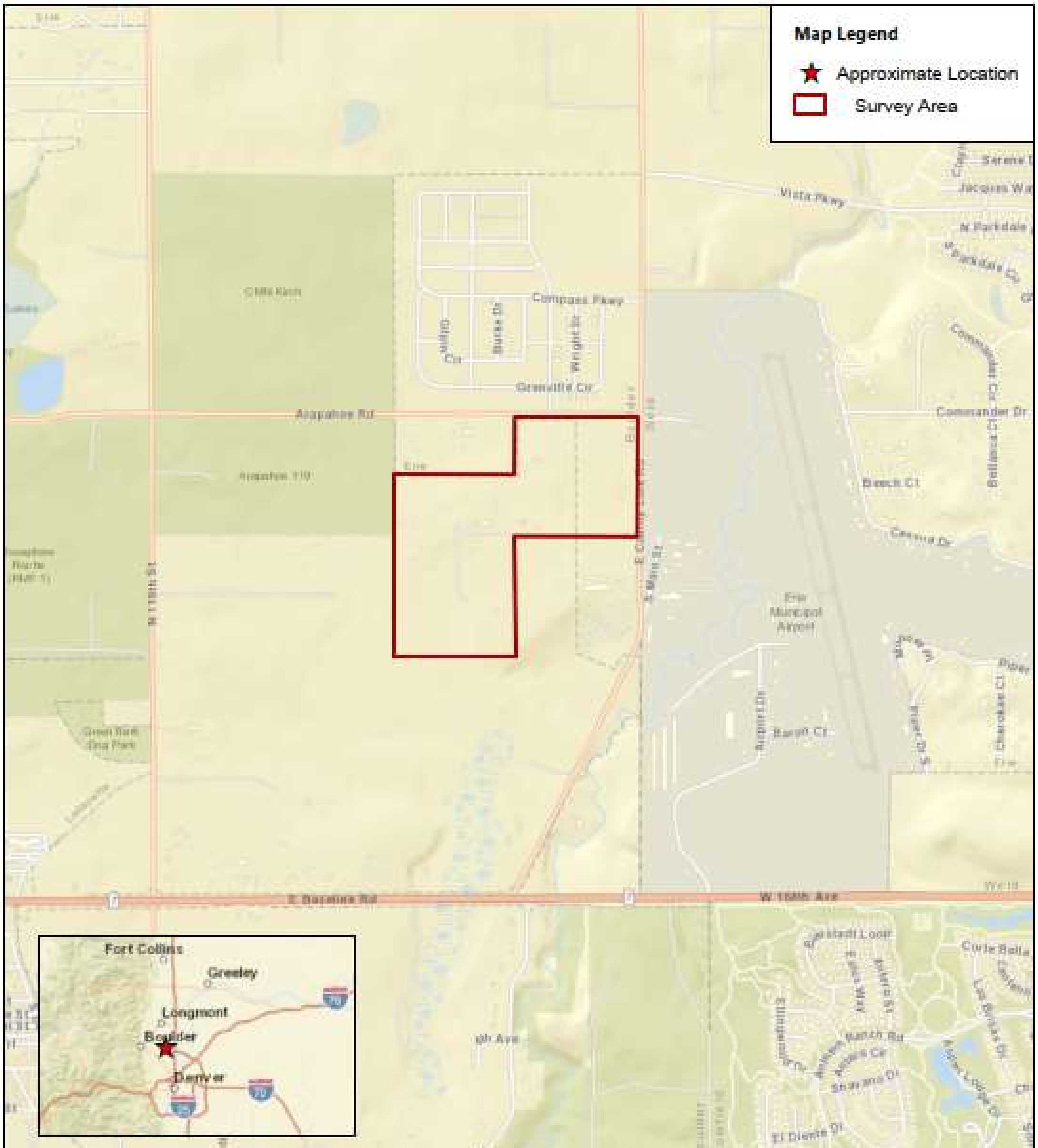
Tyler Worley, Project Ecologist

Reviewed and approved by:

David J. Blauch, V.P., Senior Ecologist

References

Compass. 2021. Colorado Historical Society – Office of Archaeology and Historic Preservation. Compass: Colorado's On-Line Cultural Resources Database. Available online at: https://gis.colorado.gov/compass/. Accessed February 2021.



Prepared By:

ERC

2820 Wilderness Place, Suite A
Boulder, CO 80301
(303) 679-4820

ERC #: 1000-2101

FIGURE 1
LOCATION MAP

PARKDALE NORTH PROJECT SITE
BOULDER COUNTY, COLORADO

0 1,000 2,000
Feet

ATTACHMENT A

A & B Cultural Consultants, LLC

1608 Sunset Drive
Louisville, CO 80027

office: 303-666-0437
cell: 303-968-7880
email: rmutaw@comcast.net

TO: Tyler Worley, Ecological Resource Consultants
FROM: Robert Mutaw, Ph.D., A&B Cultural Consultants, LLC (A&B)
DATE: February 22, 2021
RE: Records Review for Parkdale North, Boulder County, Colorado (ERC Project No. 1000-2101)

At your request, A&B conducted a records review for the Parkdale North property in Boulder County, Colorado. This Study Area includes the northeast, northwest and southwest quarter of the northeast quarter of the Section 36, Township (T) 1 North (N), Range (R) 69 West (W) of the 6th Principal Meridian (P.M.).

On February 22, 2021, A&B reviewed the records for Section 36, T1N, R69W in Compass, the on-line database of Colorado cultural resources maintained by the Office of Archaeology and Historic Preservation (OAHP) at History Colorado. The purpose of this review was to determine if any resources listed in the National Register of Historic Places (NRHP) have been previously recorded within the Study Area and to assess the potential for qualifying resources to be present based on existing information. A field investigation for archaeological and historical resources was not performed.

The search of the Compass database revealed that four surveys had been performed and seven cultural resources were previously recorded within the legal section that was searched. The GIS mapping feature available through Compass was used to evaluate which, if any, of these surveys and cultural resources were within the Study Area. This analysis revealed that none of these surveys had been conducted within the Study Area and none of the previously recorded cultural resources were within it. The four surveys within the section are listed in Table 1, and the seven cultural resources in Table 2.

Previous documentation for the Parkdale south area recorded resources within Section 36 that are not yet included in the Compass records. These included additional segments of the railroad and Goodhue #1 Ditch and three standing structures. None of these are within the Study Area, however an unrecorded segment of the Goodhue #1 Ditch is located within the Study Area in the south half of the northwest quarter of the northeast quarter and the west half of the northeast quarter of the northeast quarter.

