TRAFFIC VOLUME AND LEVEL OF SERVICE EVALUATION

EDWARDS SPUR ROAD PRELIMINARY DESIGN

Prepared for:

Eagle County
500 Broadway
Eagle, CO 81631

Prepared by:

Felsburg Holt & Ullevig
6300 S. Syracuse Way
Suite 600
Centennial, CO 80111

Project Manager: Charles M. Buck, P.E.
Principal: David C. Burnett, P.E.

May 7, 2004
FHU Reference No. 03-206

FELSBURG HOLT & ULLEVIG

engineering paths to transportation solutions

May 7, 2004

Mr. Justin Hildreth, P.E.
Eagle County Engineering
P.O. Box 850
Eagle, Colorado 81631-0850

Re: Traffic Volume and Level Of Service Evaluation
Edwards Spur Road Preliminary Design
FHU Reference No. 03-206

Dear Mr. Hildreth:

On behalf of Eagle County, Felsburg Holt & Ullevig is currently conducting a preliminary design effort for improvements to I-70 G, the Edwards Spur Road. Because the Edwards Spur Road is a State Highway, our design efforts on this project are being coordinated with the Colorado Department of Transportation.

The Edwards area of Eagle County has been the subject of several previous traffic engineering analyses, including the following reports:

- EDWARDS AREA ACCESS CONTROL PLAN, Felsburg Holt & Ullevig, 1997.
- US 6 CORRIDOR FEASIBILITY STUDY, PBS & J, Felsburg Holt & Ullevig, 2004.

These previous studies evaluated existing and projected traffic volumes in and around the Edwards area, and included roadway improvement recommendations to accommodate future conditions. Improvement requirements for the Edwards Spur Road were included in these evaluations, and have been used as the basis for our current preliminary design efforts. The purpose of this brief letter is to summarize the existing and projected future conditions along the Spur Road identified in the above reports as support documentation for the preliminary design.

EXISTING CONDITIONS

The Spur Road extends south from I-70 to US 6, a distance of approximately one half mile. The roadway currently consists of a basic two-lane cross section, with auxiliary turn lanes provided at key intersections. The intersections at the I-70 ramps, Miller Ranch Road, and US 6 are currently signalized; all other intersections and accesses are unsignalized.

Existing traffic volume data were collected in the Edwards area in March, 2002 as a part of the US 6 Corridor Feasibility Study. The data included 24-hour roadway counts and peak hour intersection turning movement counts. The existing traffic volumes for the Spur Road are depicted on the attached Figure 1. As shown, the existing count between US 6 and Miller Ranch

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Road is nearly 18,000 vehicle trips per day (VPD). The existing peak hour traffic volumes were used as the basis for intersection Level Of Service (LOS) analyses.

LOS is a qualitative measure of traffic operational conditions based on roadway capacity and motorist delay. The 2000 HIGHWAY CAPACITY MANUAL defines six levels of service, ranging from A to F, with LOS A representing the best possible operating conditions and LOS F representing over-capacity, or congested conditions. In Eagle County, LOS D is considered to be acceptable for peak hour intersection operations, while LOS C is the standard for acceptable roadway operations.

The results of the existing conditions LOS analyses are illustrated on Figure 2. Currently, the signalized intersections at the I-70 ramps and at Miller Ranch Road operate at acceptable levels (LOS B) during peak times. The signalized intersection at US 6, however, operates at LOS D during the AM peak hour and LOS E during the PM peak hour. At the Spur Road intersection serving Old Edwards Estates and the CDOT rest area, the STOP sign controlled left turns are at LOS E or F during peak times, indicating long delays for motorists attempting this maneuver. Two-lane roadway operations along the Spur Road are currently at LOS D during both peak hours.

TRAFFIC VOLUME PROJECTIONS

To provide a basis for evaluating roadway cross-section, access configuration, and traffic control alternatives, year 2025 traffic volume forecasts for the Spur Road were extracted from the US 6 Corridor Feasibility Study. Within the Edwards Area, these forecasts are based on build-out level trip generation estimates for land uses within the Edwards area. An attached excerpt from the Edwards Area Access Control Plan documents this trip generation analysis.

Figure 3 illustrates the year 2025 traffic volume projections along the Spur Road. It can be seen that daily traffic volumes are projected to be approximately 33,000 vehicles per day (VPD) between I-70 and US 6. North of I-70, the projected daily traffic volume would be approximately 11,000 VPD. South US 6 (along Edwards Village Boulevard) the projected volume would be about 10,500 VPD.

PROJECTED TRAFFIC OPERATIONS – NO BUILD

The projected traffic volumes were then used as the basis for Level of Service (LOS) analyses to determine the appropriate future laneage, intersection geometrics, and traffic control along the Spur Road. Figure 4 depicts the LOS associated with a No-Build scenario, in which the future traffic volumes were loaded onto the existing Spur Road configuration. It can be seen that congested conditions would be expected at the north I-70 ramp intersection (PM peak hour only), at the Miller Ranch Road intersection (both AM and PM peak hours), and at the intersection with US 6 (both peak hours). Two-lane roadway operations along the Spur Road would be at LOS E during the AM peak hour and LOS F during the PM peak hour.

PROJECTED TRAFFIC OPERATIONS – WITH SPUR ROAD IMPROVEMENTS

Figure 5 summarizes the LOS anticipated with the roadway and traffic control improvements identified in the US 6 Corridor Study (intersection geometrics are depicted on the figure). As shown, all intersections along the Spur Road would operate at LOS C or better under either traffic signal control or through the use of roundabouts. At the Spur Road/US 6 intersection, however, the roundabout would need to be either three lanes within the circle or two lanes plus right-turn bypass lanes on all approaches. Urban arterial roadway operations along the Spur Road would be at LOS B during the AM peak hour and LOS C during the PM peak hour.

SUMMARY AND CONCLUSIONS

The preliminary design effort for improvements to I-70 G, the Edwards Spur Road, has used traffic volume data and roadway improvement recommendations documented in previous traffic engineering analyses, including the EDWARDS AREA ACCESS CONTROL PLAN and US 6 CORRIDOR FEASIBILITY STUDY. These studies indicate that traffic operations at several intersections along the Spur Road are currently below Eagle County LOS standards. Future projected growth in traffic volumes along the Spur Road would exacerbate operational conditions without roadway and traffic control improvements.

The required improvements consist of providing a continuous right-turn lane in each direction, with signalized traffic control or roundabouts at key accesses and intersections. Left-turn auxiliary lane improvements would also be needed at signalized locations. The preliminary design effort identified four alternative plans, each using a different combination of intersection traffic control. The alternatives were presented for consideration at a Public Open House in Edwards on April 8, 2004. Following a review of comments received, an alternative (Alternative 3) was selected for continued design efforts. This alternative would use traffic signals at the intersections at US 6 and the CDOT rest area/Old Edwards Estates, with roundabouts at Miller Ranch Road, I-70 south ramps, and at a combined I-70 north ramps/Berry Creek Road/Beard Creek Road intersection. The attached plan and profile sheets illustrate the current design concept.

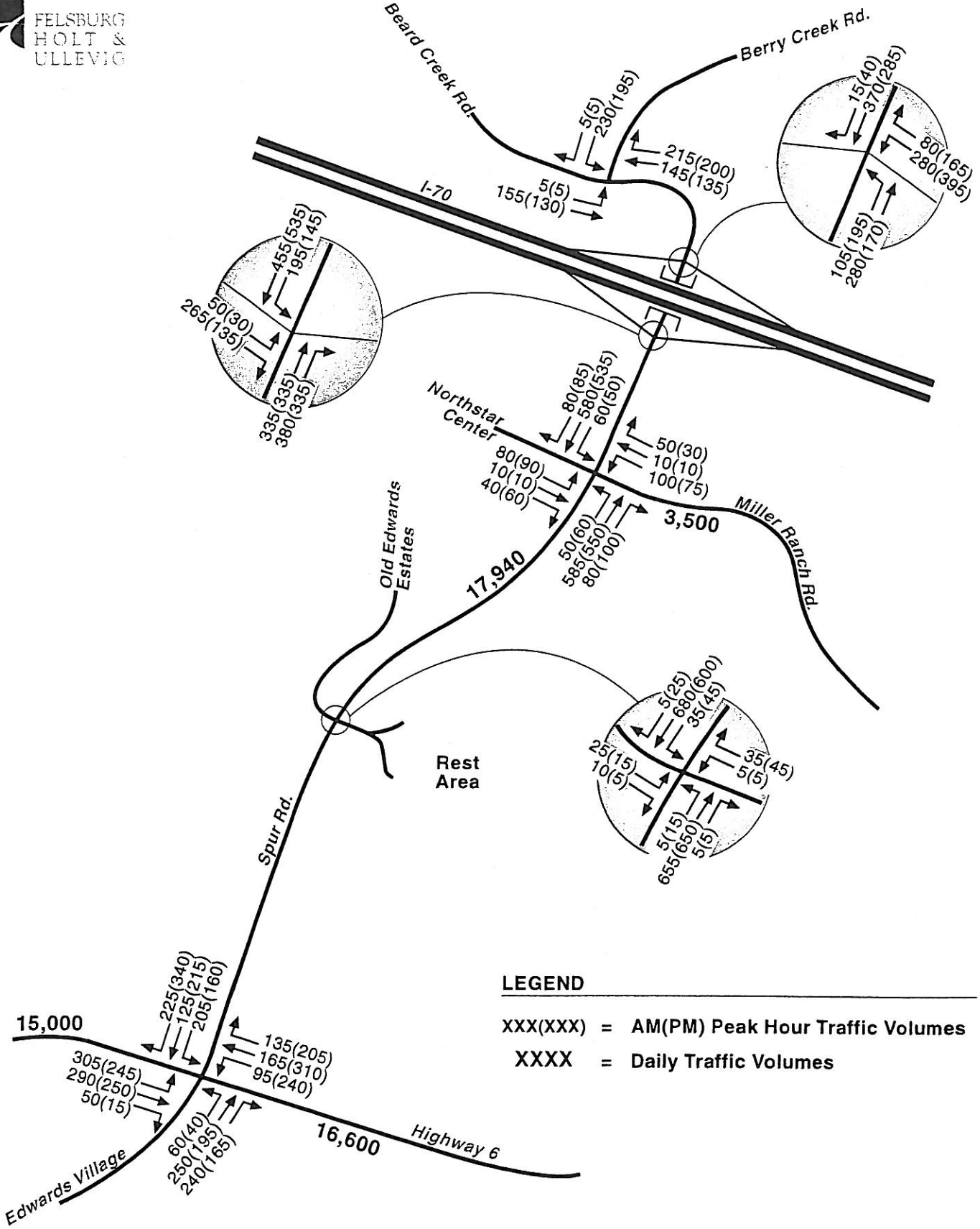
We trust the information provided in this letter will assist you in your efforts on this project. If you have any questions, or if we can provide any additional services, please do not hesitate to call.

Sincerely,

FELSBURG HOLT & ULLEVIG

Charles M. Buck, P.E.
Senior Transportation Engineer

FELSBURG HOLT & ULLEVIG



LEGEND

XXX(XXX) = AM(PM) Peak Hour Traffic Volumes

XXXX = Daily Traffic Volumes

North

Figure 1

Existing Traffic Volumes

FELSBURG HOLT & ULLEVIG

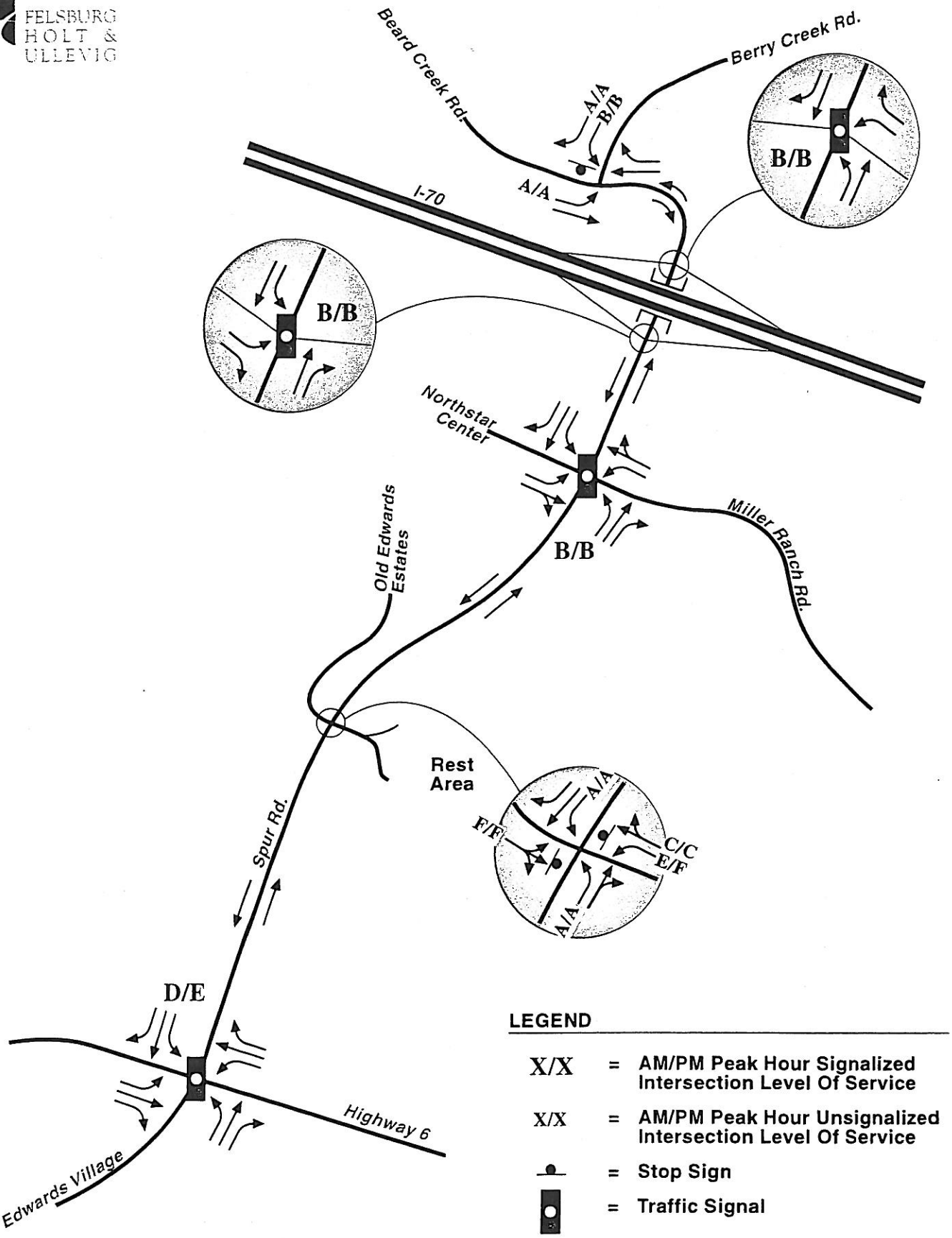
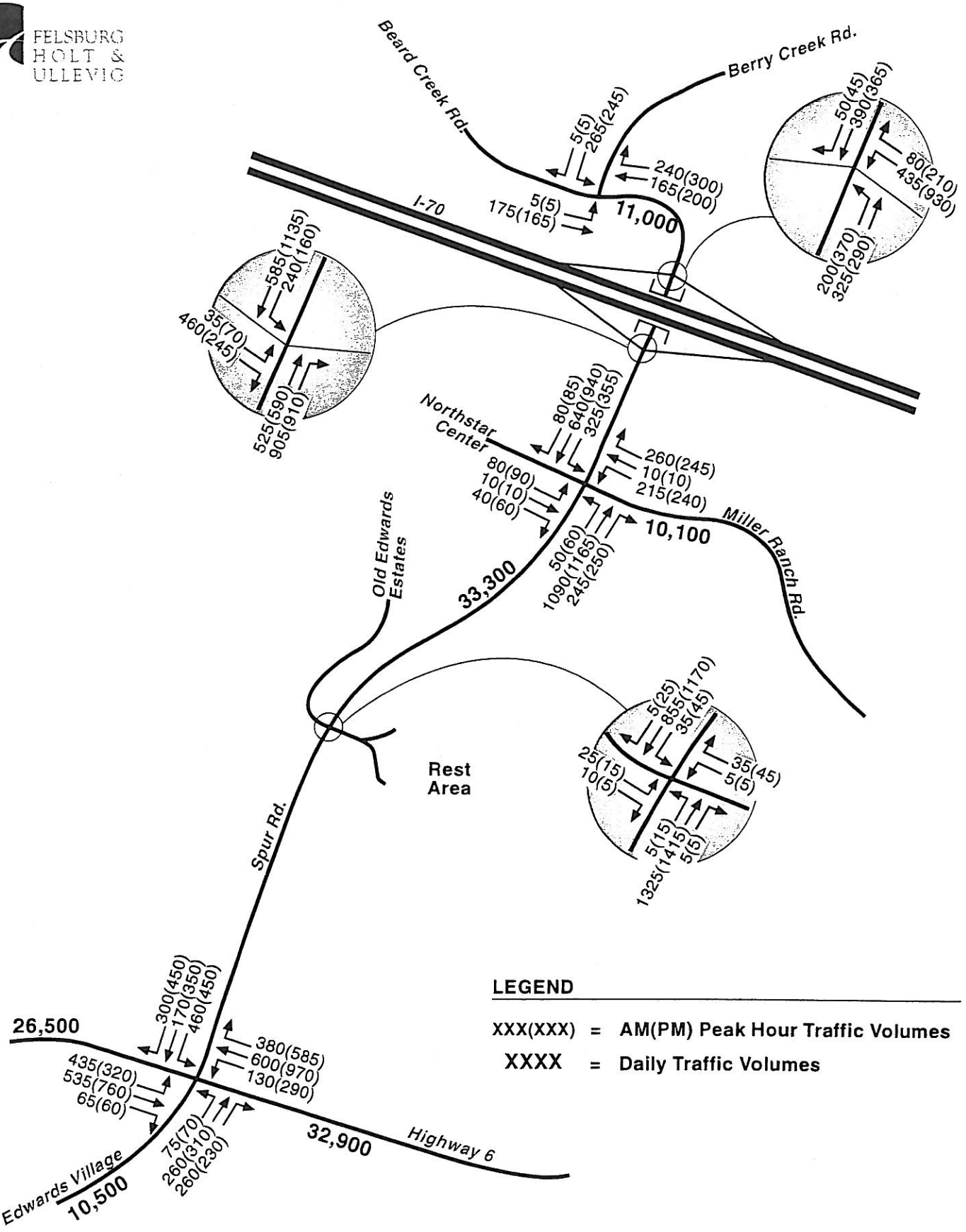