Records from the Boulder County Assessor's office were also reviewed on February 22, 2021 to determine if there were any potential historic structures located on any of the real estate parcels included within the Study Area. This review found that one parcel contains buildings that are more than 50 years old. A warehouse and cold storage facility reportedly built in 1965 are located on the parcel at 12420 Arapahoe Road.

Table 1
Previous Surveys in Section 36, T1S, R69W, 6th P.M.

Report ID	Report Title	Author(s)	Institution	Completion Date
BL.CH.NR36	AN INTENSIVE ARCHAEOLOGICAL RESOURCE INVENTORY OF PROPOSED INTERSECTION IMPROVEMENTS, STATE HIGHWAY 7 AT EAST COUNTY LINE ROAD, BOULDER COUNTY, COLORADO	WOLFF, GREG	COLORADO DEPARTMENT OF TRANSPORTATION	06/10/2008
BL.CH.R1	CULTURAL RESOURCE SURVEY OF A BRIDGE OVER COAL CREEK, BOULDER COUNTY (HIGHWAY PROJECT BRF 007-3(3), SH 7 OVER COAL CREEK, 1.7 MI. EAST OF SH 287)	ANGULSKI, DEBRA	COLORADO DEPARTMENT OF TRANSPORTATION	07/20/1989
BL.CH.R2	SURVEY REPORT, CDOH PROJECT FC 287-3(50), LAFAYETTE BYPASS, COLORADO DEPARTMENT OF HIGHWAYS	PEARCE, SALLY	COLORADO DEPARTMENT OF TRANSPORTATION	02/20/1990
BL.SHF.R49	UNINCORPORATED BOULDER COUNTY HISTORIC SITES SURVEY REPORT (SHF 98-02-064, 93-02-062, 96-02-171, 99-02-059)	MCWILLIAMS, CARL	CULTURAL RESOURCE HISTORIANS	2/2003

Table 2
Previously Recorded Cultural Resources in Section 36. T1S, R69W. 6th P.M.

Site No.	Site Name or Type	Recording Date(s)	Site Condition	Estimated Age(s)	NRHP Eligibility
5BL.374	BURLINGTON NORTHERN RAILROAD	05/01/1981	---	1870 1879	ELIGIBLE - OFFICIALLY
5BL.374.7	BURLINGTON NORTHERN RAILROAD (SEGMENT)	02/06/1990	POOR/HEAVY DISTURBANCE	1878 1889	NOT ELIGIBLE – FIELD
5BL.2663	ISOLATED FIND	06/21/1989	COLLECTED	PREHISTORIC	NOT ELIGIBLE – FIELD
5BL.2731	GOODHUE #1 DITCH	01/09/1990	GOOD/LIGHT DISTURBANCE	1907	NOT ELIGIBLE - OFFICIALLY
5BL.5761	MCDONALD PROPERTY	11/11/1994	FAIR/MODERATE DISTURBANCE	1880 1910	NOT ELIGIBLE - FIELD
5BL.9249	BURT HOUSE, SCHILLAWSKI RESIDENCE	06/27/2003	---	1928	NOT ELIGIBLE - FIELD
5BL.10332	HAYWOOD MINE, BAKER, IRVINGTON	11/01/1986	POOR/HEAVY DISTURBANCE	1899	NOT ELIGIBLE - OFFICIALLY

Notes: --- data not provided.

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May 7, 2021

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RE: Parkdale -Tree Inventory

Ecological Resource Consultants, Inc. (ERC) conducted an inventory of existing trees at a parcel known as Parkdale North (Site) located south of Erie, Boulder County, Colorado. The Site is located to the southwest of Arapahoe Road and E County Line Road. The purpose of the inventory was to locate and identify the species of trees present, measure the trunk diameter at breast height (dbh), measure the drip line, and evaluate the general health of the trees identified on and near the subject Site in accordance with Chapter 6 Section 10.6.2 of the Town of Erie Development Code.

General Site Description
The Site is approximately 158 acres in size, collectively. Presently, they are comprised primarily of upland agricultural lands as well as ruderal grasslands with nine private residential homes and associated agricultural outbuildings. Surrounding the Site is a residential housing subdivision to the north with Arapahoe Road bounding the northernmost portions. Agricultural lands and private residences to the west. Agricultural lands to the south and disturbed grasslands, agricultural lands and private residences to the west with E County Line Road being located at the easternmost portion.

Method
ERC performed the tree inventory on April 12 and 22, 2021. Weather was cloudy, and 50 degrees with trees in the budding stage. ERC inventoried each tree with a diameter of 4 inches and over by identifying the species, measuring the trunk diameter at breast height (dbh) (at approximately 54 inches above the ground) using a 6-foot diameter tape, measuring the drip line (measured as a radius from the trunk to the end of the outermost branch on the tree crown), and evaluating the general condition of each tree. Trees and shrubs with a dbh less than 4 inches were not included in the survey.

All trees inventoried were categorized into one of five groups: excellent, good, fair, poor, or very poor. The tree condition categories are defined as follows:

<u>Excellent</u>
- Healthy, vigorous tree.
- No apparent signs of insect, disease or mechanical injury.
- No corrective work required.
- Form representative of the species.

Good
- Better than average vigor.
- Little corrective work needed.
- Not quite perfect form.

Fair
- Average condition and vigor for the area.
- May be in need of some corrective pruning or repair.
- May lack desirable form characteristics of the species.
- May show minor insect injury, disease, or physiological problem.

Poor
- General state of decline.
- May show severe mechanical, insect or disease damage.
- Death not imminent.
- May require major repair or renovation.

Very Poor
- Includes "poor" above but is more extreme in that no amount of repair or renovation will lead to a desirable and sustainable tree. Costs would exceed any benefit.

Specific tree information is provided in the enclosed table titled **Table 1. Existing On-Site Tree Inventory.** A Tree Inventory Map was prepared by ERC on base mapping provided by the client and is enclosed as **Figure 1.** The mapping depicts the location of each tree and provides an identification number that corresponds to the tree described in the *Existing On-Site Tree Inventory* table. Tree species and health were verified by a licensed Certified Arborist on April 12 and 22, 2021.

Summary of Results

In total, 520 individual trees, composed of 19 separate species, were identified within the Site. The species include sugar maple (*Acer saccharum*), Russian olive (*Elaeagnus angustifolia*), green ash (*Fraxinus pennsylvanica*), honey locust (*Gleditsia triacanthos*), oneseed juniper (*Juniperus monosperma*), crabapple (*Malus sp.*), blue spruce (*Picea pungens*), pinyon pine (*pinus edulis*), Austrian pine (*Pinus nigra*), ponderosa pine (*pinus ponderosa*), Scotch pine (*pinus sylvestris*), eastern cottonwood (*Populus deltoies*), quaking aspen (*Populus tremuloides*), Lombardy poplar (*Populus nigra*), Canada red chokecherry (*Prunus virginiana*), coyote willow (*Salix exigua*), arborvitae (*Thuga spp*.), linden littleleaf (*Tilia cordata*), and Siberian elm (*Ulmus pumila*).

Trees on the Site are generally located within the residential areas of the Site. Generally, trees located within the Site show no signs of regular maintenance. The condition of 429 of the trees was determined to be "good". Thirty-three (33) trees located on the Site were categorized as "fair" (i.e., undesirable form, minor insect injury or disease). Nineteen (19) trees were considered to be in "poor" condition, and thirty-eight (39) trees were considered to be in "very poor" condition. It is recommended that these trees be removed. Location of these trees can be seen in **Figure 1.**

Native species (as listed by the US Department of Agriculture (USDA) PLANTS Database 2014 for Boulder County and Colorado) present on the Site include green ash, honey locust, oneseed juniper, crabapple, blue spruce, pinyon pine, ponderosa pine, eastern cottonwood, quaking aspen, Lombardy poplar, Canada red chokecherry and coyote willow. Non-native species present on the site include Siberian elm, and Russian olive.

During any future land use changes, landscape plans should utilize native, Boulder County approved tree species and remove or manage undesirable tree species.

Report completed by:

Ecological Resource Consultants, Inc.

Matthew Boyer, Project Ecologist

David J. Blauch, V.P., Senior Ecologist

Chris Becker, Certified Arborist (Contractor License # RM-0753A)
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(303) 279-1910

Table 1. Existing On-Site Tree Inventory.

ID	Common Name	Scientific Name	DBH (in)	Drip Line (ft)	General Health
1	Austrian Pine	*Pinus nigra*	10	15	Good
2	Blue Spruce	*Picea pungens*	7	9	Good
3	Austrian Pine	*Pinus nigra*	7	8	Good
4	Austrian Pine	*Pinus nigra*	6	8	Good
5	Austrian Pine	*Pinus nigra*	7	8	Good
6	Eastern Cottonwood	*Populus deltoides*	11.5	18	Good
7	Eastern Cottonwood	*Populus deltoides*	9.5	10	Good
8	Eastern Cottonwood	*Populus deltoides*	13	10	Good
9	Austrian Pine	*Pinus nigra*	7	15	Good
10	Austrian Pine	*Pinus nigra*	8	12	Good
11	Green Ash	*Fraxinus pennsylvanica*	8.5	12	Good
12	Austrian Pine	*Pinus nigra*	8.5	10	Good
13	Austrian Pine	*Pinus nigra*	11	15	Good
14	Austrian Pine	*Pinus nigra*	19	15	Good
15	Austrian Pine	*Pinus nigra*	14	15	Good
16	Austrian Pine	*Pinus nigra*	13	12	Good
17	Austrian Pine	*Pinus nigra*	12	15	Good
18	Austrian Pine	*Pinus nigra*	12	15	Good
19	Blue Spruce	*Picea pungens*	12	14	Good
20	Green Ash	*Fraxinus pennsylvanica*	17	20	Good
21	Green Ash	*Fraxinus pennsylvanica*	10	14	Good
22	Green Ash	*Fraxinus pennsylvanica*	15	25	Good
23	Blue Spruce	*Picea pungens*	13	15	Good
24	Oneseed Juniper	*Juniperus monosperma*	14	8	Good
25	Oneseed Juniper	*Juniperus monosperma*	10	5	Good
26	Oneseed Juniper	*Juniperus monosperma*	9	5	Good
27	Oneseed Juniper	*Juniperus monosperma*	12	5	Good
28	Oneseed Juniper	*Juniperus monosperma*	8	5	Good
29	Oneseed Juniper	*Juniperus monosperma*	10	5	Good
30	Oneseed Juniper	*Juniperus monosperma*	9	5	Good
31	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
32	Oneseed Juniper	*Juniperus monosperma*	11	5	Good
33	Oneseed Juniper	*Juniperus monosperma*	9	5	Good
34	Oneseed Juniper	*Juniperus monosperma*	13	5	Good
35	Oneseed Juniper	*Juniperus monosperma*	11	5	Good
36	Oneseed Juniper	*Juniperus monosperma*	10	5	Good
37	Oneseed Juniper	*Juniperus monosperma*	14	5	Good
38	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
39	Oneseed Juniper	*Juniperus monosperma*	14	5	Good
40	Oneseed Juniper	*Juniperus monosperma*	6	5	Good

41	Oneseed Juniper	*Juniperus monosperma*	12	5	Good
42	Oneseed Juniper	*Juniperus monosperma*	10	5	Good
43	Oneseed Juniper	*Juniperus monosperma*	11	5	Good
44	Oneseed Juniper	*Juniperus monosperma*	14	5	Good
45	Oneseed Juniper	*Juniperus monosperma*	9	5	Good
46	Oneseed Juniper	*Juniperus monosperma*	10	5	Good
47	Oneseed Juniper	*Juniperus monosperma*	10	5	Good
48	Oneseed Juniper	*Juniperus monosperma*	12	5	Good
49	Oneseed Juniper	*Juniperus monosperma*	12	5	Good
50	Oneseed Juniper	*Juniperus monosperma*	12	5	Good
51	Oneseed Juniper	*Juniperus monosperma*	14	5	Good
52	Oneseed Juniper	*Juniperus monosperma*	10	5	Good
53	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
54	Oneseed Juniper	*Juniperus monosperma*	2	5	Good
55	Green Ash	*Fraxinus pennsylvanica*	7.5	8	Good
56	Green Ash	*Fraxinus pennsylvanica*	11	15	Good
57	Green Ash	*Fraxinus pennsylvanica*	7	10	Good
58	Green Ash	*Fraxinus pennsylvanica*	6	10	Good
59	Green Ash	*Fraxinus pennsylvanica*	7	10	Good
60	Green Ash	*Fraxinus pennsylvanica*	4.5	7	Good
61	Green Ash	*Fraxinus pennsylvanica*	6.5	8	Good
62	Green Ash	*Fraxinus pennsylvanica*	5	8	Good
63	Green Ash	*Fraxinus pennsylvanica*	5	8	Good
64	Green Ash	*Fraxinus pennsylvanica*	5	8	Good
65	Green Ash	*Fraxinus pennsylvanica*	5.5	8	Good
66	Green Ash	*Fraxinus pennsylvanica*	4.5	7	Good
67	Green Ash	*Fraxinus pennsylvanica*	5	7	Good
68	Green Ash	*Fraxinus pennsylvanica*	6	8	Good
69	Green Ash	*Fraxinus pennsylvanica*	6.5	8	Good
70	Green Ash	*Fraxinus pennsylvanica*	6	8	Good
71	Austrian Pine	*Pinus nigra*	15	20	Good
72	Crabapple	*Malus sp.*	10	14	Good
73	Crabapple	*Malus sp.*	22	16	Good
74	Green Ash	*Fraxinus pennsylvanica*	19	30	Good
75	Blue Spruce	*Picea pungens*	11	13	Good
76	Green Ash	*Fraxinus pennsylvanica*	13	25	Good
77	Austrian Pine	*Pinus nigra*	22	25	Good
78	Green Ash	*Fraxinus pennsylvanica*	15	25	Good
79	Green Ash	*Fraxinus pennsylvanica*	14.5	25	Good
80	Green Ash	*Fraxinus pennsylvanica*	17	20	Fair
81	Quaking Aspen	*Populus tremuloides*	18	15	Good
82	Quaking Aspen	*Populus tremuloides*	16	12	Fair
83	Quaking Aspen	*Populus tremuloides*	6	8	Good