Figure 2

Existing Traffic Operations

North

FELSBURG HOLT & ULLEVIG



LEGEND

XXX(XXX) = AM(PM) Peak Hour Traffic Volumes

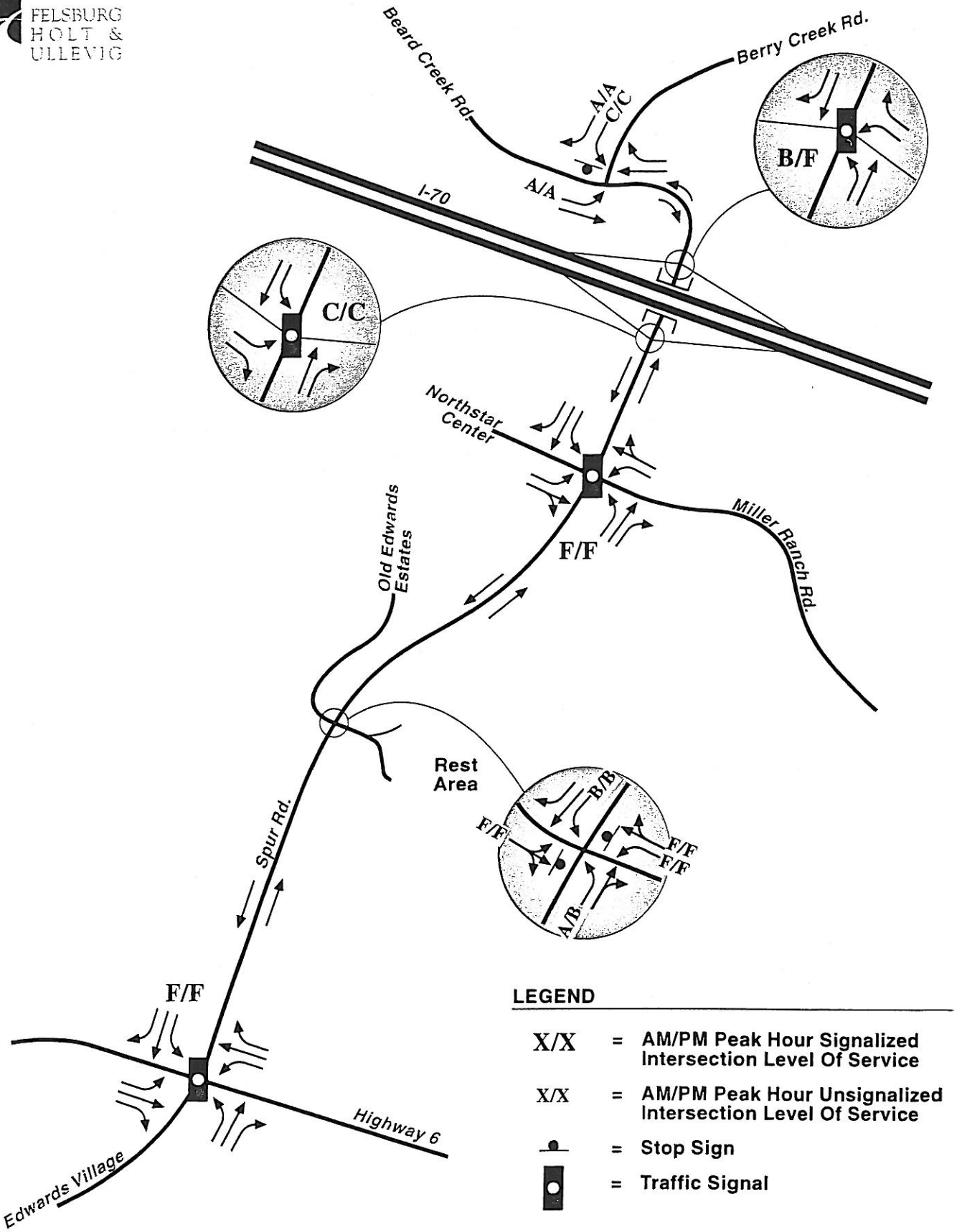
XXXX = Daily Traffic Volumes

Figure 3

Projected Year 2025 Traffic Volumes

North

FELSBURG HOLT & ULLEVIG



LEGEND

X/X	=	AM/PM Peak Hour Signalized Intersection Level Of Service
X/X	=	AM/PM Peak Hour Unsignalized Intersection Level Of Service
	=	Stop Sign
	=	Traffic Signal

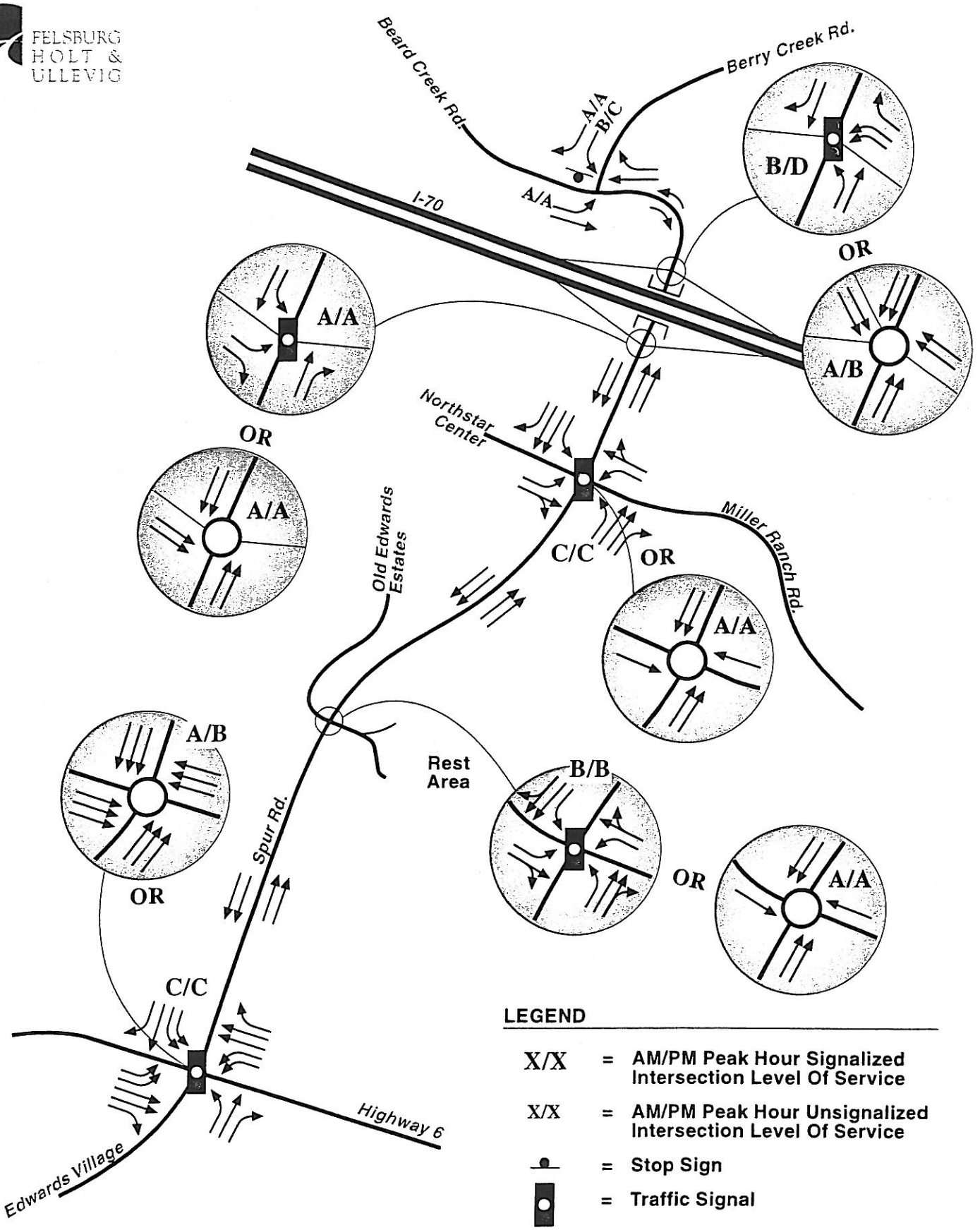
Figure 4

Projected Year 2025

Traffic Operations - No Build

North

FELSBURG HOLT & ULLEVIG



LEGEND

X/X	=	AM/PM Peak Hour Signalized Intersection Level Of Service
X/X	=	AM/PM Peak Hour Unsignalized Intersection Level Of Service
	=	Stop Sign
	=	Traffic Signal

Figure 5

Projected Year 2025

Traffic Operations with Improvements

North

TRAFFIC DATA

Counter Measures

Site Code : 7
N/S STREET: SPUR RD
E/W STREET: SH-6

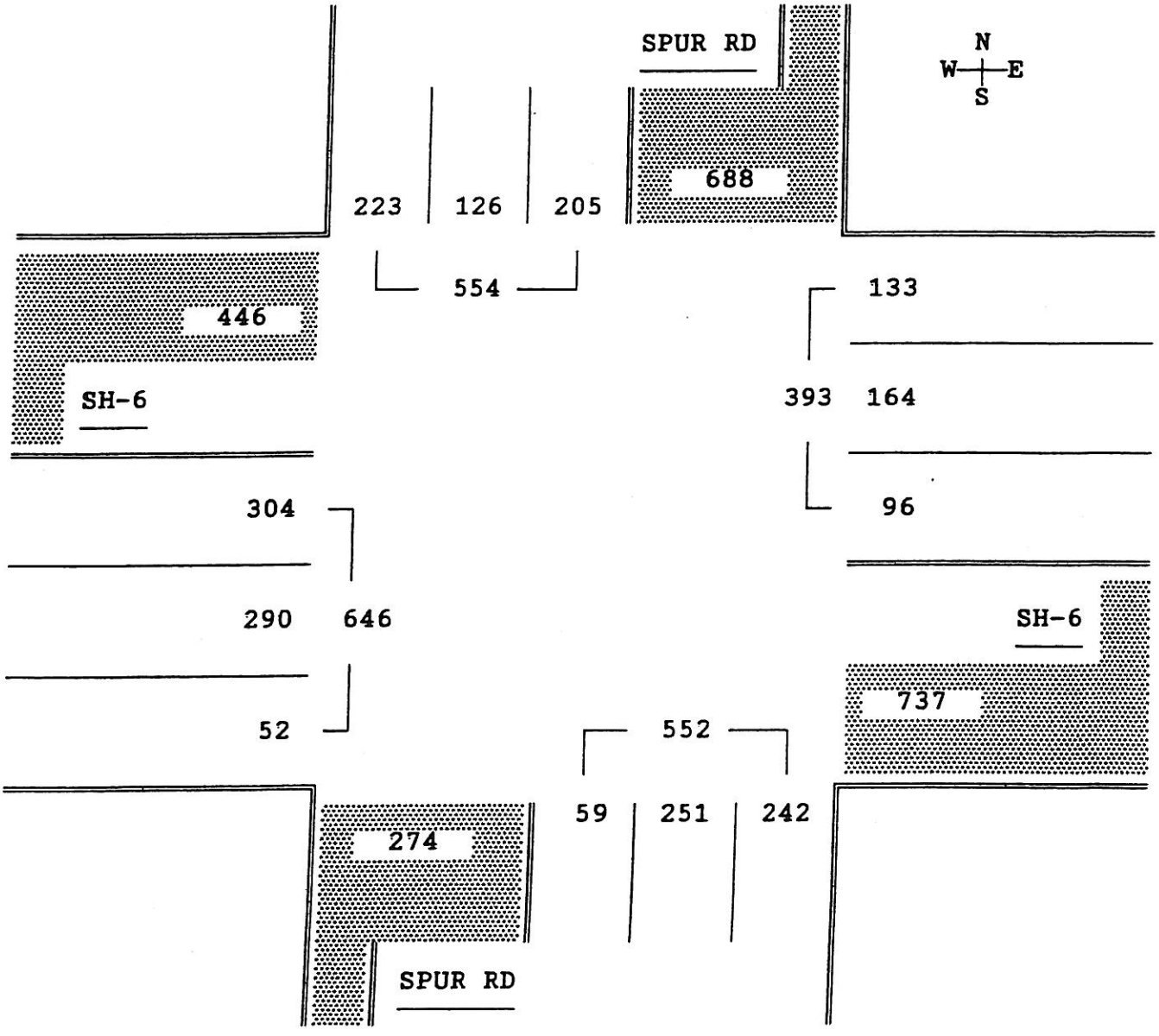
PAGE: 1
FILE: SPURSH-6

Movements by: Vehicles

DATE: 3/20/02

PEAK PERIOD ANALYSIS FOR THE PERIOD: 7:00 AM - 9:00 AM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	VOLUMES Right	Thru	Left	Total	PERCENTS Right	Thru	Left
North	7:15 AM	0.76	223	126	205	554	40	23	37
East	7:30 AM	0.96	128	183	111	422	30	43	26
South	7:30 AM	0.89	245	250	65	560	44	45	12
West	7:15 AM	0.83	52	290	304	646	8	45	47
Entire Intersection									
North	7:15 AM	0.76	223	126	205	554	40	23	37
East		0.91	133	164	96	393	34	42	24
South		0.88	242	251	59	552	44	45	11
West		0.83	52	290	304	646	8	45	47



Counter Measures

Site Code : 7
N/S STREET: SPUR RD
E/W STREET: SH-6

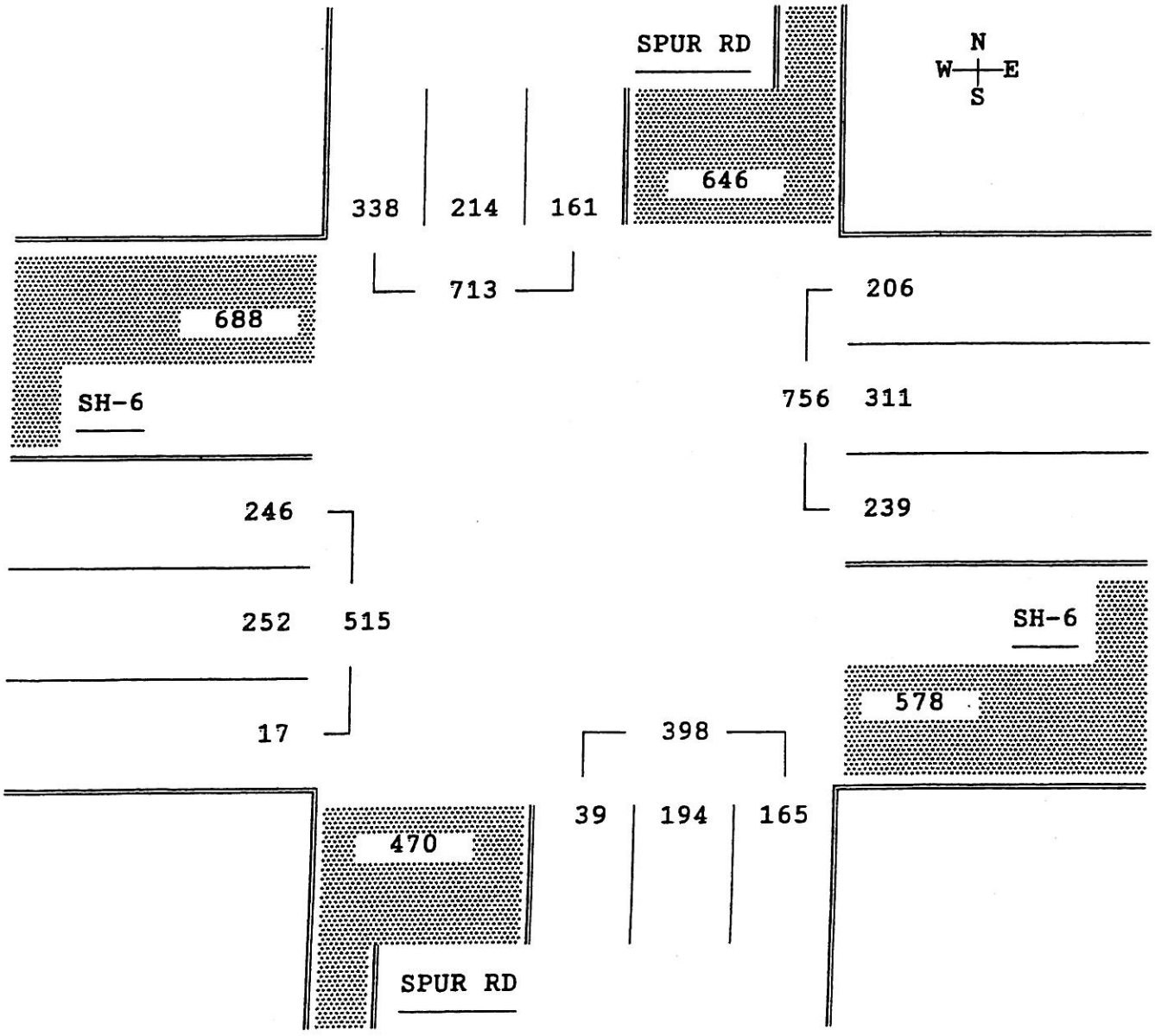
PAGE: 1
FILE: SPURSH-6

Movements by: Vehicles

DATE: 3/20/02

PEAK PERIOD ANALYSIS FOR THE PERIOD: 4:00 PM - 6:00 PM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	VOLUMES Right	Thru	Left	Total	PERCENTS Right	Thru	Left
North	4:45 PM	0.86	341	235	147	723	47	33	20
East	4:30 PM	0.87	206	311	239	756	27	41	32
South	4:30 PM	0.81	165	194	39	398	41	49	10
West	4:15 PM	0.95	17	278	256	551	3	50	46
Entire Intersection									
North	4:30 PM	0.84	338	214	161	713	47	30	23
East		0.87	206	311	239	756	27	41	32
South		0.81	165	194	39	398	41	49	10
West		0.89	17	252	246	515	3	49	48



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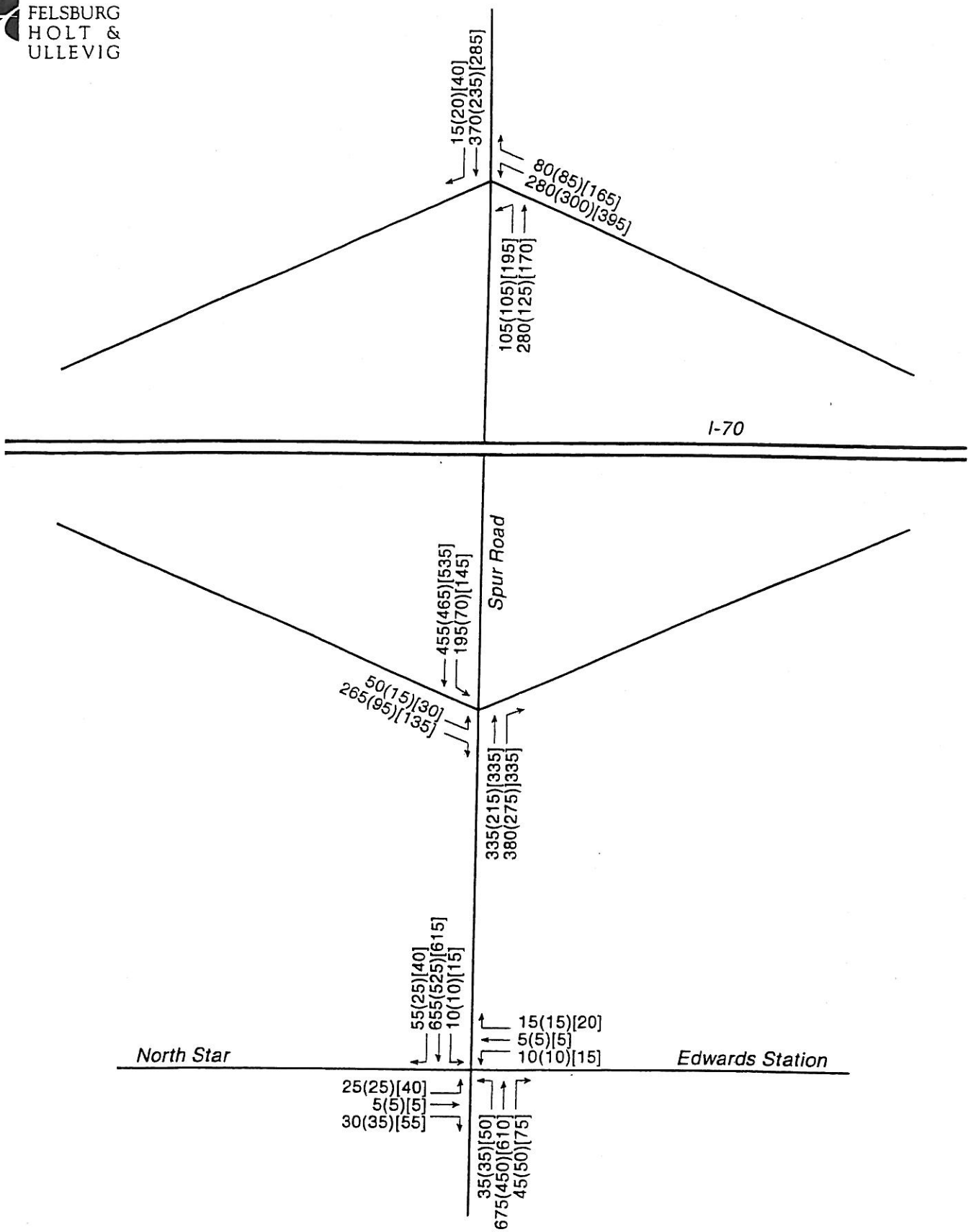