84	Quaking Aspen	*Populus tremuloides*	8	10	Good
85	Quaking Aspen	*Populus tremuloides*	19	12	Good
86	Quaking Aspen	*Populus tremuloides*	5	7	Good
87	Linden Littleleaf	*Tilia cordata*	9	15	Good
88	Linden Littleleaf	*Tilia cordata*	12	24	Good
89	Green Ash	*Fraxinus pennsylvanica*	9	14	Good
90	Green Ash	*Fraxinus pennsylvanica*	10	14	Good
91	Quaking Aspen	*Populus tremuloides*	4	5	Good
92	Quaking Aspen	*Populus tremuloides*	5	5	Good
93	Quaking Aspen	*Populus tremuloides*	12	14	Good
94	Quaking Aspen	*Populus tremuloides*	14	14	Fair
95	Crabapple	*Malus sp.*	5.5	9	Good
96	Canada Red Chokecherry	*Prunus virginiana*	8	12	Good
97	Green Ash	*Fraxinus pennsylvanica*	15	22	Good
98	Russian Olive	*Elaeagnus angustifolia*	11.5	20	Good
99	Lombardy Poplar	*Populus nigra*	15	5	Very Poor
100	Lombardy Poplar	*Populus nigra*	5	5	Very Poor
101	Lombardy Poplar	*Populus nigra*	20	7	Very Poor
102	Lombardy Poplar	*Populus nigra*	17	7	Very Poor
103	Lombardy Poplar	*Populus nigra*	20	8	Very Poor
104	Siberian Elm	*Ulmus pumila*	16	13	Poor
105*	Coyote Willow	*Salix exigua*	10	10	Poor
106*	Coyote Willow	*Salix exigua*	15	12	Poor
107	Blue Spruce	*Picea pungens*	8	10	Good
108	Eastern Cottonwood	*Populus deltoides*	10	11	Good
109	Eastern Cottonwood	*Populus deltoides*	6	8	Good
110	Austrian Pine	*Pinus nigra*	9	12	Good
111	Blue Spruce	*Picea pungens*	8	9	Very Poor
112	Austrian Pine	*Pinus nigra*	8	14	Good
113	Austrian Pine	*Pinus nigra*	8	12	Very Poor
114*	Coyote Willow	*Salix exigua*	10	10	Fair
115*	Coyote Willow	*Salix exigua*	7	3	Very Poor
116*	Coyote Willow	*Salix exigua*	5	4	Very Poor
117*	Coyote Willow	*Salix exigua*	5	4	Very Poor
118*	Coyote Willow	*Salix exigua*	7	5	Very Poor
119*	Coyote Willow	*Salix exigua*	8	7	Very Poor
120*	Coyote Willow	*Salix exigua*	6	5	Very Poor
121*	Coyote Willow	*Salix exigua*	4.5	4	Very Poor
122*	Coyote Willow	*Salix exigua*	10	8	Very Poor
123	Eastern Cottonwood	*Populus deltoides*	9	10	Good
124	Quaking Aspen	*Populus tremuloides*	6.5	8	Good
125	Siberian Elm	*Ulmus pumila*	24	25	Very Poor

126	Oneseed Juniper	*Juniperus monosperma*	6.5	9	Good
127	Oneseed Juniper	*Juniperus monosperma*	7	8	Good
128	Oneseed Juniper	*Juniperus monosperma*	6	12	Good
129	Oneseed Juniper	*Juniperus monosperma*	8	10	Good
130	Oneseed Juniper	*Juniperus monosperma*	9	10	Good
131	Oneseed Juniper	*Juniperus monosperma*	6	8	Good
132	Oneseed Juniper	*Juniperus monosperma*	7	10	Good
133	Oneseed Juniper	*Juniperus monosperma*	6	8	Good
134	Oneseed Juniper	*Juniperus monosperma*	9	10	Good
135	Oneseed Juniper	*Juniperus monosperma*	8	14	Good
136	Oneseed Juniper	*Juniperus monosperma*	5	6	Good
137	Oneseed Juniper	*Juniperus monosperma*	5	8	Good
138	Oneseed Juniper	*Juniperus monosperma*	5	8	Good
139	Oneseed Juniper	*Juniperus monosperma*	6	7	Good
140	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
141	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
142	Oneseed Juniper	*Juniperus monosperma*	4	5	Good
143	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
144	Oneseed Juniper	*Juniperus monosperma*	4	5	Good
145	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
146	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
147	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
148	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
149	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
150	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
151	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
152	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
153	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
154	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
155	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
156	Oneseed Juniper	*Juniperus monosperma*	4	5	Good
157	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
158	Oneseed Juniper	*Juniperus monosperma*	5.5	5	Good
159	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
160	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
161	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
162	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
163	Oneseed Juniper	*Juniperus monosperma*	8	5	Good
164	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
165	Oneseed Juniper	*Juniperus monosperma*	5.5	8	Good
166	Russian Olive	*Elaeagnus angustifolia*	6	10	Very Poor
167	Russian Olive	*Elaeagnus angustifolia*	4	6	Very Poor
168	Russian Olive	*Elaeagnus angustifolia*	5	8	Very Poor

169	Russian Olive	*Elaeagnus angustifolia*	4.5	8	Very Poor
170	Russian Olive	*Elaeagnus angustifolia*	7	8	Poor
171	Russian Olive	*Elaeagnus angustifolia*	4.5	5	Very Poor
172	Oneseed Juniper	*Juniperus monosperma*	4	5	Poor
173	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Poor
174	Russian Olive	*Elaeagnus angustifolia*	4.5	5	Very Poor
175	Oneseed Juniper	*Juniperus monosperma*	4.5	6	Fair
176	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
177	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
178	Oneseed Juniper	*Juniperus monosperma*	8	5	Good
179	Oneseed Juniper	*Juniperus monosperma*	8	5	Good
180	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
181	Oneseed Juniper	*Juniperus monosperma*	8	8	Good
182	Oneseed Juniper	*Juniperus monosperma*	7	8	Good
183	Oneseed Juniper	*Juniperus monosperma*	8	5	Good
184	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
185	Oneseed Juniper	*Juniperus monosperma*	8	8	Good
186	Oneseed Juniper	*Juniperus monosperma*	8	8	Good
187	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
188	Oneseed Juniper	*Juniperus monosperma*	8	5	Good
189	Oneseed Juniper	*Juniperus monosperma*	7	8	Good
190	Oneseed Juniper	*Juniperus monosperma*	6	8	Good
191	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
192	Oneseed Juniper	*Juniperus monosperma*	8	5	Good
193	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
194	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
195	Oneseed Juniper	*Juniperus monosperma*	8	5	Good
196	Oneseed Juniper	*Juniperus monosperma*	8	5	Good
197	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
198	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
199	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
200	Oneseed Juniper	*Juniperus monosperma*	8	5	Good
201	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
202	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
203	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
204	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
205	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
206	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
207	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
208	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
209	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
210	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
211	Oneseed Juniper	*Juniperus monosperma*	5	5	Good

212	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
213	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
214	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
215	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
216	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
217	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
218	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
219	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
220	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
221	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
222	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
223	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
224	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
225	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
226	Oneseed Juniper	*Juniperus monosperma*	8	8	Good
227	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
228	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
229	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
230	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
231	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
232	Oneseed Juniper	*Juniperus monosperma*	4	5	Good
233	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
234	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
235	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
236	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
237	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
238	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
239	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
240	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
241	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
242	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
243	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
244	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
245	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
246	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
247	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
248	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
249	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
250	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
251	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
252	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
253	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
254	Oneseed Juniper	*Juniperus monosperma*	5	5	Good

255	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
256	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
257	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
258	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
259	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
260	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
261	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
262	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
263	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
264	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
265	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
266	Oneseed Juniper	*Juniperus monosperma*	4.5	5	Good
267	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
268	Oneseed Juniper	*Juniperus monosperma*	7	8	Good
269	Oneseed Juniper	*Juniperus monosperma*	4.5	8	Good
270	Eastern Cottonwood	*Populus deltoides*	31	24	Fair
271	Crabapple	*Malus sp.*	5	8	Good
272	Green Ash	*Fraxinus pennsylvanica*	6	12	Fair
273	Green Ash	*Fraxinus pennsylvanica*	6.5	15	Good
274	Russian Olive	*Elaeagnus angustifolia*	8.5	15	Fair
275	Austrian Pine	*Pinus nigra*	13	10	Good
276	Austrian Pine	*Pinus nigra*	9	12	Good
277	Eastern Cottonwood	*Populus deltoides*	18	24	Fair
278	Austrian Pine	*Pinus nigra*	6.5	8	Very Poor
279	Austrian Pine	*Pinus nigra*	8	10	Good
280	Honey Locust	*Gleditsia triacanthos*	10	15	Very Poor
281	Honey Locust	*Gleditsia triacanthos*	15	25	Good
282	Siberian Elm	*Ulmus pumila*	19.5	8	Very Poor
283	Siberian Elm	*Ulmus pumila*	19	30	Good
284	Blue Spruce	*Picea pungens*	5	7	Very Poor
285	Austrian Pine	*Pinus nigra*	8	10	Very Poor
286	Eastern Cottonwood	*Populus deltoides*	15	14	Very Poor
287	Russian Olive	*Elaeagnus angustifolia*	7.5	12	Fair
288	Austrian Pine	*Pinus nigra*	7	8	Fair
289	Russian Olive	*Elaeagnus angustifolia*	9	15	Fair
290	Austrian Pine	*Pinus nigra*	9	9	Good
291	Austrian Pine	*Pinus nigra*	11	12	Good
292	Sugar Maple	*Acer saccharum*	18	30	Fair
293	Canada Red Chokecherry	*Prunus virginiana*	7.5	12	Fair
294	Pinyon Pine	*Pinus edulis*	6	8	Good
295	Eastern Cottonwood	*Populus deltoides*	23	25	Very Poor
296	Scotch Pine	*Pinus sylvestris*	8.5	12	Fair

297	Scotch Pine	*Pinus sylvestris*	8	12	Fair
298	Austrian Pine	*Pinus nigra*	7	10	Poor
299	Eastern Cottonwood	*Populus deltoides*	22	15	Very Poor
300	Eastern Cottonwood	*Populus deltoides*	22	15	Very Poor
301	Scotch Pine	*Pinus sylvestris*	13	15	Good
302	Oneseed Juniper	*Juniperus monosperma*	6	8	Good
303	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
304	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
305	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
306	Oneseed Juniper	*Juniperus monosperma*	6	8	Good
307	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
308	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
309	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
310	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
311	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
312	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
313	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
314	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
315	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
316	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
317	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
318	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
319	Russian Olive	*Elaeagnus angustifolia*	23	25	Good
320	Oneseed Juniper	*Juniperus monosperma*	7	8	Good
321	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
322	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
323	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
324	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
325	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
326	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
327	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
328	Oneseed Juniper	*Juniperus monosperma*	6	5	Good
329	Oneseed Juniper	*Juniperus monosperma*	8	5	Good
330	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
331	Oneseed Juniper	*Juniperus monosperma*	7	5	Good
332	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
333	Oneseed Juniper	*Juniperus monosperma*	5	5	Good
334	Oneseed Juniper	*Juniperus monosperma*	7	6	Good
335	Oneseed Juniper	*Juniperus monosperma*	8	8	Good
336	Siberian Elm	*Ulmus pumila*	16	25	Good
337	Ponderosa Pine	*Pinus ponderosa*	8	10	Good
338	Ponderosa Pine	*Pinus ponderosa*	13	15	Good
339	Ponderosa Pine	*Pinus ponderosa*	12.5	18	Good