LEGEND

XXX(XXX)[XXX] = AM(NOON)[PM] Peak Hour Traffic Volumes

North

Figure 1

Existing Traffic Volumes

COUNTER MEASURES

03-21-2002 *** Weekly Summary For Week Of March 17, 2002 *** 13:37 Pg 1

File: M0302013.PRN Sta: 031969000000 Id: 031969000000 ConnId: 01
City/Town: County: EAGLE
Location: SPUR RD N/O I-70 Format: Dir
Lane/s: 1-1
Direction: North

Time	17 Sun	18 Mon	19 Tue	20 Wed	21 Thu	22 Fri	23 Sat	Daily Avg.	Wkday Avg.	Wkend Avg.
01:00	-	-	-	20	-	-	-	20	20	0
02:00	-	-	-	14	-	-	-	14	14	0
03:00	-	-	-	10	-	-	-	10	10	0
04:00	-	-	-	4	-	-	-	4	4	0
05:00	-	-	-	1	-	-	-	1	1	0
06:00	-	-	-	7	-	-	-	7	7	0
07:00	-	-	-	97	-	-	-	97	97	0
08:00	-	-	-	420	-	-	-	420	420	0
09:00	-	-	-	316	-	-	-	316	316	0
10:00	-	-	-	253	-	-	-	253	253	0
11:00	-	-	-	285	-	-	-	285	285	0
12:00	-	-	-	297	-	-	-	297	297	0
13:00	-	-	301	-	-	-	-	301	301	0
14:00	-	-	288	-	-	-	-	288	288	0
15:00	-	-	423	-	-	-	-	423	423	0
16:00	-	-	405	-	-	-	-	405	405	0
17:00	-	-	480	-	-	-	-	480	480	0
18:00	-	-	505	-	-	-	-	505	505	0
19:00	-	-	376	-	-	-	-	376	376	0
20:00	-	-	260	-	-	-	-	260	260	0
21:00	-	-	178	-	-	-	-	178	178	0
22:00	-	-	131	-	-	-	-	131	131	0
23:00	-	-	74	-	-	-	-	74	74	0
24:00	-	-	35	-	-	-	-	35	35	0
Totals	-	-	3456	1724	-	-	-	5180	5180	0
Avg Wkday	-	-	66.7	33.3	-	-	-			
Avg Day	-	-	66.7	33.3	-	-	-			
Peak Hr	None	None	None	08:00	None	None	None			
Count	-	-	-	420	-	-	-			
Peak Hr	None	None	18:00	None	None	None	None			
Count	-	-	505	-	-	-	-			

COUNTER MEASURES

03-21-2002 *** Weekly Summary For Week Of March 17, 2002 *** 13:37 Pg 2

File: M0302013.PRN Sta: 031969000000 Id: 031969000000 ConnId: 01
City/Town: County: EAGLE
Location: SPUR RD N/O I-70 Format: Dir
Lane/s: 2-1
Direction: South

Time	17 Sun	18 Mon	19 Tue	20 Wed	21 Thu	22 Fri	23 Sat	Daily Avg.	Wkday Avg.	Wkend Avg.
1:00	-	-	-	10	-	-	-	10	10	0
2:00	-	-	-	4	-	-	-	4	4	0
3:00	-	-	-	6	-	-	-	6	6	0
4:00	-	-	-	3	-	-	-	3	3	0
5:00	-	-	-	6	-	-	-	6	6	0
6:00	-	-	-	39	-	-	-	39	39	0
7:00	-	-	-	138	-	-	-	138	138	0
8:00	-	-	-	622	-	-	-	622	622	0
9:00	-	-	-	412	-	-	-	412	412	0
10:00	-	-	-	381	-	-	-	381	381	0
11:00	-	-	-	303	-	-	-	303	303	0
12:00	-	-	-	369	-	-	-	369	369	0
13:00	-	-	316	-	-	-	-	316	316	0
14:00	-	-	258	-	-	-	-	258	258	0
15:00	-	-	395	-	-	-	-	395	395	0
16:00	-	-	444	-	-	-	-	444	444	0
17:00	-	-	423	-	-	-	-	423	423	0
18:00	-	-	397	-	-	-	-	397	397	0
19:00	-	-	302	-	-	-	-	302	302	0
20:00	-	-	188	-	-	-	-	188	188	0
21:00	-	-	140	-	-	-	-	140	140	0
22:00	-	-	77	-	-	-	-	77	77	0
23:00	-	-	33	-	-	-	-	33	33	0
24:00	-	-	21	-	-	-	-	21	21	0
Totals	-	-	2994	2293	-	-	-	5287	5287	0
Avg Wkday	-	-	56.6	43.4	-	-	-			
Avg Day	-	-	56.6	43.4	-	-	-			
AM Peak Hr	None	None	None	08:00	None	None	None			
AM Count	-	-	-	622	-	-	-			
PM Peak Hr	None	None	16:00	None	None	None	None			
PM Count	-	-	444	-	-	-	-			

COUNTER MEASURES

03-21-2002 *** Weekly Summary For Week Of March 17, 2002 *** 13:38 Pg 1

File: M0302014.PRN Sta: 031971000000 Id: 031971000000 CommId: 01
City/Town: County: EAGLE
Location: SPUR RD S/O I-70 Format: Dir
Lane/s: 1-1
Direction: North

Time	17 Sun	18 Mon	19 Tue	20 Wed	21 Thu	22 Fri	23 Sat	Daily Avg.	Wkday Avg.	Wkend Avg.
01:00	-	-	-	35	-	-	-	35	35	0
02:00	-	-	-	25	-	-	-	25	25	0
03:00	-	-	-	4	-	-	-	4	4	0
04:00	-	-	-	12	-	-	-	12	12	0
05:00	-	-	-	20	-	-	-	20	20	0
06:00	-	-	-	74	-	-	-	74	74	0
07:00	-	-	-	265	-	-	-	265	265	0
08:00	-	-	-	802	-	-	-	802	802	0
09:00	-	-	-	617	-	-	-	617	617	0
10:00	-	-	-	516	-	-	-	516	516	0
11:00	-	-	-	508	-	-	-	508	508	0
12:00	-	-	-	609	-	-	-	609	609	0
13:00	-	-	609	-	-	-	-	609	609	0
14:00	-	-	588	-	-	-	-	588	588	0
15:00	-	-	624	-	-	-	-	624	624	0
16:00	-	-	692	-	-	-	-	692	692	0
17:00	-	-	853	-	-	-	-	853	853	0
18:00	-	-	803	-	-	-	-	803	803	0
19:00	-	-	576	-	-	-	-	576	576	0
20:00	-	-	410	-	-	-	-	410	410	0
21:00	-	-	257	-	-	-	-	257	257	0
22:00	-	-	200	-	-	-	-	200	200	0
23:00	-	-	140	-	-	-	-	140	140	0
24:00	-	-	78	-	-	-	-	78	78	0
Totals	-	-	5830	3487	-	-	-	9317	9317	0

Avg Wkday	-	-	62.6	37.4	-	-	-
Avg Day	-	-	62.6	37.4	-	-	-
Peak Hr	None	None	None	08:00	None	None	None
Count	-	-	-	802	-	-	-
Peak Hr	None	None	17:00	None	None	None	None
Count	-	-	853	-	-	-	-

COUNTER MEASURES

03-21-2002 *** Weekly Summary For Week Of March 17, 2002 *** 13:38 Pg 2

File: M0302014.PRN Sta: 031971000000 Id: 031971000000 ConnId: 01
City/Town: County: EAGLE
Location: SPUR RD S/O I-70 Format: Dir
Lane/s: 2-1
Direction: South

Time	17 Sun	18 Mon	19 Tue	20 Wed	21 Thu	22 Fri	23 Sat	Daily Avg.	Wkday Avg.	Wkend Avg.
01:00	-	-	-	58	-	-	-	58	58	0
02:00	-	-	-	21	-	-	-	21	21	0
03:00	-	-	-	19	-	-	-	19	19	0
04:00	-	-	-	7	-	-	-	7	7	0
05:00	-	-	-	13	-	-	-	13	13	0
06:00	-	-	-	47	-	-	-	47	47	0
07:00	-	-	-	234	-	-	-	234	234	0
08:00	-	-	-	662	-	-	-	662	662	0
09:00	-	-	-	585	-	-	-	585	585	0
10:00	-	-	-	532	-	-	-	532	532	0
11:00	-	-	-	473	-	-	-	473	473	0
12:00	-	-	-	521	-	-	-	521	521	0
13:00	-	-	559	-	-	-	-	559	559	0
14:00	-	-	487	-	-	-	-	487	487	0
15:00	-	-	544	-	-	-	-	544	544	0
16:00	-	-	636	-	-	-	-	636	636	0
17:00	-	-	731	-	-	-	-	731	731	0
18:00	-	-	778	-	-	-	-	778	778	0
19:00	-	-	602	-	-	-	-	602	602	0
20:00	-	-	385	-	-	-	-	385	385	0
21:00	-	-	271	-	-	-	-	271	271	0
22:00	-	-	207	-	-	-	-	207	207	0
23:00	-	-	155	-	-	-	-	155	155	0
24:00	-	-	92	-	-	-	-	92	92	0
Totals	-	-	5447	3172	-	-	-	8619	8619	0

Avg Wkday	-	-	63.2	36.8	-	-	-
Avg Day	-	-	63.2	36.8	-	-	-
Peak Hr	None	None	None	08:00	None	None	None
Count	-	-	-	662	-	-	-
Peak Hr	None	None	18:00	None	None	None	None
Count	-	-	778	-	-	-	-

COUNTER MEASURES

03-21-2002 *** Weekly Summary For Week Of March 17, 2002 *** 13:50 Pg 2

File: M0302015.PRN Sta: 031959000000 Id: 031959000000 CommId: 01
City/Town: County: EAGLE
Location: EDWARDS VILLAGE DR S/O SH-6 Format: Dir
Lane/s: 2-1
Direction: North

Time	17 Sun	18 Mon	19 Tue	20 Wed	21 Thu	22 Fri	23 Sat	Daily Avg.	Wkday Avg.	Wkend Avg.
01:00	-	-	-	10	-	-	-	10	10	0
02:00	-	-	-	5	-	-	-	5	5	0
03:00	-	-	-	1	-	-	-	1	1	0
04:00	-	-	-	4	-	-	-	4	4	0
05:00	-	-	-	6	-	-	-	6	6	0
06:00	-	-	-	36	-	-	-	36	36	0
07:00	-	-	-	146	-	-	-	146	146	0
08:00	-	-	-	440	-	-	-	440	440	0
09:00	-	-	-	387	-	-	-	387	387	0
10:00	-	-	-	265	-	-	-	265	265	0
11:00	-	-	-	213	-	-	-	213	213	0
12:00	-	-	285	-	-	-	-	285	285	0
13:00	-	-	278	-	-	-	-	278	278	0
14:00	-	-	236	-	-	-	-	236	236	0
15:00	-	-	257	-	-	-	-	257	257	0
16:00	-	-	335	-	-	-	-	335	335	0
17:00	-	-	346	-	-	-	-	346	346	0
18:00	-	-	287	-	-	-	-	287	287	0
19:00	-	-	248	-	-	-	-	248	248	0
20:00	-	-	177	-	-	-	-	177	177	0
21:00	-	-	120	-	-	-	-	120	120	0
22:00	-	-	61	-	-	-	-	61	61	0
23:00	-	-	50	-	-	-	-	50	50	0
24:00	-	-	27	-	-	-	-	27	27	0
Totals	-	-	2707	1513	-	-	-	4220	4220	0

Avg Wkday	-	-	64.1	35.9	-	-	-
Avg Day	-	-	64.1	35.9	-	-	-
AM Peak Hr	None	None	12:00	08:00	None	None	None
Count	-	-	285	440	-	-	-
PM Peak Hr	None	None	17:00	None	None	None	None
Count	-	-	346	-	-	-	-

COUNTER MEASURES

03-21-2002 *** Weekly Summary For Week Of March 17, 2002 *** 13:50 Pg 1

File: M0302015.PRN Sta: 031959000000 Id: 031959000000 ConnId: 01
City/Town: County: EAGLE
Location: EDWARDS VILLAGE DR S/O SH-6 Format: Dir
Lane/s: 1-1
Direction: South

Time	17 Sun	18 Mon	19 Tue	20 Wed	21 Thu	22 Fri	23 Sat	Daily Avg.	Wkday Avg.	Wkend Avg.
01:00	-	-	-	33	-	-	-	33	33	0
02:00	-	-	-	19	-	-	-	19	19	0
03:00	-	-	-	9	-	-	-	9	9	0
04:00	-	-	-	4	-	-	-	4	4	0
05:00	-	-	-	5	-	-	-	5	5	0
06:00	-	-	-	12	-	-	-	12	12	0
07:00	-	-	-	67	-	-	-	67	67	0
08:00	-	-	-	175	-	-	-	175	175	0
09:00	-	-	-	176	-	-	-	176	176	0
10:00	-	-	-	161	-	-	-	161	161	0
11:00	-	-	-	160	-	-	-	160	160	0
12:00	-	-	207	-	-	-	-	207	207	0
13:00	-	-	261	-	-	-	-	261	261	0
14:00	-	-	204	-	-	-	-	204	204	0
15:00	-	-	250	-	-	-	-	250	250	0
16:00	-	-	335	-	-	-	-	335	335	0
17:00	-	-	404	-	-	-	-	404	404	0
18:00	-	-	459	-	-	-	-	459	459	0
19:00	-	-	362	-	-	-	-	362	362	0
20:00	-	-	202	-	-	-	-	202	202	0
21:00	-	-	166	-	-	-	-	166	166	0
22:00	-	-	118	-	-	-	-	118	118	0
23:00	-	-	81	-	-	-	-	81	81	0
24:00	-	-	47	-	-	-	-	47	47	0
Totals	-	-	3096	821	-	-	-	3917	3917	0

Avg Wkday	-	-	79.0	21.0	-	-	-
Avg Day	-	-	79.0	21.0	-	-	-
AM Peak Hr	None	None	12:00	09:00	None	None	None
AM Count	-	-	207	176	-	-	-
PM Peak Hr	None	None	18:00	None	None	None	None
PM Count	-	-	459	-	-	-	-

COUNTER MEASURES

03-21-2002 *** Weekly Summary For Week Of March 17, 2002 *** 13:47 Pg 1

File: M0302003.PRN Sta: 031957000000 Id: 031957000000 ConnId: 01
City/Town: County: EAGLE
Location: SH-6 E/O LAKE CREEK RD Format: Dir
Lane/s: 1-1
Direction: East

Time	17 Sun	18 Mon	19 Tue	20 Wed	21 Thu	22 Fri	23 Sat	Daily Avg.	Wkday Avg.	Wkend Avg.
01:00	-	-	-	15	-	-	-	15	15	0
02:00	-	-	-	6	-	-	-	6	6	0
03:00	-	-	-	5	-	-	-	5	5	0
04:00	-	-	-	5	-	-	-	5	5	0
05:00	-	-	-	10	-	-	-	10	10	0
06:00	-	-	-	66	-	-	-	66	66	0
07:00	-	-	-	248	-	-	-	248	248	0
08:00	-	-	-	702	-	-	-	702	702	0
09:00	-	-	-	452	-	-	-	452	452	0
10:00	-	-	358	-	-	-	-	358	358	0
11:00	-	-	334	-	-	-	-	334	334	0
12:00	-	-	312	-	-	-	-	312	312	0
13:00	-	-	351	-	-	-	-	351	351	0
14:00	-	-	284	-	-	-	-	284	284	0
15:00	-	-	347	-	-	-	-	347	347	0
16:00	-	-	365	-	-	-	-	365	365	0
17:00	-	-	459	-	-	-	-	459	459	0
18:00	-	-	427	-	-	-	-	427	427	0
19:00	-	-	322	-	-	-	-	322	322	0
20:00	-	-	224	-	-	-	-	224	224	0
21:00	-	-	164	-	-	-	-	164	164	0
22:00	-	-	105	-	-	-	-	105	105	0
23:00	-	-	60	-	-	-	-	60	60	0
24:00	-	-	27	-	-	-	-	27	27	0
Totals	-	-	4139	1509	-	-	-	5648	5648	0

Avg Wkday	-	-	73.3	26.7	-	-	-
Avg Day	-	-	73.3	26.7	-	-	-
AM Peak Hr	None	None	10:00	08:00	None	None	None
AM Count	-	-	358	702	-	-	-
PM Peak Hr	None	None	17:00	None	None	None	None
PM Count	-	-	459	-	-	-	-

COUNTER MEASURES

03-21-2002 *** Weekly Summary For Week Of March 17, 2002 *** 13:47 Pg 2

ile: M0302003.PRN Sta: 031957000000 Id: 031957000000 ConnId: 01
City/Town: County: EAGLE
Location: SH-6 E/O LAKE CREEK RD Format: Dir
Lane/s: 2-1
Direction: West

Time	17 Sun	18 Mon	19 Tue	20 Wed	21 Thu	22 Fri	23 Sat	Daily Avg.	Wkday Avg.	Wkend Avg.
1:00	-	-	-	41	-	-	-	41	41	0
2:00	-	-	-	15	-	-	-	15	15	0
:00	-	-	-	8	-	-	-	8	8	0
4:00	-	-	-	3	-	-	-	3	3	0
5:00	-	-	-	3	-	-	-	3	3	0
:00	-	-	-	18	-	-	-	18	18	0
7:00	-	-	-	120	-	-	-	120	120	0
8:00	-	-	-	400	-	-	-	400	400	0
:00	-	-	-	341	-	-	-	341	341	0
0:00	-	-	220	-	-	-	-	220	220	0
1:00	-	-	255	-	-	-	-	255	255	0
:00	-	-	227	-	-	-	-	227	227	0
3:00	-	-	294	-	-	-	-	294	294	0
4:00	-	-	288	-	-	-	-	288	288	0
:00	-	-	332	-	-	-	-	332	332	0
6:00	-	-	417	-	-	-	-	417	417	0
7:00	-	-	524	-	-	-	-	524	524	0
.00	-	-	583	-	-	-	-	583	583	0
9:00	-	-	426	-	-	-	-	426	426	0
0:00	-	-	292	-	-	-	-	292	292	0
.00	-	-	220	-	-	-	-	220	220	0
2:00	-	-	209	-	-	-	-	209	209	0
3:00	-	-	127	-	-	-	-	127	127	0
.00	-	-	74	-	-	-	-	74	74	0
otals	-	-	4488	949	-	-	-	5437	5437	0