340	Green Ash	*Fraxinus pennsylvanica*	9	15	Good
341	Ponderosa Pine	*Pinus ponderosa*	12	18	Good
342	Siberian Elm	*Ulmus pumila*	19.5	24	Good
343	Honey Locust	*Gleditsia triacanthos*	5	9	Good
344	Arborvitae	*Thugga spp.*	7	8	Fair
345	Austrian Pine	*Pinus nigra*	15.5	18	Good
346	Blue Spruce	*Picea pungens*	18.5	18	Good
347	Eastern Cottonwood	*Populus deltoides*	20	18	Fair
348	Eastern Cottonwood	*Populus deltoides*	15.5	18	Fair
349	Blue Spruce	*Picea pungens*	6	8	Good
350	Austrian Pine	*Pinus nigra*	5	5	Good
351	Blue Spruce	*Picea pungens*	6	6	Good
352	Blue Spruce	*Picea pungens*	4.5	5	Good
353	Blue Spruce	*Picea pungens*	4.5	5	Good
354	Austrian Pine	*Pinus nigra*	6	8	Good
355	Austrian Pine	*Pinus nigra*	7	9	Good
356	Blue Spruce	*Picea pungens*	7	8	Good
357	Blue Spruce	*Picea pungens*	7	9	Good
358	Austrian Pine	*Pinus nigra*	7	10	Good
359	Quaking Aspen	*Populus tremuloides*	6	8	Good
360	Austrian Pine	*Pinus nigra*	7	9	Good
361	Siberian Elm	*Ulmus pumila*	8	10	Good
362	Siberian Elm	*Ulmus pumila*	12	14	Good
363	Russian Olive	*Elaeagnus angustifolia*	26	25	Good
364	Ponderosa Pine	*Pinus ponderosa*	16.5	30	Good
365	Eastern Cottonwood	*Populus deltoides*	9	10	Good
366	Honey Locust	*Gleditsia triacanthos*	14	15	Good
367	Green Ash	*Fraxinus pennsylvanica*	14	17	Good
368	Green Ash	*Fraxinus pennsylvanica*	13	15	Good
369	Eastern Cottonwood	*Populus deltoides*	11.5	13	Poor
370	Eastern Cottonwood	*Populus deltoides*	14	16	Good
371	Eastern Cottonwood	*Populus deltoides*	82	60	Fair
372	Eastern Cottonwood	*Populus deltoides*	33	40	Good
373	Russian Olive	*Elaeagnus angustifolia*	23	25	Good
374	Russian Olive	*Elaeagnus angustifolia*	24	25	Good
375	Russian Olive	*Elaeagnus angustifolia*	24	30	Good
376	Russian Olive	*Elaeagnus angustifolia*	10	15	Good
377	Russian Olive	*Elaeagnus angustifolia*	20	18	Good
378	Russian Olive	*Elaeagnus angustifolia*	26	25	Good
379	Russian Olive	*Elaeagnus angustifolia*	19	20	Good
380	Russian Olive	*Elaeagnus angustifolia*	23	20	Good
381	Russian Olive	*Elaeagnus angustifolia*	18	20	Good
382	Russian Olive	*Elaeagnus angustifolia*	26	25	Good

383	Russian Olive	*Elaeagnus angustifolia*	16	14	Good
384	Russian Olive	*Elaeagnus angustifolia*	19	20	Good
385	Russian Olive	*Elaeagnus angustifolia*	25	22	Good
386	Russian Olive	*Elaeagnus angustifolia*	14	15	Good
387	Russian Olive	*Elaeagnus angustifolia*	23	20	Good
388	Russian Olive	*Elaeagnus angustifolia*	20	22	Good
389	Russian Olive	*Elaeagnus angustifolia*	16	18	Good
390	Russian Olive	*Elaeagnus angustifolia*	13	15	Good
391	Russian Olive	*Elaeagnus angustifolia*	9	10	Good
392	Russian Olive	*Elaeagnus angustifolia*	18	15	Good
393	Russian Olive	*Elaeagnus angustifolia*	28	24	Good
394	Russian Olive	*Elaeagnus angustifolia*	20	18	Good
395	Russian Olive	*Elaeagnus angustifolia*	14	15	Good
396	Russian Olive	*Elaeagnus angustifolia*	16	15	Good
397	Russian Olive	*Elaeagnus angustifolia*	15	15	Good
398	Russian Olive	*Elaeagnus angustifolia*	16	15	Good
399	Russian Olive	*Elaeagnus angustifolia*	10	10	Good
400	Russian Olive	*Elaeagnus angustifolia*	17	15	Good
401	Russian Olive	*Elaeagnus angustifolia*	23	20	Good
402	Russian Olive	*Elaeagnus angustifolia*	11	10	Good
403	Russian Olive	*Elaeagnus angustifolia*	12.5	14	Good
404	Russian Olive	*Elaeagnus angustifolia*	9.5	11	Good
405	Russian Olive	*Elaeagnus angustifolia*	23	22	Good
406	Russian Olive	*Elaeagnus angustifolia*	21	24	Good
407	Russian Olive	*Elaeagnus angustifolia*	16	20	Good
408	Russian Olive	*Elaeagnus angustifolia*	24	22	Good
409	Scotch Pine	*Pinus sylvestris*	19	20	Good
410	Scotch Pine	*Pinus sylvestris*	13	10	Good
411	Scotch Pine	*Pinus sylvestris*	8	10	Good
412	Scotch Pine	*Pinus sylvestris*	18.5	15	Good
413	Scotch Pine	*Pinus sylvestris*	12	15	Good
414	Scotch Pine	*Pinus sylvestris*	10	10	Good
415	Scotch Pine	*Pinus sylvestris*	5	8	Good
416	Scotch Pine	*Pinus sylvestris*	11	15	Good
417	Scotch Pine	*Pinus sylvestris*	11.5	15	Good
418	Scotch Pine	*Pinus sylvestris*	10.5	15	Good
419	Eastern Cottonwood	*Populus deltoides*	32	30	Good
420	Austrian Pine	*Pinus nigra*	11	15	Good
421	Austrian Pine	*Pinus nigra*	8.5	10	Good
422	Scotch Pine	*Pinus sylvestris*	12	10	Good
423	Scotch Pine	*Pinus sylvestris*	16.5	17	Good
424	Scotch Pine	*Pinus sylvestris*	14	15	Good
425	Scotch Pine	*Pinus sylvestris*	15	18	Good