Avg Wkday	-	-	82.5	17.5	-	-	-
Avg Day	-	-	82.5	17.5	-	-	-
Peak Hr	None	None	11:00	08:00	None	None	None
Count	-	-	255	400	-	-	-
Peak Hr	None	None	18:00	None	None	None	None
Count	-	-	583	-	-	-	-

COUNTER MEASURES

3-21-2002 *** Weekly Summary For Week Of March 17, 2002 *** 13:30 Pg 1

le: M0302004.PRN Sta: 031965000000 Id: 031965000000 CommId: 01
ity/Town: County: EAGLE
ocation: SH-6 E/O SPUR RD Format: Dir
ne/s: 1-1
irection: West

Time	17 Sun	18 Mon	19 Tue	20 Wed	21 Thu	22 Fri	23 Sat	Daily Avg.	Wkday Avg.	Wkend Avg.
:00	-	-	-	36	-	-	-	36	36	0
2:00	-	-	-	14	-	-	-	14	14	0
:00	-	-	-	8	-	-	-	8	8	0
:00	-	-	-	7	-	-	-	7	7	0
5:00	-	-	-	12	-	-	-	12	12	0
:00	-	-	-	25	-	-	-	25	25	0
:00	-	-	-	158	-	-	-	158	158	0
8:00	-	-	-	372	-	-	-	372	372	0
.00	-	-	-	346	-	-	-	346	346	0
:00	-	-	-	326	-	-	-	326	326	0
1:00	-	-	-	316	-	-	-	316	316	0
.00	-	-	443	-	-	-	-	443	443	0
:00	-	-	471	-	-	-	-	471	471	0
4:00	-	-	376	-	-	-	-	376	376	0
.00	-	-	477	-	-	-	-	477	477	0
00	-	-	601	-	-	-	-	601	601	0
7:00	-	-	727	-	-	-	-	727	727	0
.00	-	-	693	-	-	-	-	693	693	0
00	-	-	457	-	-	-	-	457	457	0
0:00	-	-	290	-	-	-	-	290	290	0
.00	-	-	212	-	-	-	-	212	212	0
00	-	-	145	-	-	-	-	145	145	0
3:00	-	-	94	-	-	-	-	94	94	0
00	-	-	48	-	-	-	-	48	48	0
---	---	---	---	---	---	---	---	---	---	---
tals	-	-	5034	1620	-	-	-	6654	6654	0

Avg Wkday	-	-	75.7	24.3	-	-	-
Avg Day	-	-	75.7	24.3	-	-	-
Peak Hr	None	None	12:00	08:00	None	None	None
Count	-	-	443	372	-	-	-
Peak Hr	None	None	17:00	None	None	None	None
Count	-	-	727	-	-	-	-

COUNTER MEASURES

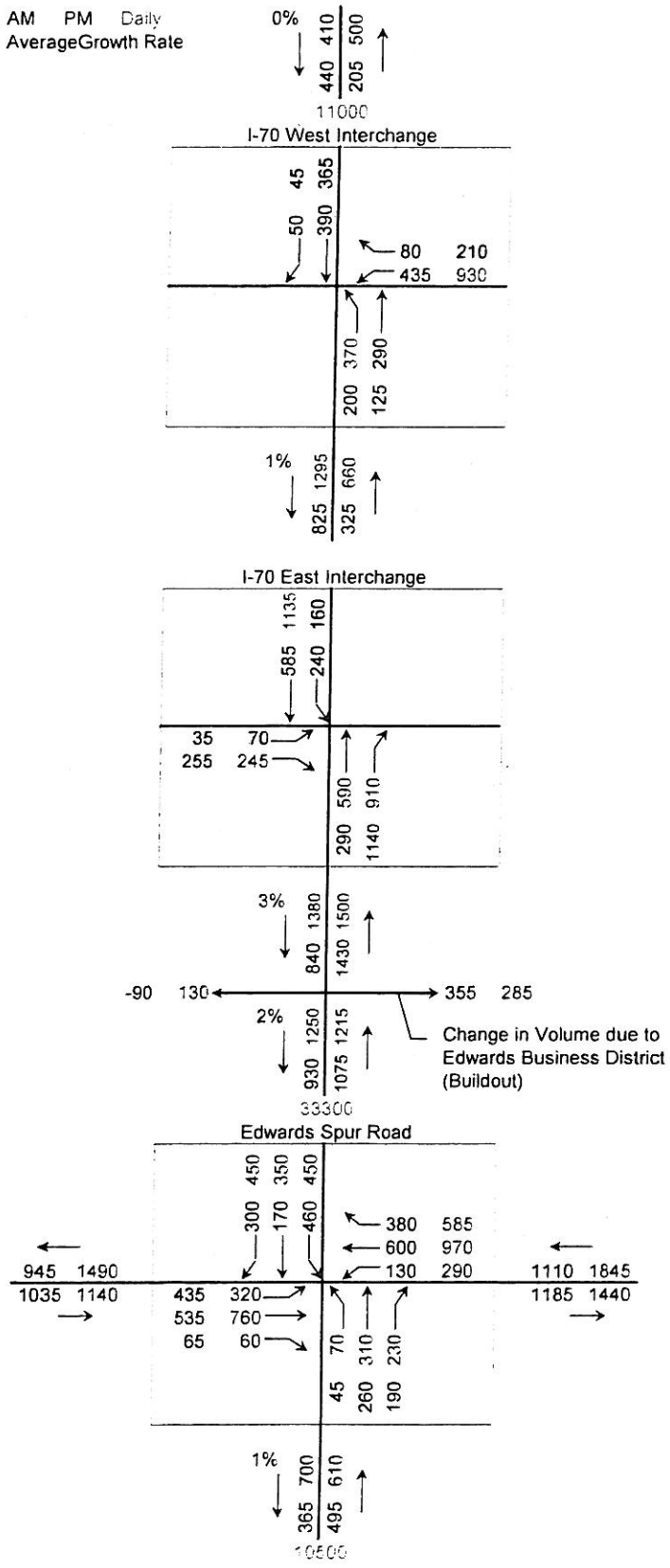
3-21-2002 *** Weekly Summary For Week Of March 17, 2002 *** 13:30 Pg 2

ile: M0302004.PRN Sta: 031965000000 Id: 031965000000 CommId: 01
ity/Town: County: EAGLE
ocation: SH-6 E/O SPUR RD Format: Dir
ane/s: 2-1
irection: East

Time	17 Sun	18 Mon	19 Tue	20 Wed	21 Thu	22 Fri	23 Sat	Daily Avg.	Wkday Avg.	Wkend Avg.
:00	-	-	-	17	-	-	-	17	17	0
?:00	-	-	-	10	-	-	-	10	10	0
:00	-	-	-	8	-	-	-	8	8	0
:00	-	-	-	4	-	-	-	4	4	0
5:00	-	-	-	14	-	-	-	14	14	0
:00	-	-	-	82	-	-	-	82	82	0
:00	-	-	-	349	-	-	-	349	349	0
9:00	-	-	-	709	-	-	-	709	709	0
:00	-	-	-	496	-	-	-	496	496	0
:00	-	-	-	423	-	-	-	423	423	0
:00	-	-	-	409	-	-	-	409	409	0
:00	-	-	375	-	-	-	-	375	375	0
00	-	-	425	-	-	-	-	425	425	0
:00	-	-	385	-	-	-	-	385	385	0
:00	-	-	386	-	-	-	-	386	386	0
00	-	-	416	-	-	-	-	416	416	0
7:00	-	-	488	-	-	-	-	488	488	0
:00	-	-	409	-	-	-	-	409	409	0
00	-	-	333	-	-	-	-	333	333	0
:00	-	-	263	-	-	-	-	263	263	0
.00	-	-	213	-	-	-	-	213	213	0
00	-	-	136	-	-	-	-	136	136	0
:00	-	-	77	-	-	-	-	77	77	0
.00	-	-	50	-	-	-	-	50	50	0
--	-----	-----	-----	-----	-----	-----	-----	-------	-------	-------
tals	-	-	3956	2521	-	-	-	6477	6477	0

Avg Wkday	-	-	61.1	38.9	-	-	-
Avg Day	-	-	61.1	38.9	-	-	-
Peak Hr	None	None	12:00	08:00	None	None	None
Count	-	-	375	709	-	-	-
Peak Hr	None	None	17:00	None	None	None	None
Count	-	-	488	-	-	-	-

2025 Summer Traffic Volume Projection: Edwards Spur Road



Visual FoxPro

Colorado Department of Transportation
Transportation Safety and Traffic Engineering
General Accident Summary Report

03/18/2002

Job #: 20020318121606

Highway: 70G **Begin:** 0.00 **End:** 0.53 **From:**01/01/1998 **To:**12/31/2000

Severity

PDO:	0	
INJ:	0	0 :Injured
FAT:	0	0 :Killed

Total: 0

Number of Vehicles

One Vehicle:	0
Two Vehicles:	0
Three or More:	0
Unknown:	0

Total: 0

Location

On Road:	0
Off Road:	0
Unknown:	0

Total: 0

Accident Type

Overturning:	0	Sideswipe (Same):	0	Bicycles:	0
Other Non Collision:	0	Sideswipe (Opposite):	0	Domestic Animal:	0
Pedestrians:	0	Approach Turn:	0	Wild Animal:	0
Broadside:	0	Overtaking Turn:	0	Fixed Objects:	0
Head On:	0	Parked Motor Vehicle:	0	Other Objects:	0
Rear End:	0	Railway Vehicle:	0	Unknown:	0

Total: 0

Lighting Conditions

Daylight:	0
Dawn or Dusk:	0
Dark - Lighted:	0
Dark - Unlighted:	0
Unknown:	0

Total: 0

Mainline/Ramps/Frontage Rds

Mainline:	0
Ramps:	0
Frontage Roads:	0
Unknown:	0

Total: 0

Weather Conditions

None:	0
Rain:	0
Snow/Sleet/Hail:	0
Fog:	0
Dust:	0
Wind:	0
Unknown:	0

Total: 0

Vehicle Types

	Vehicle 1	Vehicle 2	Vehicle 3
Passenger Car/Van:	0	0	0
Passenger Car/Van w/Trl:	0	0	0
Pickup Truck/Utility Van:	0	0	0
Pickup Truck/Utility Van w/Trl:	0	0	0
Truck 10k lbs or Less:	0	0	0
Trucks > 10k lbs/Busses > 15 People:	0	0	0
School Bus < 15 People:	0	0	0
Non School Bus < 15 People:	0	0	0
Motorhome:	0	0	0
Motorcycle:	0	0	0
Bicycle:	0	0	0
Motorized Bicycle:	0	0	0
Farm Equipment:	0	0	0
Hit and Run - Unknown:	0	0	0
Other:	0	0	0
Unknown:	0	0	0
	Total: 0	**Total:** 0	**Total:** 0

Road Conditions

Dry:	0
Wet:	0
Muddy:	0
Snowy:	0
Icy:	0
Slushy:	0
Foreign Material:	0
With Road Treatment:	0
Unknown:	0

Total: 0

Accident Rates

PDO:	0.00 *	* MVMT
INJ:	0.00 *	** 100 MVMT
FAT:	0.00 **	**Total:** 0.00 *

ADT: 6578 **WHI:** -5.47 **Length:** 1.00 **Weighted Average Accident Rate:** 4.37 **Coris File:** tcoris2001.dbf

EXISTING CONDITIONS
LOS WORKSHEETS

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*CMB*	Intersection	*BEARD CR/BERRY CR*
Agency/Co.	*FHU*	Jurisdiction	*EAGLE COUNTY*
Date Performed	*3/19/04*	Analysis Year	*EXISTING*
Analysis Time Period	*AM PEAK HOUR*		

Project Description	*EDWARDS SPUR ROAD*
East/West Street: *BEARD CREEK RD*	North/South Street: *BERRY CREEK RD*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*5*	*155*	*0*	*0*	*145*	*215*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*5*	*172*	*0*	*0*	*161*	*238*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*1*
Configuration	*L*	*T*			*T*	*R*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*230*	*0*	*5*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*255*	*0*	*5*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*1*	*0*	*1*
Configuration				*L*		*R*

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*					*L*		*R*
v (vph)	*5*					*255*		*5*
C (m) (vph)	*1171*					*654*		*889*
v/c	*0.00*					*0.39*		*0.01*
95% queue length	*0.01*					*1.85*		*0.02*
Control Delay	*8.1*					*14.0*		*9.1*
LOS	*A*					*B*		*A*
Approach Delay	--	--				*13.9*		
Approach LOS	--	--				*B*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*CMB*	Intersection	*BEARD CR/BERRY CR*
Agency/Co.	*FHU*	Jurisdiction	*EAGLE COUNTY*
Date Performed	*3/19/04*	Analysis Year	*EXISTING*
Analysis Time Period	*PM PEAK HOUR*		

Project Description	*EDWARDS SPUR ROAD*
East/West Street: *BEARD CREEK RD*	North/South Street: *BERRY CREEK RD*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*5*	*130*	*0*	*0*	*135*	*200*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*5*	*144*	*0*	*0*	*150*	*222*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*1*
Configuration	*L*	*T*			*T*	*R*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*195*	*0*	*5*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*216*	*0*	*5*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*1*	*0*	*1*
Configuration				*L*		*R*

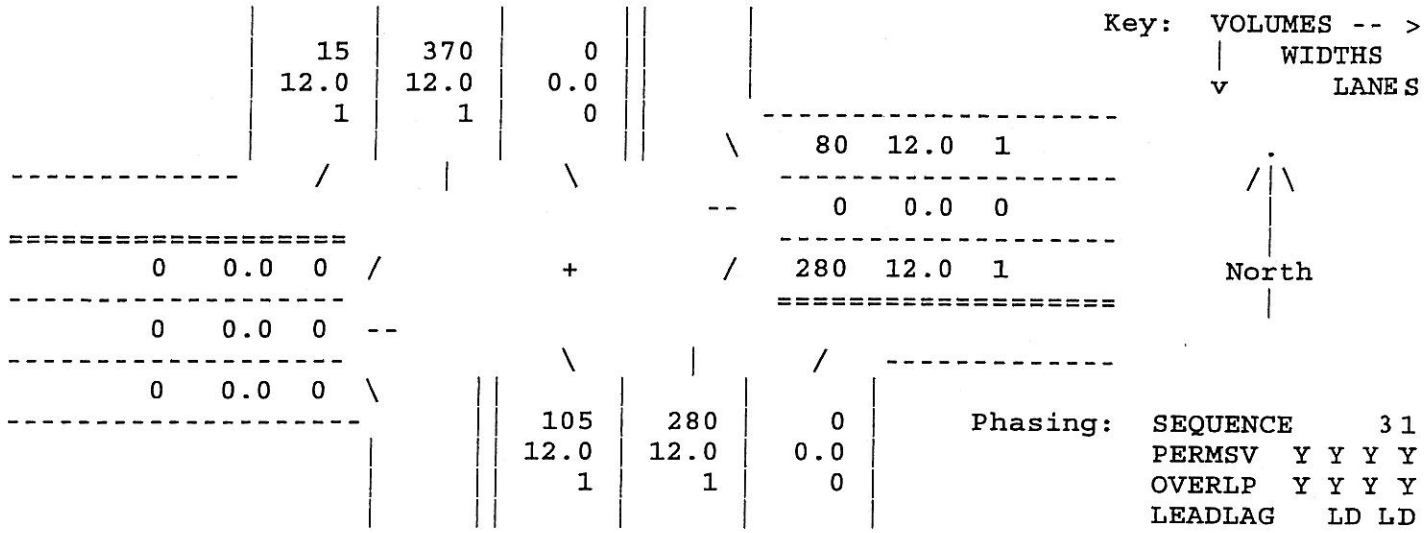
Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*					*L*		*R*
v (vph)	*5*					*216*		*5*
C (m) (vph)	*1198*					*689*		*902*
v/c	*0.00*					*0.31*		*0.01*
95% queue length	*0.01*					*1.34*		*0.02*
Control Delay	*8.0*					*12.6*		*9.0*
LOS	*A*					*B*		*A*
Approach Delay	--	--				*12.5*		
Approach LOS	--	--				*B*		

EDWARDS LOS ANALYSIS
SPUR ROAD/WESTBOUND RAMPS
SCENARIO 2, AM PEAK HOUR

04/23/02
14:07:16

SIGNAL2000/TEAPAC[Ver 1.01.00] - Display of Intersection Parameters

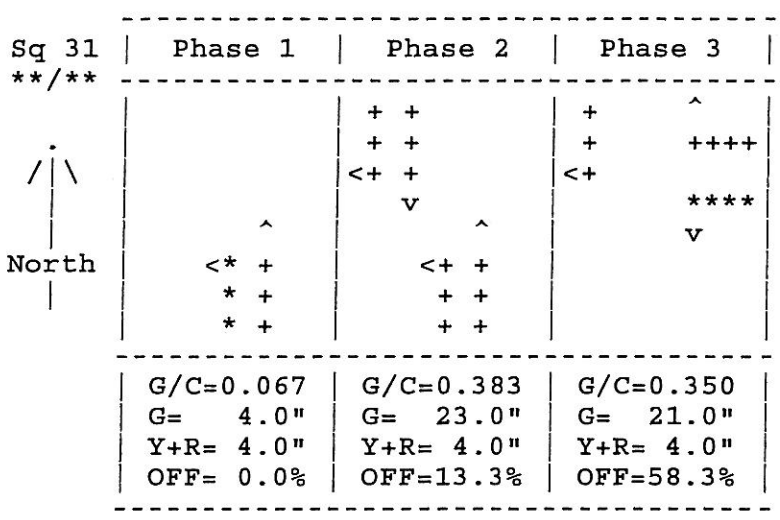


EDWARDS LOS ANALYSIS
SPUR ROAD/WESTBOUND RAMPS
SCENARIO 2, AM PEAK HOUR

04/23/02
14:07:07

SIGNAL2000/TEAPAC[Ver 1.01.00] - Capacity Analysis Summary

Intersection Averages:
Degree of Saturation (v/c) 0.43 Vehicle Delay 14.7 Level of Service B+



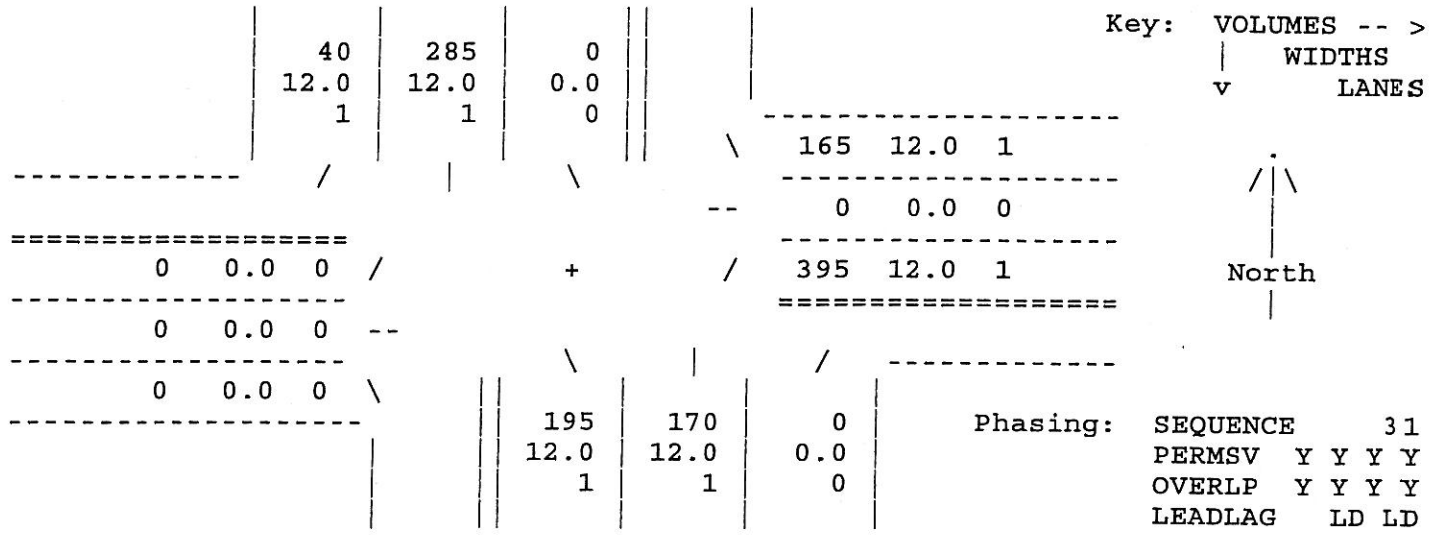
C= 60 sec G= 48.0 sec = 80.0% Y=12.0 sec = 20.0% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @C (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	L S	Queue Model 1
N Approach								17.3	B	
RT	12/1	0.046	0.800	1267	1267	17	0.013	1.2	A	4 ft
TH	12/1	0.268	0.383	649	714	411	0.576	18.0	B	262 ft
S Approach								9.7	A	
TH	12/1	0.218	0.517	925	962	311	0.323	9.3	A	151 ft
LT	12/1	0.000	0.067	325	378	117	0.310	10.8	*B+	63 ft
E Approach								17.3	B	
RT	12/1	0.111	0.350	482	554	89	0.161	14.1	B+	54 ft
LT	12/1	0.228	0.350	547	619	311	0.502	18.3	*B	202 ft

EDWARDS LOS ANALYSIS
SPUR ROAD/WESTBOUND RAMPS
SCENARIO 2, PM PEAK HOUR

04/23/02
14:08:00

SIGNAL2000/TEAPAC[Ver 1.01.00] - Display of Intersection Parameters

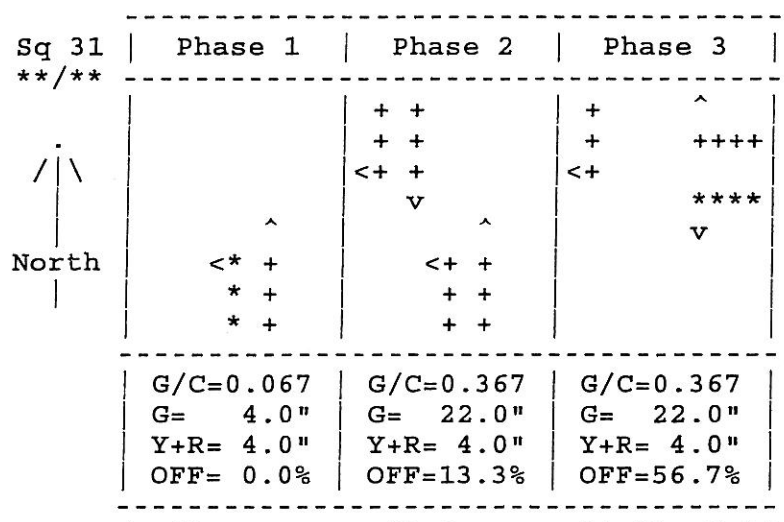


EDWARDS LOS ANALYSIS
SPUR ROAD/WESTBOUND RAMPS
SCENARIO 2, PM PEAK HOUR

04/23/02
14:07:50

SIGNAL2000/TEAPAC[Ver 1.01.00] - Capacity Analysis Summary

Intersection Averages:
Degree of Saturation (v/c) 0.47 Vehicle Delay 16.0 Level of Service B



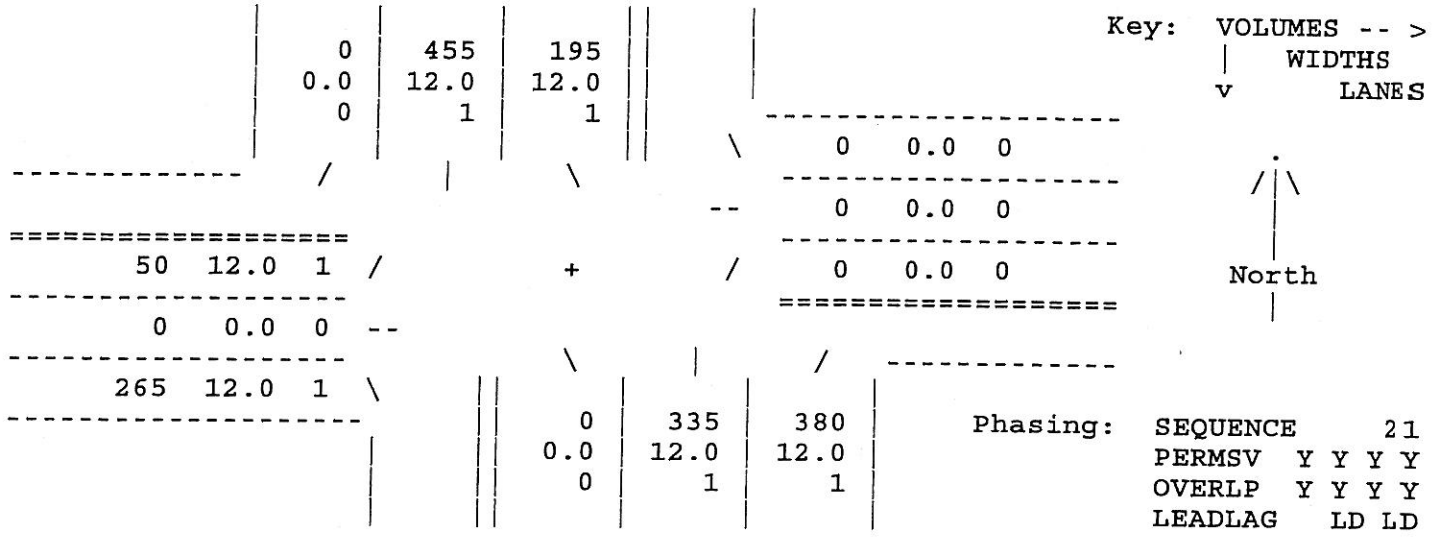
C= 60 sec G= 48.0 sec = 80.0% Y=12.0 sec = 20.0% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @C (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	LOS	Queue Model 1
N Approach								14.9	B+	
RT	12/1	0.075	0.800	1267	1267	44	0.035	1.3	A	9 ft
TH	12/1	0.221	0.367	614	683	317	0.464	16.8	B	198 ft
S Approach								11.4	B+	
TH	12/1	0.154	0.500	891	931	189	0.203	8.8	A	91 ft
LT	12/1	0.000	0.067	378	433	217	0.501	13.6	*B+	130 ft
E Approach								19.7	B	
RT	12/1	0.175	0.367	512	581	183	0.315	15.0	B	112 ft
LT	12/1	0.295	0.367	580	649	439	0.676	21.6	*C+	303 ft

EDWARDS LOS ANALYSIS
SPUR ROAD/EASTBOUND RAMPS
SCENARIO 2, AM PEAK HOUR

04/23/02
14:08:33

SIGNAL2000/TEAPAC[Ver 1.01.00] - Display of Intersection Parameters

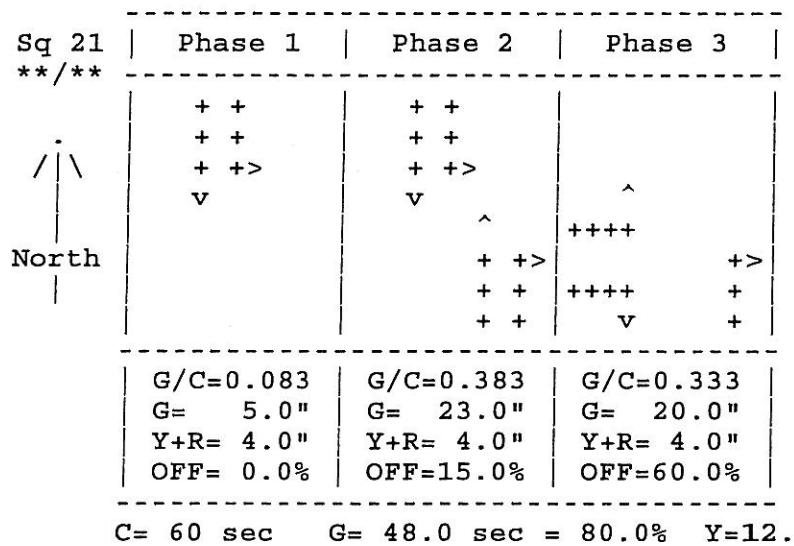


EDWARDS LOS ANALYSIS
SPUR ROAD/EASTBOUND RAMPS
SCENARIO 2, AM PEAK HOUR

04/23/02
14:08:26

SIGNAL2000/TEAPAC[Ver 1.01.00] - Capacity Analysis Summary

Intersection Averages:
Degree of Saturation (v/c) 0.47 Vehicle Delay 12.0 Level of Service B+



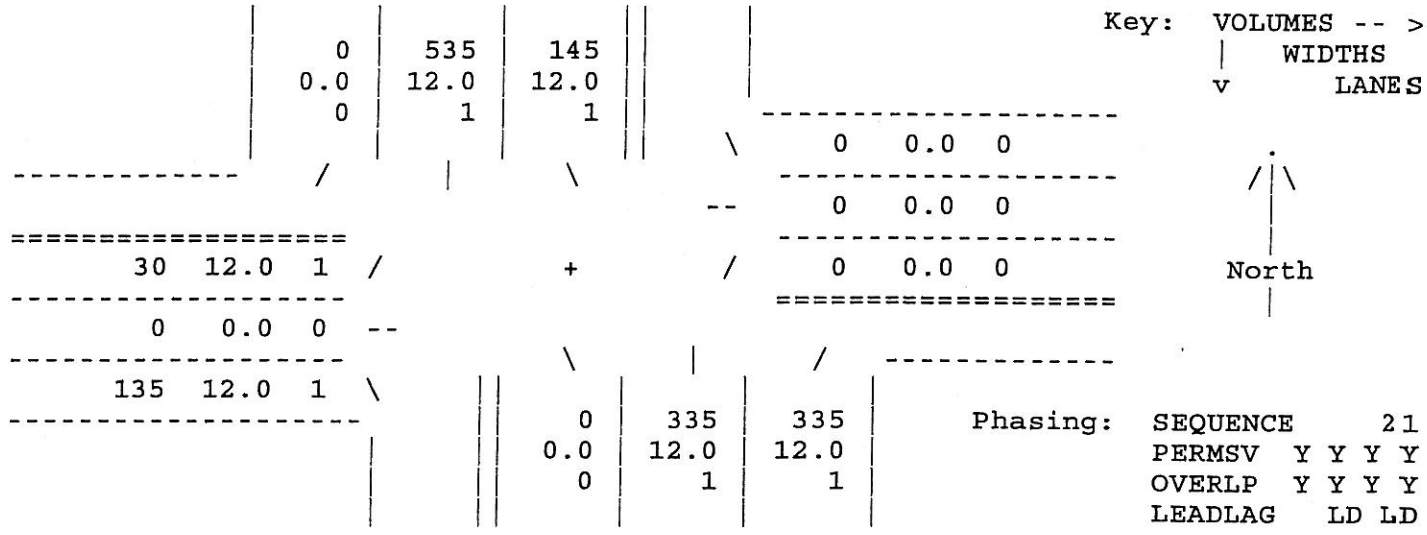
C= 60 sec G= 48.0 sec = 80.0% Y=12.0 sec = 20.0% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @C (vph)	Service Rate @E (vph)	Adj Volume	v/c	HCM Delay	L S	Queue Model 1
N Approach								11.3	B+	
TH	12/1	0.314	0.533	960	993	506	0.510	10.8	B+	261 ft
LT	12/1	0.000	0.083	389	438	217	0.495	12.4	B+	125 ft
S Approach								9.4	A	
RT	12/1	0.316	0.783	1240	1240	422	0.340	2.7	A	118 ft
TH	12/1	0.248	0.383	649	714	372	0.521	17.0	B	232 ft
W Approach								19.5	B	
RT	12/1	0.242	0.333	453	528	294	0.557	20.6	C+	201 ft
LT	12/1	0.078	0.333	515	590	56	0.095	14.1	B+	34 ft

EDWARDS LOS ANALYSIS
SPUR ROAD/EASTBOUND RAMPS
SCENARIO 2, PM PEAK HOUR

04/23/02
14:08:55

SIGNAL2000/TEAPAC[Ver 1.01.00] - Display of Intersection Parameters

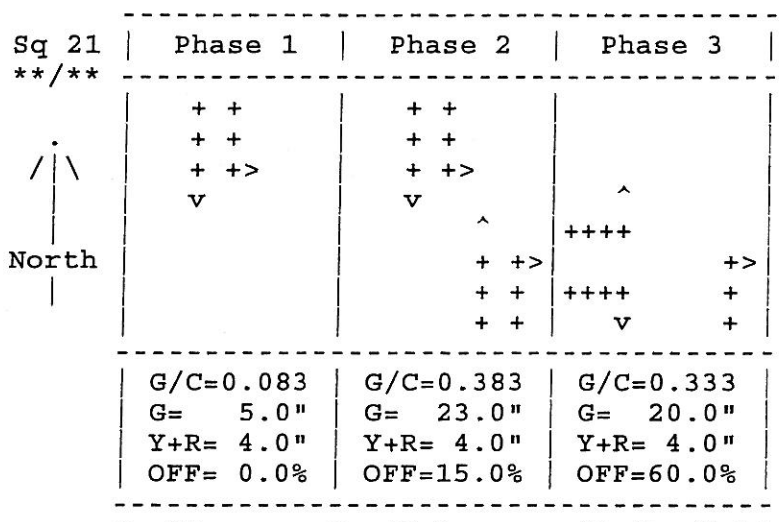


EDWARDS LOS ANALYSIS
SPUR ROAD/EASTBOUND RAMPS
SCENARIO 2, PM PEAK HOUR

04/23/02
14:08:47

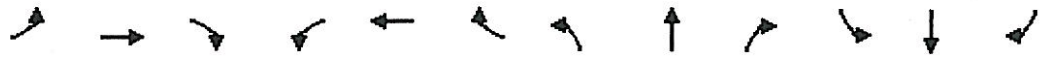
SIGNAL2000/TEAPAC[Ver 1.01.00] - Capacity Analysis Summary

Intersection Averages:
Degree of Saturation (v/c) 0.45 Vehicle Delay 11.3 Level of Service B+



C= 60 sec G= 48.0 sec = 80.0% Y=12.0 sec = 20.0% Ped= 0.0 sec = 0.0%

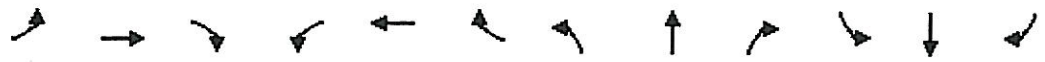
Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @C (vph)	Service Rate @E (vph)	Adj Volume	v/c	HCM Delay	L S	Queue Model 1
N Approach								11.9	B+	
TH	12/1	0.357	0.533	960	993	594	0.598	12.3	B+	325 ft
LT	12/1	0.000	0.083	389	438	161	0.368	10.5	B+	86 ft
S Approach								9.7	A	
RT	12/1	0.287	0.783	1240	1240	372	0.300	2.5	A	101 ft
TH	12/1	0.248	0.383	649	714	372	0.521	17.0	B	232 ft
W Approach								15.7	B	
RT	12/1	0.153	0.333	453	528	150	0.284	16.1	B	95 ft
LT	12/1	0.058	0.333	515	590	33	0.056	13.8	B+	20 ft