426	Scotch Pine	*Pinus sylvestris*	17	18	Good
427	Scotch Pine	*Pinus sylvestris*	11	10	Good
428	Scotch Pine	*Pinus sylvestris*	11	10	Good
429	Siberian Elm	*Ulmus pumila*	24	20	Fair
430	Siberian Elm	*Ulmus pumila*	7	10	Fair
431	Austrian Pine	*Pinus nigra*	18	20	Good
432	Austrian Pine	*Pinus nigra*	20	21	Good
433	Siberian Elm	*Ulmus pumila*	21	22	Very Poor
434	Siberian Elm	*Ulmus pumila*	32	30	Fair
435	Eastern Cottonwood	*Populus deltoides*	38	32	Poor
436	Blue Spruce	*Picea pungens*	13	15	Good
437	Austrian Pine	*Pinus nigra*	13.5	15	Good
438	Austrian Pine	*Pinus nigra*	10.5	11	Good
439	Austrian Pine	*Pinus nigra*	17	18	Good
440	Crabapple	*Malus sp.*	22	25	Fair
441	Austrian Pine	*Pinus nigra*	7	10	Good
442	Siberian Elm	*Ulmus pumila*	23	25	Poor
443	Siberian Elm	*Ulmus pumila*	8	10	Very Poor
444	Siberian Elm	*Ulmus pumila*	7	10	Good
445	Siberian Elm	*Ulmus pumila*	23	25	Very Poor
446	Siberian Elm	*Ulmus pumila*	30	32	Fair
447	Siberian Elm	*Ulmus pumila*	18	20	Good
448	Siberian Elm	*Ulmus pumila*	12.5	13	Good
449	Siberian Elm	*Ulmus pumila*	10	12	Very Poor
450	Siberian Elm	*Ulmus pumila*	7	10	Very Poor
451	Siberian Elm	*Ulmus pumila*	15.5	16	Good
452	Siberian Elm	*Ulmus pumila*	11	12	Good
453	Siberian Elm	*Ulmus pumila*	15	16	Good
454	Siberian Elm	*Ulmus pumila*	20	22	Fair
455	Siberian Elm	*Ulmus pumila*	7	10	Fair
456	Siberian Elm	*Ulmus pumila*	19	20	Good
457	Siberian Elm	*Ulmus pumila*	16	20	Very Poor
458	Siberian Elm	*Ulmus pumila*	18	20	Good
459	Siberian Elm	*Ulmus pumila*	18	20	Good
460	Siberian Elm	*Ulmus pumila*	18.5	20	Good
461	Siberian Elm	*Ulmus pumila*	10	12	Good
462	Siberian Elm	*Ulmus pumila*	22	25	Good
463	Siberian Elm	*Ulmus pumila*	9	10	Good
464	Siberian Elm	*Ulmus pumila*	19	20	Poor
465	Siberian Elm	*Ulmus pumila*	27	24	Good
466	Siberian Elm	*Ulmus pumila*	28	25	Poor
467	Siberian Elm	*Ulmus pumila*	22	20	Good
468	Siberian Elm	*Ulmus pumila*	22	20	Good

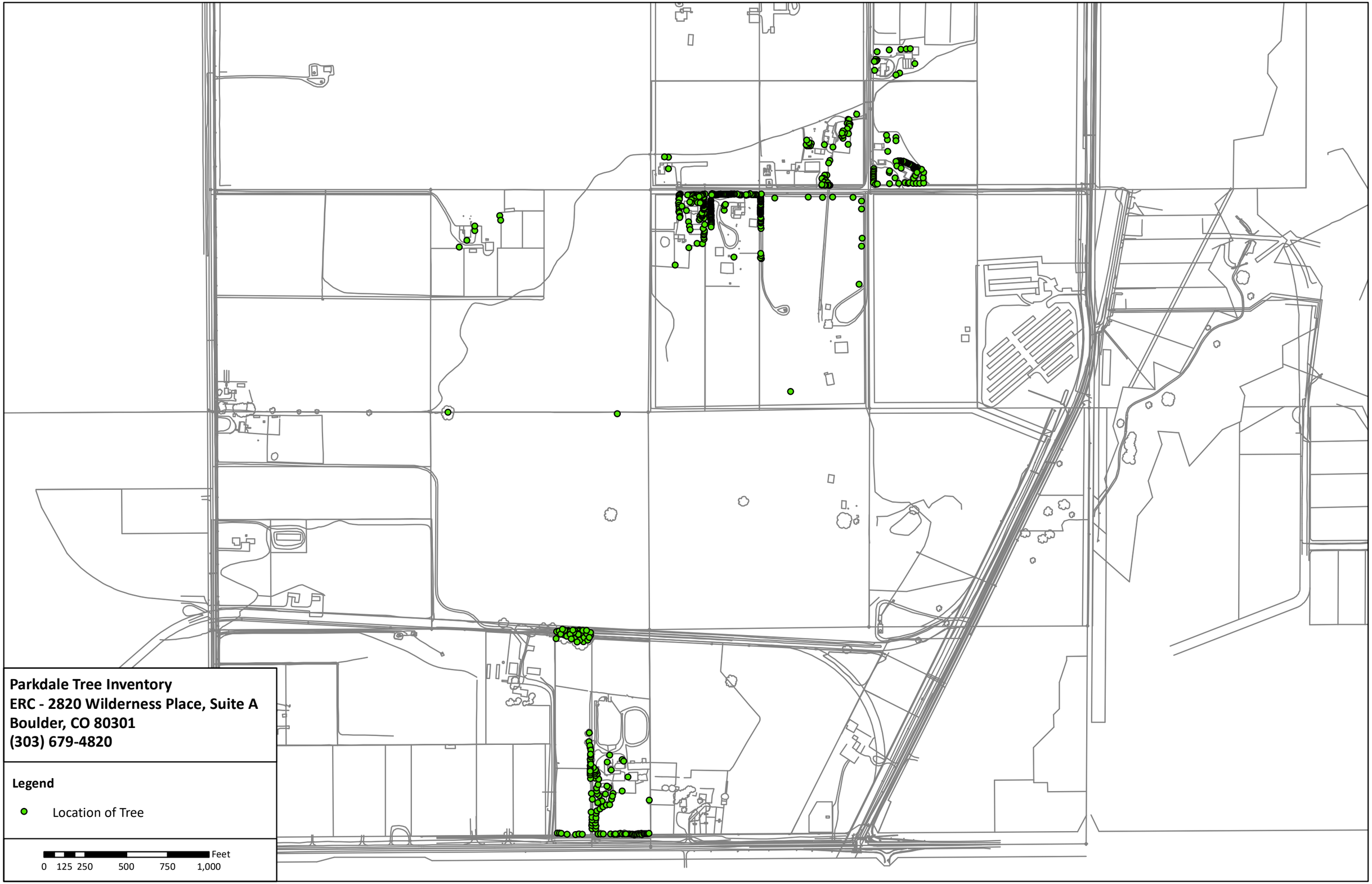
469	Siberian Elm	*Ulmus pumila*	24	20	Good
470	Siberian Elm	*Ulmus pumila*	26	23	Fair
471	Siberian Elm	*Ulmus pumila*	9	10	Poor
472	Siberian Elm	*Ulmus pumila*	11	12	Poor
473	Siberian Elm	*Ulmus pumila*	23	25	Poor
474	Siberian Elm	*Ulmus pumila*	12	15	Good
475	Eastern Cottonwood	*Populus deltoides*	52	40	Good
476	Eastern Cottonwood	*Populus deltoides*	10	10	Poor
477	Eastern Cottonwood	*Populus deltoides*	32	25	Good
478	Eastern Cottonwood	*Populus deltoides*	34	25	Good
479	Eastern Cottonwood	*Populus deltoides*	22	20	Good
480	Eastern Cottonwood	*Populus deltoides*	9	10	Poor
481	Eastern Cottonwood	*Populus deltoides*	17	14	Good
482	Eastern Cottonwood	*Populus deltoides*	14.5	15	Good
483	Eastern Cottonwood	*Populus deltoides*	16	15	Good
484	Eastern Cottonwood	*Populus deltoides*	18	18	Fair
485	Eastern Cottonwood	*Populus deltoides*	40	35	Good
486	Eastern Cottonwood	*Populus deltoides*	14	15	Good
487	Eastern Cottonwood	*Populus deltoides*	10	12	Good
488	Eastern Cottonwood	*Populus deltoides*	11	12	Good
489	Eastern Cottonwood	*Populus deltoides*	9	10	Good
490	Eastern Cottonwood	*Populus deltoides*	8	10	Very Poor
491	Eastern Cottonwood	*Populus deltoides*	50	40	Fair
492	Eastern Cottonwood	*Populus deltoides*	13	15	Poor
493	Eastern Cottonwood	*Populus deltoides*	13	15	Good
494	Eastern Cottonwood	*Populus deltoides*	14	15	Good
495	Eastern Cottonwood	*Populus deltoides*	10	12	Very Poor
496	Eastern Cottonwood	*Populus deltoides*	15	15	Good
497	Eastern Cottonwood	*Populus deltoides*	15	15	Good
498	Eastern Cottonwood	*Populus deltoides*	15	15	Good
499	Eastern Cottonwood	*Populus deltoides*	13	12	Fair
500	Eastern Cottonwood	*Populus deltoides*	6	10	Poor
501	Eastern Cottonwood	*Populus deltoides*	20	22	Good
502	Eastern Cottonwood	*Populus deltoides*	14	15	Good
503	Eastern Cottonwood	*Populus deltoides*	13	15	Good
504	Eastern Cottonwood	*Populus deltoides*	15	17	Good
505	Eastern Cottonwood	*Populus deltoides*	15	15	Good
506	Eastern Cottonwood	*Populus deltoides*	11	12	Good
507	Eastern Cottonwood	*Populus deltoides*	12	12	Good
508	Eastern Cottonwood	*Populus deltoides*	11	12	Good
509	Eastern Cottonwood	*Populus deltoides*	17	20	Good
510	Eastern Cottonwood	*Populus deltoides*	10	12	Good
511	Eastern Cottonwood	*Populus deltoides*	10	10	Good