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.88		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1640		1770	1863		1770	1863	1583	1770	1863	1583
Flt Permitted	0.75	1.00		0.72	1.00		0.22	1.00	1.00	0.22	1.00	1.00
Satd. Flow (perm)	1398	1640		1345	1863		418	1863	1583	409	1863	1583
Volume (vph)	80	10	40	100	10	0	50	585	80	60	580	80
Peak-hour factor, PHF	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)	87	11	43	109	11	0	54	636	87	65	630	87
RTOR Reduction (vph)	0	32	0	0	0	0	0	0	25	0	0	25
Lane Group Flow (vph)	87	22	0	109	11	0	54	636	62	65	630	62
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	16.0	16.0		16.0	16.0		32.0	28.0	28.0	32.0	28.0	28.0
Effective Green, g (s)	16.0	16.0		16.0	16.0		32.0	28.0	28.0	32.0	28.0	28.0
Actuated g/C Ratio	0.27	0.27		0.27	0.27		0.53	0.47	0.47	0.53	0.47	0.47
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	373	437		359	497		313	869	739	309	869	739
v/s Ratio Prot		0.01			0.01		0.01	c0.34		c0.01	0.34	
v/s Ratio Perm	0.06			c0.08			0.08		0.04	0.10		0.04
v/c Ratio	0.23	0.05		0.30	0.02		0.17	0.73	0.08	0.21	0.72	0.08
Uniform Delay, d1	17.2	16.4		17.6	16.2		8.3	13.0	8.9	8.4	12.9	8.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	0.2		2.2	0.1		1.2	5.4	0.2	1.5	5.2	0.2
Delay (s)	18.7	16.6		19.7	16.3		9.5	18.4	9.1	10.0	18.1	9.1
Level of Service	B	B		B	B		A	B	A	A	B	A
Approach Delay (s)		17.9			19.4			16.7			16.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	16.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1624		1770	1863		1770	1863	1583	1770	1863	1583
Flt Permitted	0.75	1.00		0.71	1.00		0.37	1.00	1.00	0.38	1.00	1.00
Satd. Flow (perm)	1398	1624		1318	1863		686	1863	1583	715	1863	1583
Volume (vph)	90	10	60	100	10	0	60	550	100	50	535	85
Peak-hour factor, PHF	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)	98	11	65	109	11	0	65	598	109	54	582	92
RTOR Reduction (vph)	0	57	0	0	0	0	0	0	14	0	0	12
Lane Group Flow (vph)	98	19	0	109	11	0	65	598	95	54	582	80
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	10.9	10.9		10.9	10.9		68.6	63.4	63.4	65.6	61.9	61.9
Effective Green, g (s)	10.9	10.9		10.9	10.9		68.6	63.4	63.4	65.6	61.9	61.9
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.76	0.70	0.70	0.73	0.69	0.69
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	169	197		160	226		586	1312	1115	565	1281	1089
v/s Ratio Prot		0.01			0.01		c0.01	c0.32		0.00	0.31	
v/s Ratio Perm	0.07			c0.08			0.08		0.06	0.07		0.05
v/c Ratio	0.58	0.10		0.68	0.05		0.11	0.46	0.09	0.10	0.45	0.07
Uniform Delay, d1	37.4	35.2		37.9	35.0		3.4	5.8	4.2	3.8	6.4	4.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.71	0.90	0.64
Incremental Delay, d2	4.8	0.2		11.3	0.1		0.1	1.1	0.2	0.1	1.1	0.1
Delay (s)	42.1	35.4		49.2	35.1		3.4	6.9	4.3	2.8	6.8	3.1
Level of Service	D	D		D	D		A	A	A	A	A	A
Approach Delay (s)		39.2			47.9			6.3			6.1	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*CMB*	Intersection	*SPUR/REST AREA*
Agency/Co.	*FHU*	Jurisdiction	*EAGLE COUNTY*
Date Performed	*3/19/04*	Analysis Year	*EXISTING*
Analysis Time Period	*AM PEAK HOUR*		
Project Description	*EDWARDS SPUR ROAD*		
East/West Street:	*REST AREA/OLD EDWARDS*	North/South Street:	*SPUR ROAD*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*5*	*655*	*5*	*35*	*680*	*5*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*5*	*727*	*5*	*38*	*755*	*5*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*1*	*1*	*1*
Configuration	*L*		*TR*	*L*	*T*	*R*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*5*	*5*	*35*	*25*	*5*	*10*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*5*	*5*	*38*	*27*	*5*	*11*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*0*
Configuration	*L*		*TR*		*LTR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*	*L*		*TR*		*LTR*	
v (vph)	*5*	*38*	*5*		*43*		*43*	
C (m) (vph)	*861*	*882*	*80*		*315*		*98*	
v/c	*0.01*	*0.04*	*0.06*		*0.14*		*0.44*	
95% queue length	*0.02*	*0.13*	*0.20*		*0.47*		*1.85*	
Control Delay	*9.2*	*9.3*	*53.0*		*18.2*		*67.8*	
LOS	*A*	*A*	*F*		*C*		*F*	
Approach Delay	--	--	*21.8*			*67.8*		
Approach LOS	--	--	*C*			*F*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*CMB*	Intersection	*SPUR/REST AREA*
Agency/Co.	*FHU*	Jurisdiction	*EAGLE COUNTY*
Date Performed	*3/19/04*	Analysis Year	*EXISTING*
Analysis Time Period	*PM PEAK HOUR*		
Project Description	*EDWARDS SPUR ROAD*		
East/West Street:	*REST AREA/OLD EDWARDS*	North/South Street:	*SPUR ROAD*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*15*	*650*	*5*	*45*	*600*	*25*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*16*	*722*	*5*	*50*	*666*	*27*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*1*	*1*	*1*
Configuration	*L*		*TR*	*L*	*T*	*R*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*5*	*5*	*45*	*15*	*5*	*5*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*5*	*5*	*50*	*16*	*5*	*5*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*0*
Configuration	*L*		*TR*		*LTR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*	*L*		*TR*		*LTR*	
v (vph)	*16*	*50*	*5*		*55*		*26*	
C (m) (vph)	*912*	*886*	*86*		*337*		*97*	
v/c	*0.02*	*0.06*	*0.06*		*0.16*		*0.27*	
95% queue length	*0.05*	*0.18*	*0.18*		*0.58*		*0.99*	
Control Delay	*9.0*	*9.3*	*49.4*		*17.8*		*55.2*	
LOS	*A*	*A*	*E*		*C*		*F*	
Approach Delay	--	--	*20.4*			*55.2*		
Approach LOS	--	--	*C*			*F*		

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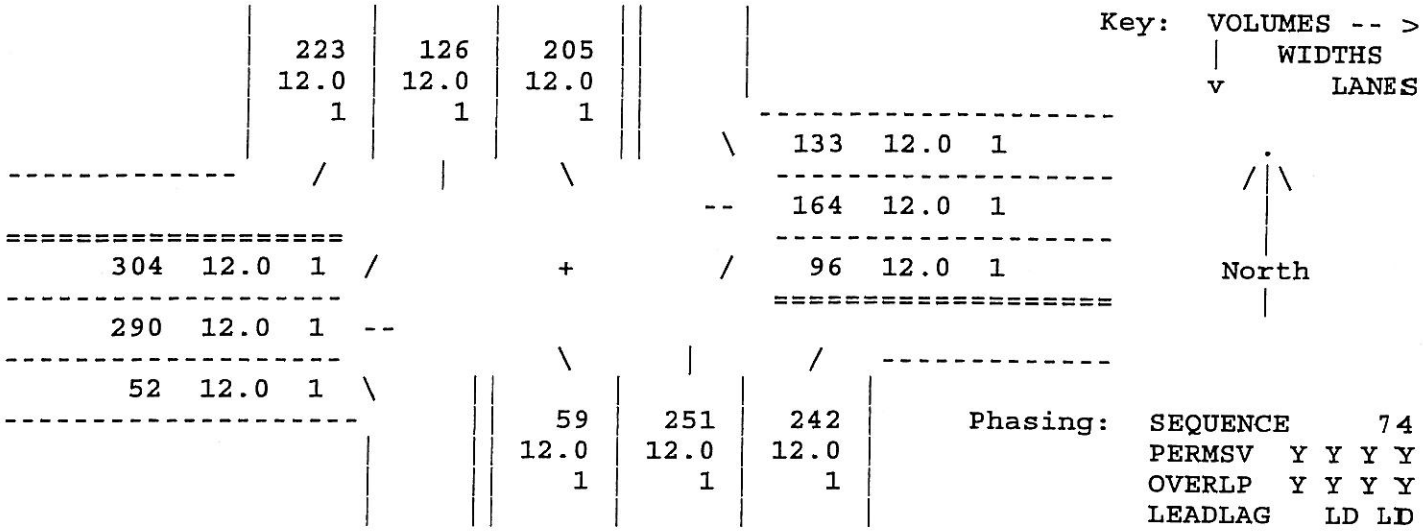
SH 6 CORRIDOR STUDY
SH 6/SPUR ROAD (I-70 G)
EXISTING CONDITIONS AM PEAK HOUR

04/30/02
12:51:50

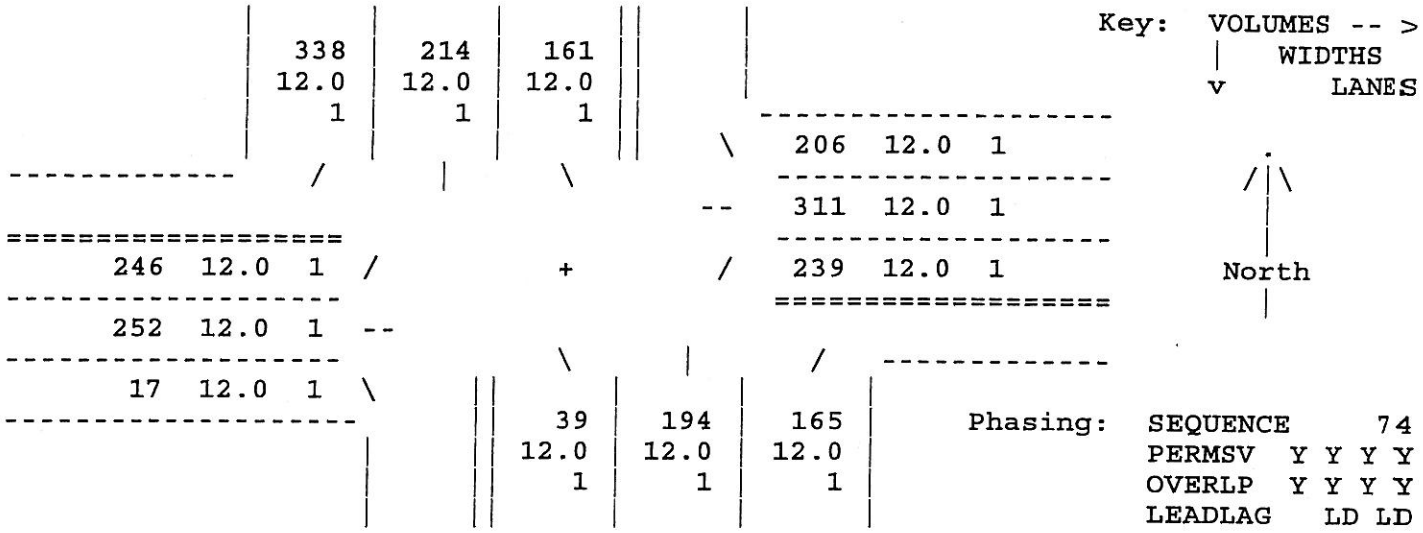
SIGNAL2000/TEAPAC[Ver 1.01.00] - Display of Intersection Parameters



SH 6 CORRIDOR STUDY
SH 6/SPUR ROAD (I-70 G)
EXISTING CONDITIONS PM PEAK HOUR

04/30/02
12:52:52

SIGNAL2000/TEAPAC[Ver 1.01.00] - Display of Intersection Parameters

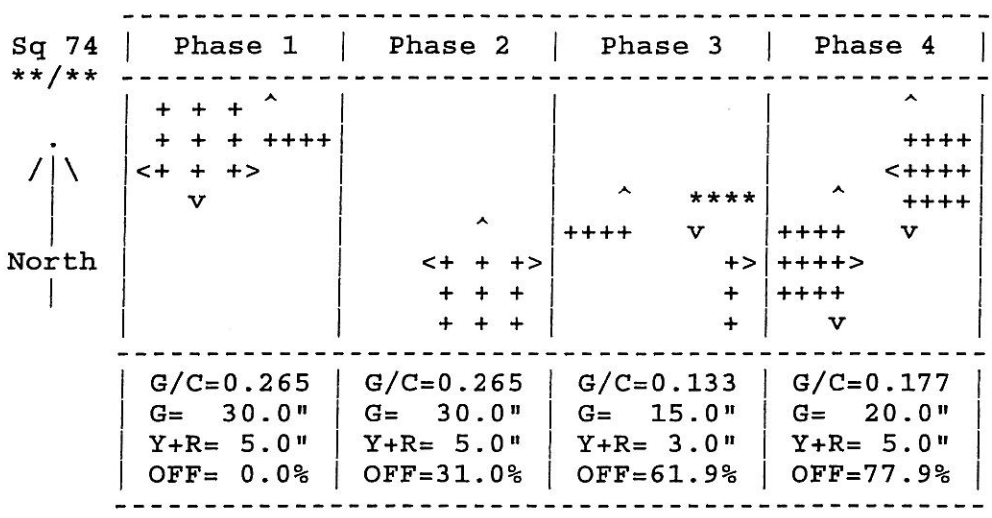


SH 6 CORRIDOR STUDY
SH 6/SPUR ROAD (I-70 G)
EXISTING CONDITIONS PM PEAK HOUR

04/30/02
12:52:39

SIGNAL2000/TEAPAC[Ver 1.01.00] - Capacity Analysis Summary

Intersection Averages:
Degree of Saturation (v/c) 0.68 Vehicle Delay 55.3 Level of Service E+



C=113 sec G= 95.0 sec = 84.1% Y=18.0 sec = 15.9% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @C (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	L S	Queue Model 1
N Approach								50.1	D	
RT	12/1	0.368	0.265	128	411	376	0.895	64.2	E+	582 ft
TH	12/1	0.292	0.265	158	492	238	0.481	38.3	D+	289 ft
LT	12/1	0.277	0.265	148	465	179	0.381	36.2	D+	216 ft
S Approach								29.9	C	
RT	12/1	0.288	0.442	545	701	183	0.261	20.8	C+	174 ft
TH	12/1	0.285	0.265	158	492	216	0.436	37.3	D+	260 ft
LT	12/1	0.228	0.265	148	465	43	0.091	31.6	*C	53 ft
E Approach								67.1	E+	
RT	12/1	0.307	0.487	640	771	229	0.297	18.4	B	205 ft
TH	12/1	0.329	0.177	1	307	346	1.048	109.3	F	657 ft
LT	12/1	0.178	0.133	176	309	266	0.855	54.2	*D	403 ft
W Approach								64.6	E+	
RT	12/1	0.221	0.177	1	254	19	0.068	39.2	D+	26 ft
TH	12/1	0.306	0.177	1	307	280	0.848	67.9	E	432 ft
LT	12/1	0.187	0.133	164	298	273	0.907	62.9	E+	439 ft

FUTURE NO-BUILD CONDITIONS
LOS WORKSHEETS

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*CMB*	Intersection	*BEARD CR/BERRY CR*
Agency/Co.	*FHU*	Jurisdiction	*EAGLE COUNTY*
Date Performed	*3/19/04*	Analysis Year	*2025 NO BUILD*
Analysis Time Period	*PM PEAK HOUR*		

Project Description	*EDWARDS SPUR ROAD*
East/West Street: *BEARD CREEK RD*	North/South Street: *BERRY CREEK RD*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*5*	*165*	*0*	*0*	*200*	*300*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*5*	*183*	*0*	*0*	*222*	*333*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*1*
Configuration	*L*	*T*			*T*	*R*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*245*	*0*	*5*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*272*	*0*	*5*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*1*	*0*	*1*
Configuration				*L*		*R*

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*					*L*		*R*
v (vph)	*5*					*272*		*5*
C (m) (vph)	*1026*					*595*		*823*
v/c	*0.00*					*0.46*		*0.01*
95% queue length	*0.01*					*2.39*		*0.02*
Control Delay	*8.5*					*16.0*		*9.4*
LOS	*A*					*C*		*A*
Approach Delay	--	--				*15.9*		
Approach LOS	--	--				*C*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	CMB	Intersection	BEARD CR/BERRY CR
Agency/Co.	FHU	Jurisdiction	EAGLE COUNTY
Date Performed	3/19/04	Analysis Year	2025 NO BUILD
Analysis Time Period	AM PEAK HOUR		

Project Description	EDWARDS SPUR ROAD
East/West Street:	BEARD CREEK RD
North/South Street:	BERRY CREEK RD
Intersection Orientation:	East-West
Study Period (hrs):	0.25

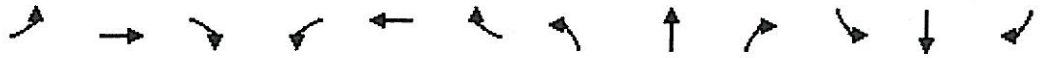
Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	5	175	0	0	165	240
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	5	194	0	0	183	266
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	1	0	0	1	1
Configuration	L	T			T	R
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	265	0	5
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	0	0	0	294	0	5
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	1
Configuration				L		R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
v (vph)	5					294		5
C (m) (vph)	1122					617		865
v/c	0.00					0.48		0.01
95% queue length	0.01					2.57		0.02
Control Delay	8.2					16.0		9.2
LOS	A					C		A
Approach Delay	--	--				15.9		
Approach LOS	--	--				C		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				0.97		1.00	1.00	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		1583	1770	1863			1863	1583
Flt Permitted				0.95		1.00	0.43	1.00			1.00	1.00
Satd. Flow (perm)				3433		1583	808	1863			1863	1583
Volume (vph)	0	0	0	435	0	80	200	125	0	0	390	50
Peak-hour factor, PHF	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)	0	0	0	473	0	87	217	136	0	0	424	54
RTOR Reduction (vph)	0	0	0	0	0	57	0	0	0	0	0	23
Lane Group Flow (vph)	0	0	0	473	0	30	217	136	0	0	424	31
Turn Type				custom		custom	Perm					Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				30.0		30.0	50.0	50.0			50.0	50.0
Effective Green, g (s)				31.0		31.0	51.0	51.0			51.0	51.0
Actuated g/C Ratio				0.34		0.34	0.57	0.57			0.57	0.57
Clearance Time (s)				5.0		5.0	5.0	5.0			5.0	5.0
Lane Grp Cap (vph)				1182		545	458	1056			1056	897
v/s Ratio Prot								0.07			0.23	
v/s Ratio Perm				c0.14		0.02	c0.27					0.02
v/c Ratio				0.40		0.05	0.47	0.13			0.40	0.03
Uniform Delay, d1				22.4		19.7	11.6	9.1			10.9	8.6
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				1.0		0.2	3.5	0.3			1.1	0.1
Delay (s)				23.4		19.9	15.0	9.4			12.1	8.7
Level of Service				C		B	B	A			B	A
Approach Delay (s)		0.0			22.9			12.9			11.7	
Approach LOS		A			C			B			B	

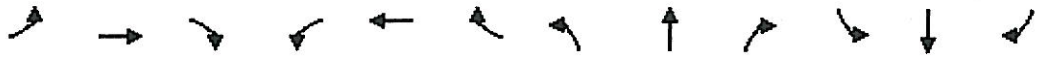
Intersection Summary			
HCM Average Control Delay	16.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	1770	1863			1863	1583
Flt Permitted				0.95		1.00	0.39	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	734	1863			1863	1583
Volume (vph)	0	0	0	930	0	210	370	290	0	0	365	45
Peak-hour factor, PHF	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)	0	0	0	1011	0	228	402	315	0	0	397	49
RTOR Reduction (vph)	0	0	0	0	0	99	0	0	0	0	0	27
Lane Group Flow (vph)	0	0	0	1011	0	129	402	315	0	0	397	22
Turn Type				custom		custom	Perm					Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				41.0		41.0	39.0	39.0			39.0	39.0
Effective Green, g (s)				42.0		42.0	40.0	40.0			40.0	40.0
Actuated g/C Ratio				0.47		0.47	0.44	0.44			0.44	0.44
Clearance Time (s)				5.0		5.0	5.0	5.0			5.0	5.0
Lane Grp Cap (vph)				826		739	326	828			828	704
v/s Ratio Prot								0.17			0.21	
v/s Ratio Perm				c0.57		0.08	c0.55					0.01
v/c Ratio				1.22		0.17	1.23	0.38			0.48	0.03
Uniform Delay, d1				24.0		13.9	25.0	16.7			17.7	14.1
Progression Factor				1.00		1.00	1.01	1.20			1.00	1.00
Incremental Delay, d2				111.5		0.5	125.9	1.1			2.0	0.1
Delay (s)				135.5		14.4	151.1	21.3			19.6	14.2
Level of Service				F		B	F	C			B	B
Approach Delay (s)		0.0			113.3			94.1			19.0	
Approach LOS		A			F			F			B	

Intersection Summary			
HCM Average Control Delay	90.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	140.9%	ICU Level of Service	H
Analysis Period (min)	15		

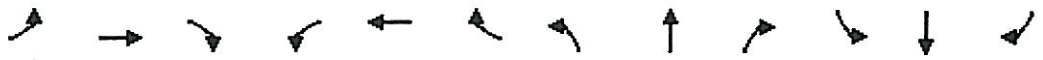
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583					1863	1583	1770	1863	
Flt Permitted	0.95		1.00					1.00	1.00	0.47	1.00	
Satd. Flow (perm)	1770		1583					1863	1583	869	1863	
Volume (vph)	35	0	255	0	0	0	0	290	1140	240	585	0
Peak-hour factor, PHF	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)	38	0	277	0	0	0	0	315	1239	261	636	0
RTOR Reduction (vph)	0	0	239	0	0	0	0	0	396	0	0	0
Lane Group Flow (vph)	38	0	38	0	0	0	0	315	843	261	636	0
Turn Type	custom		custom						Perm	pm+pt		
Protected Phases	7							2		1	6	
Permitted Phases	4 7		4						2	6		
Actuated Green, G (s)	7.5		7.5					30.2	30.2	43.7	43.7	
Effective Green, g (s)	8.5		8.5					31.2	31.2	44.7	44.7	
Actuated g/C Ratio	0.14		0.14					0.51	0.51	0.73	0.73	
Clearance Time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	246		220					950	807	775	1361	
v/s Ratio Prot	0.02							0.17		0.05	c0.34	
v/s Ratio Perm			c0.02						c0.53	0.19		
v/c Ratio	0.15		0.17					0.33	1.04	0.34	0.47	
Uniform Delay, d1	23.2		23.3					8.8	15.0	3.0	3.4	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3		0.4					0.2	43.9	0.3	0.3	
Delay (s)	23.5		23.6					9.1	58.9	3.3	3.6	
Level of Service	C		C					A	E	A	A	
Approach Delay (s)		23.6			0.0			48.8			3.5	
Approach LOS		C			A			D			A	

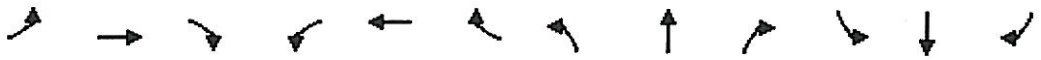
Intersection Summary			
HCM Average Control Delay	31.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	61.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	97.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583					1863	1583	1770	1863	
Flt Permitted	0.95		1.00					1.00	1.00	0.28	1.00	
Satd. Flow (perm)	1770		1583					1863	1583	525	1863	
Volume (vph)	70	0	245	0	0	0	0	590	910	240	585	0
Peak-hour factor, PHF	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)	76	0	266	0	0	0	0	641	989	261	636	0
RTOR Reduction (vph)	0	0	236	0	0	0	0	0	296	0	0	0
Lane Group Flow (vph)	76	0	30	0	0	0	0	641	693	261	636	0
Turn Type	custom		custom						Perm	pm+pt		
Protected Phases	7							2		1	6	
Permitted Phases	4 7		4						2	6		
Actuated Green, G (s)	9.1		9.1					53.8	53.8	70.9	70.9	
Effective Green, g (s)	10.1		10.1					54.8	54.8	71.9	71.9	
Actuated g/C Ratio	0.11		0.11					0.61	0.61	0.80	0.80	
Clearance Time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	199		178					1134	964	601	1488	
v/s Ratio Prot	c0.04							0.34		0.06	c0.34	
v/s Ratio Perm			0.02						c0.44	0.28		
v/c Ratio	0.38		0.17					0.57	0.72	0.43	0.43	
Uniform Delay, d1	37.1		36.1					10.5	12.2	5.3	2.8	
Progression Factor	1.00		1.00					0.33	1.79	0.71	2.18	
Incremental Delay, d2	1.2		0.4					0.2	0.4	0.0	0.1	
Delay (s)	38.3		36.6					3.7	22.4	3.8	6.1	
Level of Service	D		D					A	C	A	A	
Approach Delay (s)		37.0			0.0			15.0			5.4	
Approach LOS		D			A			B			A	

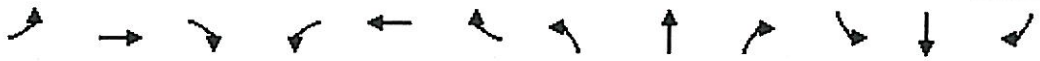
Intersection Summary			
HCM Average Control Delay	14.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	140.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.88		1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1640		1770	1594		1770	1863	1583	1770	1863	1583
Flt Permitted	0.32	1.00		0.72	1.00		0.52	1.00	1.00	0.10	1.00	1.00
Satd. Flow (perm)	593	1640		1345	1594		974	1863	1583	186	1863	1583
Volume (vph)	80	10	40	215	10	260	50	1090	245	385	375	80
Peak-hour factor, PHF	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)	87	11	43	234	11	283	54	1185	266	418	408	87
RTOR Reduction (vph)	0	33	0	0	217	0	0	0	27	0	0	25
Lane Group Flow (vph)	87	21	0	234	77	0	54	1185	239	418	408	62
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	20.0	20.0		20.0	20.0		45.0	35.0	35.0	60.0	45.0	45.0
Effective Green, g (s)	21.0	21.0		21.0	21.0		47.0	36.0	36.0	61.0	46.0	46.0
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.52	0.40	0.40	0.68	0.51	0.51
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	138	383		314	372		606	745	633	496	952	809
v/s Ratio Prot		0.01			0.05		0.01	c0.64		c0.20	0.22	
v/s Ratio Perm	0.15			c0.17			0.04		0.15	0.37		0.04
v/c Ratio	0.63	0.05		0.75	0.21		0.09	1.59	0.38	0.84	0.43	0.08
Uniform Delay, d1	31.0	26.8		32.0	27.8		10.6	27.0	19.1	34.6	13.8	11.2
Progression Factor	1.00	1.00		1.00	1.00		0.86	0.64	0.65	1.00	1.00	1.00
Incremental Delay, d2	19.9	0.3		14.8	1.3		0.2	270.7	1.3	15.9	1.4	0.2
Delay (s)	50.9	27.1		46.9	29.1		9.3	288.1	13.7	50.5	15.2	11.4
Level of Service	D	C		D	C		A	F	B	D	B	B
Approach Delay (s)		41.8			36.9			229.6			31.0	
Approach LOS		D			D			F			C	

Intersection Summary			
HCM Average Control Delay	129.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	113.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1624		1770	1594		1770	1863	1583	1770	1863	1583
Flt Permitted	0.35	1.00		0.71	1.00		0.11	1.00	1.00	0.10	1.00	1.00
Satd. Flow (perm)	651	1624		1318	1594		196	1863	1583	177	1863	1583
Volume (vph)	90	10	60	240	10	245	60	1165	250	355	940	85
Peak-hour factor, PHF	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)	98	11	65	261	11	266	65	1266	272	386	1022	92
RTOR Reduction (vph)	0	50	0	0	204	0	0	0	26	0	0	11
Lane Group Flow (vph)	98	26	0	261	73	0	65	1266	246	386	1022	81
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	20.0	20.0		20.0	20.0		47.0	37.0	37.0	60.0	45.0	45.0
Effective Green, g (s)	21.0	21.0		21.0	21.0		49.0	38.0	38.0	61.0	46.0	46.0
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.54	0.42	0.42	0.68	0.51	0.51
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	152	379		308	372		299	787	668	456	952	809
v/s Ratio Prot		0.02			0.05		0.03	c0.68		c0.18	c0.55	
v/s Ratio Perm	0.15			c0.20			0.09		0.16	0.39		0.05
v/c Ratio	0.64	0.07		0.85	0.20		0.22	1.61	0.37	0.85	1.07	0.10
Uniform Delay, d1	31.1	26.9		33.0	27.7		36.0	26.0	17.8	35.8	22.0	11.3
Progression Factor	1.00	1.00		1.00	1.00		1.63	1.31	1.63	1.34	0.77	0.62
Incremental Delay, d2	19.2	0.4		24.0	1.2		1.2	278.2	1.1	17.1	50.7	0.2
Delay (s)	50.3	27.2		57.0	28.9		60.0	312.2	30.1	65.0	67.6	7.3
Level of Service	D	C		E	C		E	F	C	E	E	A
Approach Delay (s)		40.2			42.5			254.1			63.3	
Approach LOS		D			D			F			E	

Intersection Summary			
HCM Average Control Delay	139.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*CMB*	Intersection	*SPUR/REST AREA*
Agency/Co.	*FHU*	Jurisdiction	*EAGLE COUNTY*
Date Performed	*3/19/04*	Analysis Year	*2025 NO BUILD*
Analysis Time Period	*PM PEAK HOUR*		
Project Description	*EDWARDS SPUR ROAD*		
East/West Street:	*REST AREA/OLD EDWARDS*	North/South Street:	*SPUR ROAD*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*15*	*1415*	*5*	*45*	*1170*	*25*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*16*	*1572*	*5*	*50*	*1300*	*27*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*1*	*1*	*1*
Configuration	*L*		*TR*	*L*	*T*	*R*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*5*	*5*	*45*	*15*	*5*	*5*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*5*	*5*	*50*	*16*	*5*	*5*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*0*
Configuration	*L*		*TR*		*LTR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*	*L*		*TR*		*LTR*	
v (vph)	*16*	*50*	*5*		*55*		*26*	
C (m) (vph)	*527*	*423*	*5*		*67*		*5*	
v/c	*0.03*	*0.12*	*1.00*		*0.82*		*5.20*	
95% queue length	*0.09*	*0.40*	*1.37*		*3.85*		*4.70*	
Control Delay	*12.0*	*14.6*			*165.0*			
LOS	*B*	*B*	*F*		*F*		*F*	
Approach Delay	--	--	*259.1*					
Approach LOS	--	--	*F*			*F*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*CMB*	Intersection	*SPUR/REST AREA*
Agency/Co.	*FHU*	Jurisdiction	*EAGLE COUNTY*
Date Performed	*3/19/04*	Analysis Year	*2025 NO BUILD*
Analysis Time Period	*AM PEAK HOUR*		
Project Description	*EDWARDS SPUR ROAD*		
East/West Street:	*REST AREA/OLD EDWARDS*	North/South Street:	*SPUR ROAD*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*5*	*1325*	*5*	*35*	*590*	*5*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*5*	*1472*	*5*	*38*	*655*	*5*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*1*	*1*	*1*
Configuration	*L*		*TR*	*L*	*T*	*R*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*5*	*5*	*35*	*25*	*5*	*10*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*5*	*5*	*38*	*27*	*5*	*11*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*0*
Configuration	*L*		*TR*		*LTR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*	*L*		*TR*		*LTR*	
v (vph)	*5*	*38*	*5*		*43*		*43*	
C (m) (vph)	*938*	*462*	*26*		*117*		*29*	
v/c	*0.01*	*0.08*	*0.19*		*0.37*		*1.48*	
95% queue length	*0.02*	*0.27*	*0.58*		*1.50*		*4.98*	
Control Delay	*8.9*	*13.5*	*173.9*		*52.6*		*545.4*	
LOS	*A*	*B*	*F*		*F*		*F*	
Approach Delay	--	--	*65.3*			*545.4*		
Approach LOS	--	--	*F*			*F*		

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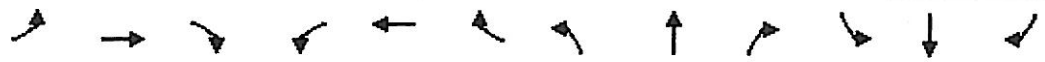
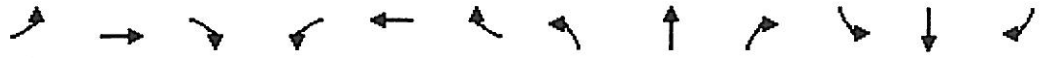


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Volume (vph)	435	535	65	130	600	380	75	260	190	460	170	300
Peak-hour factor, PHF	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)	473	582	71	141	652	413	82	283	207	500	185	326
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	473	582	71	141	652	413	82	283	207	500	185	326
Turn Type	Prot		Free	Prot		Free	Prot		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Actuated Green, G (s)	15.0	27.1	86.5	6.0	18.1	86.5	3.9	18.4	86.5	15.0	29.5	86.5
Effective Green, g (s)	16.0	28.1	86.5	7.0	19.1	86.5	4.9	19.4	86.5	16.0	30.5	86.5
Actuated g/C Ratio	0.18	0.32	1.00	0.08	0.22	1.00	0.06	0.22	1.00	0.18	0.35	1.00
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	327	605	1583	143	411	1583	100	418	1583	327	657	1583
v/s Ratio Prot	c0.27	0.31		0.08	c0.35		0.05	c0.15		c0.28	0.10	
v/s Ratio Perm			0.04			0.26			0.13			0.21
v/c Ratio	1.45	0.96	0.04	0.99	1.59	0.26	0.82	0.68	0.13	1.53	0.28	0.21
Uniform Delay, d1	35.2	28.7	0.0	39.7	33.7	0.0	40.4	30.7	0.0	35.2	20.1	0.0
Progression 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
Incremental Delay, d2	217.4	27.2	0.1	70.4	275.2	0.4	39.3	4.3	0.2	253.0	0.2	0.3
Delay (s)	252.6	55.9	0.1	110.1	308.9	0.4	79.7	35.0	0.2	288.3	20.4	0.3
Level of Service	F	E	A	F	F	A	E	C	A	F	C	A
Approach Delay (s)		135.0			180.0			28.8			146.4	
Approach LOS		F			F			C			F	

Intersection Summary			
HCM Average Control Delay	136.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	86.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	108.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Volume (vph)	320	760	60	290	970	585	70	310	230	450	350	450
Peak-hour factor, PHF	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)	348	826	65	315	1054	636	76	337	250	489	380	489
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	348	826	65	315	1054	636	76	337	250	489	380	489
Turn Type	Prot		Free	Prot		Free	Prot		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Actuated Green, G (s)	10.0	26.0	90.1	10.0	26.0	90.1	5.5	19.1	90.1	15.0	28.6	90.1
Effective Green, g (s)	11.0	27.0	90.1	11.0	27.0	90.1	6.5	20.1	90.1	16.0	29.6	90.1
Actuated g/C Ratio	0.12	0.30	1.00	0.12	0.30	1.00	0.07	0.22	1.00	0.18	0.33	1.00
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	216	558	1583	216	558	1583	128	416	1583	314	612	1583
v/s Ratio Prot	c0.20	0.44		0.18	c0.57		0.04	c0.18		c0.28	0.20	
v/s Ratio Perm			0.04			0.40			0.16			0.31
v/c Ratio	1.61	1.48	0.04	1.46	1.89	0.40	0.59	0.81	0.16	1.56	0.62	0.31
Uniform Delay, d1	39.6	31.6	0.0	39.6	31.6	0.0	40.5	33.2	0.0	37.0	25.5	0.0
Progression 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
Incremental Delay, d2	295.4	225.7	0.0	230.0	406.7	0.8	7.2	11.3	0.2	265.9	2.0	0.5
Delay (s)	335.0	257.2	0.0	269.6	438.3	0.8	47.7	44.5	0.2	303.0	27.5	0.5
Level of Service	F	F	A	F	F	A	D	D	A	F	C	A
Approach Delay (s)		265.6			273.0			28.2			117.0	
Approach LOS		F			F			C			F	

Intersection Summary			
HCM Average Control Delay	200.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.48		
Actuated Cycle Length (s)	90.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	123.4%	ICU Level of Service	H
Analysis Period (min)	15		

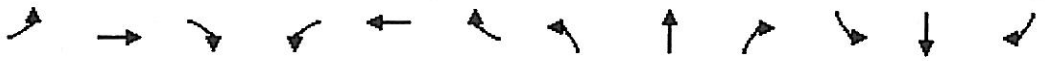
c Critical Lane Group

FUTURE BUILD CONDITIONS
(SIGNALIZED CORRIDOR)
LOS WORKSHEETS

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	265	5	5	175	80	125
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	288	5	5	190	87	136
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	288	87	223			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	288	87	223			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	59	99	100			
cM capacity (veh/h)	700	972	1346			

Direction, Lane #	SB 1	SB 2	SE 1	SE 2	NW 1	NW 2
Volume Total	288	5	5	190	87	136
Volume Left	288	0	5	0	0	0
Volume Right	0	5	0	0	0	136
cSH	700	972	1346	1700	1700	1700
Volume to Capacity	0.41	0.01	0.00	0.11	0.05	0.08
Queue Length (ft)	51	0	0	0	0	0
Control Delay (s)	13.7	8.7	7.7	0.0	0.0	0.0
Lane LOS	B	A	A			
Approach Delay (s)	13.6		0.2		0.0	
Approach LOS	B					

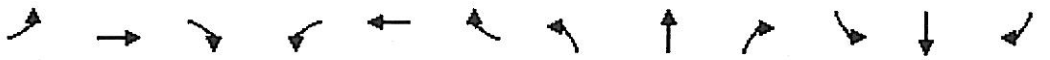
Intersection Summary			
Average Delay	5.7		
Intersection Capacity Utilization	30.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				0.97		1.00	1.00	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		1583	1770	1863			1863	1583
Flt Permitted				0.95		1.00	0.43	1.00			1.00	1.00
Satd. Flow (perm)				3433		1583	808	1863			1863	1583
Volume (vph)	0	0	0	435	0	80	200	125	0	0	390	50
Peak-hour factor, PHF	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)	0	0	0	473	0	87	217	136	0	0	424	54
RTOR Reduction (vph)	0	0	0	0	0	57	0	0	0	0	0	23
Lane Group Flow (vph)	0	0	0	473	0	30	217	136	0	0	424	31
Turn Type				custom		custom	Perm					Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				30.0		30.0	50.0	50.0			50.0	50.0
Effective Green, g (s)				31.0		31.0	51.0	51.0			51.0	51.0
Actuated g/C Ratio				0.34		0.34	0.57	0.57			0.57	0.57
Clearance Time (s)				5.0		5.0	5.0	5.0			5.0	5.0
Lane Grp Cap (vph)				1182		545	458	1056			1056	897
v/s Ratio Prot								0.07			0.23	
v/s Ratio Perm				0.14		0.05	c0.27					0.03
v/c Ratio				0.40		0.05	0.47	0.13			0.40	0.03
Uniform Delay, d1				22.4		19.7	11.6	9.1			10.9	8.6
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				1.0		0.2	3.5	0.3			1.1	0.1
Delay (s)				23.4		19.9	15.0	9.4			12.1	8.7
Level of Service				C		B	B	A			B	A
Approach Delay (s)		0.0			22.9			12.9			11.7	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

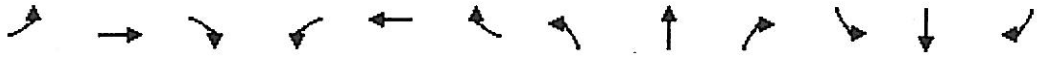
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				0.97		1.00	1.00	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		1583	1770	1863			1863	1583
Flt Permitted				0.95		1.00	0.39	1.00			1.00	1.00
Satd. Flow (perm)				3433		1583	734	1863			1863	1583
Volume (vph)	0	0	0	930	0	210	370	290	0	0	365	45
Peak-hour factor, PHF	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)	0	0	0	1011	0	228	402	315	0	0	397	49
RTOR Reduction (vph)	0	0	0	0	0	122	0	0	0	0	0	27
Lane Group Flow (vph)	0	0	0	1011	0	106	402	315	0	0	397	22
Turn Type				custom		custom	Perm					Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				41.0		41.0	39.0	39.0			39.0	39.0
Effective Green, g (s)				42.0		42.0	40.0	40.0			40.0	40.0
Actuated g/C Ratio				0.47		0.47	0.44	0.44			0.44	0.44
Clearance Time (s)				5.0		5.0	5.0	5.0			5.0	5.0
Lane Grp Cap (vph)				1602		739	326	828			828	704
v/s Ratio Prot								0.17			0.21	
v/s Ratio Perm				0.29		0.14	c0.55					0.03
v/c Ratio				0.63		0.14	1.23	0.38			0.48	0.03
Uniform Delay, d1				18.1		13.7	25.0	16.7			17.7	14.1
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				1.9		0.4	128.7	1.3			2.0	0.1
Delay (s)				20.0		14.1	153.7	18.0			19.6	14.2
Level of Service				C		B	F	B			B	B
Approach Delay (s)		0.0			19.0			94.1			19.0	
Approach LOS		A			B			F			B	