512	Eastern Cottonwood	*Populus deltoides*	23	20	Fair
513	Eastern Cottonwood	*Populus deltoides*	27	25	Good
514	Eastern Cottonwood	*Populus deltoides*	21	20	Good
515	Eastern Cottonwood	*Populus deltoides*	12	15	Fair
516	Eastern Cottonwood	*Populus deltoides*	22	20	Good
517	Eastern Cottonwood	*Populus deltoides*	26	25	Good
518	Eastern Cottonwood	*Populus deltoides*	14	12	Good
519	Eastern Cottonwood	*Populus deltoides*	41	35	Good
520	Eastern Cottonwood	*Populus deltoides*	36	30	Good

-ID# refers to **Figure 1:** ERC Tree Inventory Map

-DBH refers to diameter at breast height measured at 54 inches above ground

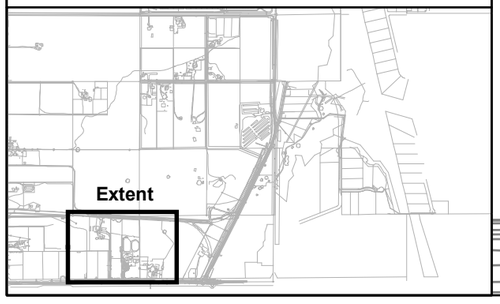
-* indicates the tree has multiple stems included in the DBH measurement


Parkdale Tree Inventory
ERC - 2820 Wilderness Place, Suite A
Boulder, CO 80301
(303) 679-4820
Legend
Location of Tree
Feet
0 125 250 500 750 1,000

Parkdale Tree Inventory
ERC - 2820 Wilderness Place, Suite A
Boulder, CO 80301
(303) 679-4820

Legend

Tree ID and Location



Feet
0 125 250 500

370
369
368
367
366
365
371
372

Parkdale Tree Inventory
ERC - 2820 Wilderness Place, Suite A
Boulder, CO 80301
(303) 679-4820

Legend

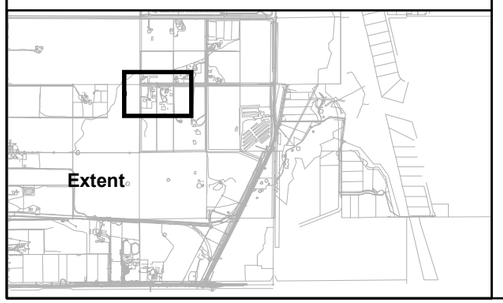
Tree ID and Location

0 125 250 500 Feet

Parkdale Tree Inventory
ERC - 2820 Wilderness Place, Suite A
Boulder, CO 80301
(303) 679-4820

Legend

Tree ID and Location



Feet
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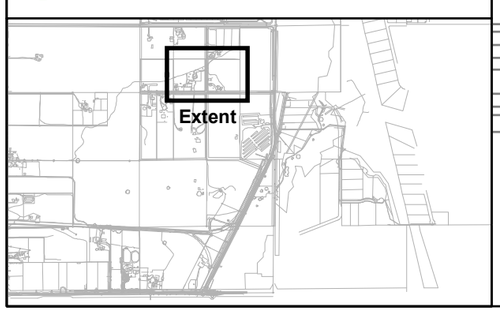
Parkdale Tree Inventory
ERC - 2820 Wilderness Place, Suite A
Boulder, CO 80301
(303) 679-4820

Legend

Tree ID and Location



Feet
0 100 200 400

288
289
287
286
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284
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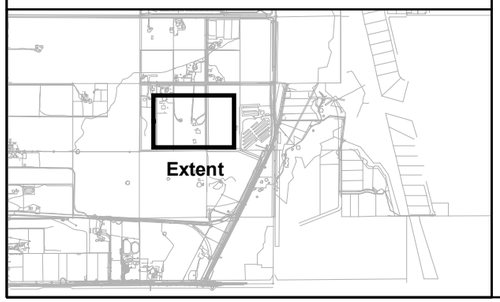
283
130
129
128
127
126
270
173
174
175
125

Parkdale Tree Inventory
ERC - 2820 Wilderness Place, Suite A
Boulder, CO 80301
(303) 679-4820

Legend

Tree ID and Location



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