Intersection Summary			
HCM Average Control Delay	41.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.8%	ICU Level of Service	E
Analysis Period (min)	15		

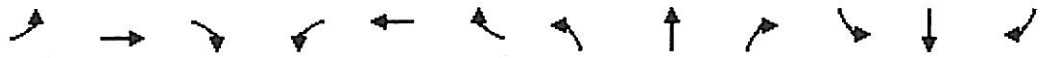
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583					1863	1583	1770	1863	
Flt Permitted	0.95		1.00					1.00	1.00	0.42	1.00	
Satd. Flow (perm)	1770		1583					1863	1583	790	1863	
Volume (vph)	35	0	255	0	0	0	0	290	1140	240	585	0
Peak-hour factor, PHF	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)	38	0	277	0	0	0	0	315	1239	261	636	0
RTOR Reduction (vph)	0	0	236	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	38	0	41	0	0	0	0	315	1239	261	636	0
Turn Type	custom		custom						Free	pm+pt		
Protected Phases	7							2		1	6	
Permitted Phases	4 7		4						Free	6		
Actuated Green, G (s)	5.6		5.6					16.9	44.2	28.6	28.6	
Effective Green, g (s)	6.6		6.6					17.9	44.2	29.6	29.6	
Actuated g/C Ratio	0.15		0.15					0.40	1.00	0.67	0.67	
Clearance Time (s)	5.0		5.0					5.0		5.0	5.0	
Vehicle Extension (s)	3.0		3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	264		236					754	1583	700	1248	
v/s Ratio Prot	0.02							0.17		0.06	0.34	
v/s Ratio Perm			0.17						0.78	0.18		
v/c Ratio	0.14		0.18					0.42	0.78	0.37	0.51	
Uniform Delay, d1	16.3		16.4					9.4	0.0	3.3	3.7	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3		0.4					0.4	3.9	0.3	0.3	
Delay (s)	16.6		16.8					9.8	3.9	3.6	4.0	
Level of Service	B		B					A	A	A	A	
Approach Delay (s)		16.8			0.0			5.1			3.9	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	44.2	Sum of lost time (s)	0.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

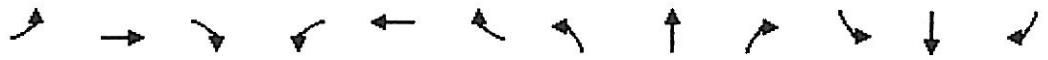
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00					1.00	1.00	1.00	0.95	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583					1863	1583	1770	3539	
Flt Permitted	0.95		1.00					1.00	1.00	0.24	1.00	
Satd. Flow (perm)	1770		1583					1863	1583	444	3539	
Volume (vph)	70	0	245	0	0	0	0	590	910	240	585	0
Peak-hour factor, PHF	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)	76	0	266	0	0	0	0	641	989	261	636	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	76	0	266	0	0	0	0	641	989	261	636	0
Turn Type	custom		Free						Free	pm+pt		
Protected Phases	7							2		1	6	
Permitted Phases	4 7		Free						Free	6		
Actuated Green, G (s)	5.0		61.2					31.5	61.2	46.2	46.2	
Effective Green, g (s)	6.0		61.2					32.5	61.2	47.2	47.2	
Actuated g/C Ratio	0.10		1.00					0.53	1.00	0.77	0.77	
Clearance Time (s)	5.0							5.0		5.0	5.0	
Vehicle Extension (s)	3.0							3.0		3.0	3.0	
Lane Grp Cap (vph)	174		1583					989	1583	574	2729	
v/s Ratio Prot	0.04							0.34		0.08	0.18	
v/s Ratio Perm			0.17						0.62	0.27		
v/c Ratio	0.44		0.17					0.65	0.62	0.45	0.23	
Uniform Delay, d1	26.0		0.0					10.3	0.0	5.0	2.0	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.8		0.2					1.5	1.9	0.6	0.0	
Delay (s)	27.8		0.2					11.7	1.9	5.5	2.0	
Level of Service	C		A					B	A	A	A	
Approach Delay (s)		6.3			0.0			5.8			3.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	61.2	Sum of lost time (s)	0.0
Intersection Capacity Utilization	86.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.88		1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1640		1770	1594		1770	3539	1583	1770	3539	1583
Flt Permitted	0.32	1.00		0.72	1.00		0.51	1.00	1.00	0.10	1.00	1.00
Satd. Flow (perm)	593	1640		1345	1594		954	3539	1583	186	3539	1583
Volume (vph)	80	10	40	215	10	260	50	1090	245	385	375	80
Peak-hour factor, PHF	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)	87	11	43	234	11	283	54	1185	266	418	408	87
RTOR Reduction (vph)	0	33	0	0	217	0	0	0	51	0	0	43
Lane Group Flow (vph)	87	21	0	234	77	0	54	1185	215	418	408	44
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	20.0	20.0		20.0	20.0		45.0	35.0	35.0	60.0	45.0	45.0
Effective Green, g (s)	21.0	21.0		21.0	21.0		47.0	36.0	36.0	61.0	46.0	46.0
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.52	0.40	0.40	0.68	0.51	0.51
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	138	383		314	372		598	1416	633	496	1809	809
v/s Ratio Prot		0.03			c0.18		0.01	0.33		c0.20	0.12	
v/s Ratio Perm	0.15			0.17			0.04		0.17	c0.37		0.05
v/c Ratio	0.63	0.05		0.75	0.21		0.09	0.84	0.34	0.84	0.23	0.05
Uniform Delay, d1	31.0	26.8		32.0	27.8		10.6	24.4	18.7	24.1	12.2	11.1
Progression Factor	1.00	1.00		1.00	1.00		0.86	0.62	0.61	1.00	1.00	1.00
Incremental Delay, d2	19.9	0.3		14.8	1.3		0.2	4.7	1.1	15.9	0.3	0.1
Delay (s)	50.9	27.1		46.9	29.1		9.3	19.8	12.5	40.0	12.4	11.2
Level of Service	D	C		D	C		A	B	B	D	B	B
Approach Delay (s)		41.8			36.9			18.1			24.9	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM Average Control Delay	24.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.87		1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1624		1770	1594		1770	3539	1583	1770	3539	1583
Flt Permitted	0.35	1.00		0.71	1.00		0.23	1.00	1.00	0.10	1.00	1.00
Satd. Flow (perm)	651	1624		1318	1594		429	3539	1583	177	3539	1583
Volume (vph)	90	10	60	240	10	245	60	1165	250	355	940	85
Peak-hour factor, PHF	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)	98	11	65	261	11	266	65	1266	272	386	1022	92
RTOR Reduction (vph)	0	50	0	0	204	0	0	0	49	0	0	21
Lane Group Flow (vph)	98	26	0	261	73	0	65	1266	223	386	1022	71
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	20.0	20.0		20.0	20.0		47.0	37.0	37.0	60.0	45.0	45.0
Effective Green, g (s)	21.0	21.0		21.0	21.0		49.0	38.0	38.0	61.0	46.0	46.0
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.54	0.42	0.42	0.68	0.51	0.51
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	152	379		308	372		397	1494	668	456	1809	809
v/s Ratio Prot		0.05			0.17		0.02	0.36		c0.18	0.29	
v/s Ratio Perm	0.15			c0.20			0.07		0.17	c0.39		0.06
v/c Ratio	0.64	0.07		0.85	0.20		0.16	0.85	0.33	0.85	0.56	0.09
Uniform Delay, d1	31.1	26.9		33.0	27.7		10.0	23.4	17.5	24.7	15.1	11.3
Progression Factor	1.00	1.00		1.00	1.00		1.71	1.35	1.77	1.00	1.00	1.00
Incremental Delay, d2	19.2	0.4		24.0	1.2		0.6	4.6	1.0	17.4	1.3	0.2
Delay (s)	50.3	27.2		57.0	28.9		17.7	36.1	32.0	42.1	16.4	11.5
Level of Service	D	C		E	C		B	D	C	D	B	B
Approach Delay (s)		40.2			42.5			34.7			22.7	
Approach LOS		D			D			C			C	

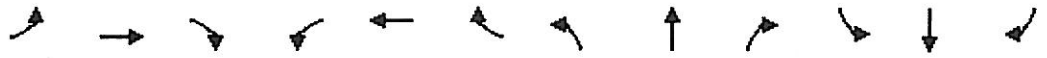
Intersection Summary			
HCM Average Control Delay	31.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1583		1770	3537		1770	3535	
Flt Permitted	0.73	1.00		0.75	1.00		0.38	1.00		0.11	1.00	
Satd. Flow (perm)	1364	1583		1398	1583		704	3537		214	3535	
Volume (vph)	25	0	10	5	0	35	5	1325	5	35	590	5
Peak-hour factor, PHF	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	0	11	5	0	38	5	1440	5	38	641	5
RTOR Reduction (vph)	0	8	0	0	27	0	0	0	0	0	1	0
Lane Group Flow (vph)	27	3	0	5	11	0	5	1445	0	38	645	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	25.0	25.0		25.0	25.0		55.0	55.0		55.0	55.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0		56.0	56.0		56.0	56.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.62	0.62		0.62	0.62	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	394	457		404	457		438	2201		133	2200	
v/s Ratio Prot		0.01			c0.02			c0.41			0.18	
v/s Ratio Perm	0.02			0.00			0.01			0.18		
v/c Ratio	0.07	0.01		0.01	0.02		0.01	0.66		0.29	0.29	
Uniform Delay, d1	23.2	22.8		22.8	22.9		6.5	10.9		7.8	7.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.83	
Incremental Delay, d2	0.3	0.0		0.1	0.1		0.0	1.5		5.0	0.3	
Delay (s)	23.6	22.8		22.9	23.0		6.5	12.4		12.8	6.8	
Level of Service	C	C		C	C		A	B		B	A	
Approach Delay (s)		23.3			23.0			12.4			7.2	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

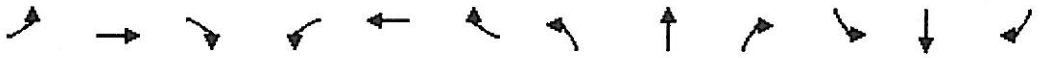
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1583		1770	3537		1770	3528	
Flt Permitted	0.73	1.00		0.75	1.00		0.15	1.00		0.09	1.00	
Satd. Flow (perm)	1351	1583		1405	1583		277	3537		177	3528	
Volume (vph)	15	0	5	5	0	45	15	1415	5	45	1170	25
Peak-hour factor, PHF	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)	16	0	5	5	0	49	16	1538	5	49	1272	27
RTOR Reduction (vph)	0	4	0	0	28	0	0	0	0	0	2	0
Lane Group Flow (vph)	16	1	0	5	21	0	16	1543	0	49	1297	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	25.0	25.0		25.0	25.0		55.0	55.0		55.0	55.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0		56.0	56.0		56.0	56.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.62	0.62		0.62	0.62	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	390	457		406	457		172	2201		110	2195	
v/s Ratio Prot		0.00			c0.03			c0.44			0.37	
v/s Ratio Perm	0.01			0.00			0.06			0.28		
v/c Ratio	0.04	0.00		0.01	0.05		0.09	0.70		0.45	0.59	
Uniform Delay, d1	23.0	22.8		22.8	23.1		6.8	11.4		8.9	10.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.62	0.63	
Incremental Delay, d2	0.2	0.0		0.1	0.2		1.1	1.9		10.1	0.9	
Delay (s)	23.2	22.8		22.9	23.3		7.9	13.3		15.6	7.3	
Level of Service	C	C		C	C		A	B		B	A	
Approach Delay (s)		23.1			23.2			13.2			7.6	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	1770	1863	1583	3433	1863	1583
Volume (vph)	435	535	65	130	600	380	75	260	190	460	170	300
Peak-hour factor, PHF	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)	473	582	71	141	652	413	82	283	207	500	185	326
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	473	582	71	141	652	413	82	283	207	500	185	326
Turn Type	Prot		Free	Prot		Free	Prot		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Actuated Green, G (s)	14.1	27.9	84.9	4.6	18.4	84.9	3.8	18.2	84.9	14.2	28.6	84.9
Effective Green, g (s)	15.1	28.9	84.9	5.6	19.4	84.9	4.8	19.2	84.9	15.2	29.6	84.9
Actuated g/C Ratio	0.18	0.34	1.00	0.07	0.23	1.00	0.06	0.23	1.00	0.18	0.35	1.00
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	611	1205	1583	226	809	1583	100	421	1583	615	650	1583
v/s Ratio Prot	c0.14	0.16		0.04	c0.18		0.05	c0.15		c0.15	0.10	
v/s Ratio Perm			0.04			0.26			0.13			0.21
v/c Ratio	0.77	0.48	0.04	0.62	0.81	0.26	0.82	0.67	0.13	0.81	0.28	0.21
Uniform Delay, d1	33.3	22.1	0.0	38.6	31.0	0.0	39.6	30.0	0.0	33.5	20.0	0.0
Progression 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
Incremental Delay, d2	6.1	0.3	0.1	5.3	5.9	0.4	39.3	4.2	0.2	8.1	0.2	0.3
Delay (s)	39.4	22.4	0.1	43.9	36.9	0.4	78.9	34.2	0.2	41.6	20.2	0.3
Level of Service	D	C	A	D	D	A	E	C	A	D	C	A
Approach Delay (s)		28.1			25.2			28.3			24.4	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	26.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	84.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	1770	1863	1583	3433	1863	1583
Volume (vph)	320	760	60	290	970	585	70	310	230	450	350	450
Peak-hour factor, PHF	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)	348	826	65	315	1054	636	76	337	250	489	380	489
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	348	826	65	315	1054	636	76	337	250	489	380	489
Turn Type	Prot		Free	Prot		Free	Prot		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Actuated Green, G (s)	10.0	26.1	89.7	9.9	26.0	89.7	5.5	19.1	89.7	14.6	28.2	89.7
Effective Green, g (s)	11.0	27.1	89.7	10.9	27.0	89.7	6.5	20.1	89.7	15.6	29.2	89.7
Actuated g/C Ratio	0.12	0.30	1.00	0.12	0.30	1.00	0.07	0.22	1.00	0.17	0.33	1.00
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	421	1069	1583	417	1065	1583	128	417	1583	597	606	1583
v/s Ratio Prot	c0.10	0.23		0.09	c0.30		0.04	c0.18		c0.14	0.20	
v/s Ratio Perm			0.04			0.40			0.16			0.31
v/c Ratio	0.83	0.77	0.04	0.76	0.99	0.40	0.59	0.81	0.16	0.82	0.63	0.31
Uniform Delay, d1	38.4	28.5	0.0	38.1	31.2	0.0	40.3	33.0	0.0	35.7	25.6	0.0
Progression 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
Incremental Delay, d2	12.5	3.5	0.0	7.6	24.8	0.8	7.2	11.0	0.2	8.6	2.0	0.5
Delay (s)	50.9	32.0	0.0	45.7	56.0	0.8	47.5	43.9	0.2	44.3	27.7	0.5
Level of Service	D	C	A	D	E	A	D	D	A	D	C	A
Approach Delay (s)		35.7			36.9			27.9			23.9	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	32.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	89.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

FUTURE BUILD CONDITIONS
(ROUNDABOUT CORRIDOR)
LOS WORKSHEETS

Intersection Summary

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aaTraffic SIDRA

I-70 G: Edwards Spur Road - Beard/Berry/I-70 WB Ramps

Performance Measure	Vehicles	Persons
Demand Flow	1361 veh/h	2042 pers/h
Degree of Saturation	0.346	
Capacity (Total)	8756 veh/h	
95% Back of Queue (ft)	53 ft	
95% Back of Queue (veh)	2.1 veh	
Control Delay (Total)	3.64 veh-h/h	5.45 pers-h/h
Control Delay (Average)	9.6 s/veh	9.6 s/pers
Level of Service	LOS A	
Level of Service (Worst Movement)	LOS B	
Total Effective Stops	1765 veh/h	2647 pers/h
Effective Stop Rate	1.30 per veh	1.30 per pers
Travel Distance (Total)	571.0 veh-mi/h	856.4 pers-mi/h
Travel Distance (Average)	2215 ft	2215 ft
Travel Time (Total)	22.1 veh-h/h	33.1 pers-h/h
Travel Time (Average)	58.4 secs	58.4 secs
Travel Speed	25.9 mph	25.9 mph
Operating Cost (Total)	466 $/h	466 $/h
Fuel Consumption (Total)	20.2 ga/h	
Carbon Dioxide (Total)	191.0 kg/h	
Hydrocarbons (Total)	0.293 kg/h	
Carbon Monoxide (Total)	8.74 kg/h	
NOX (Total)	0.316 kg/h	

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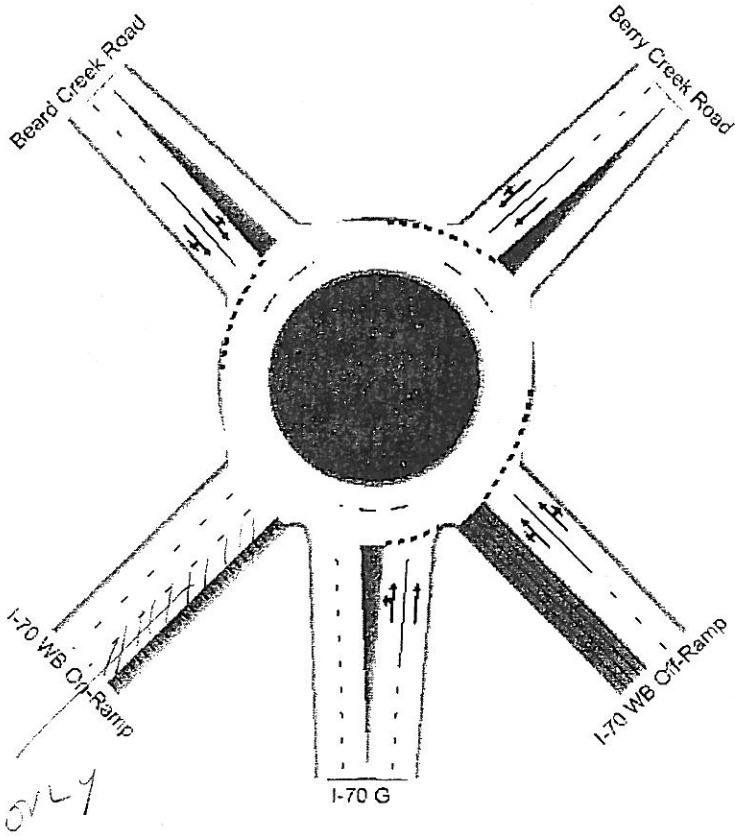
Beard Creek Road
Berry Creek Road
I-70 WB Off-Ramp
I-70 WB Off-Ramp
I-70 G

2 only

Level of Service

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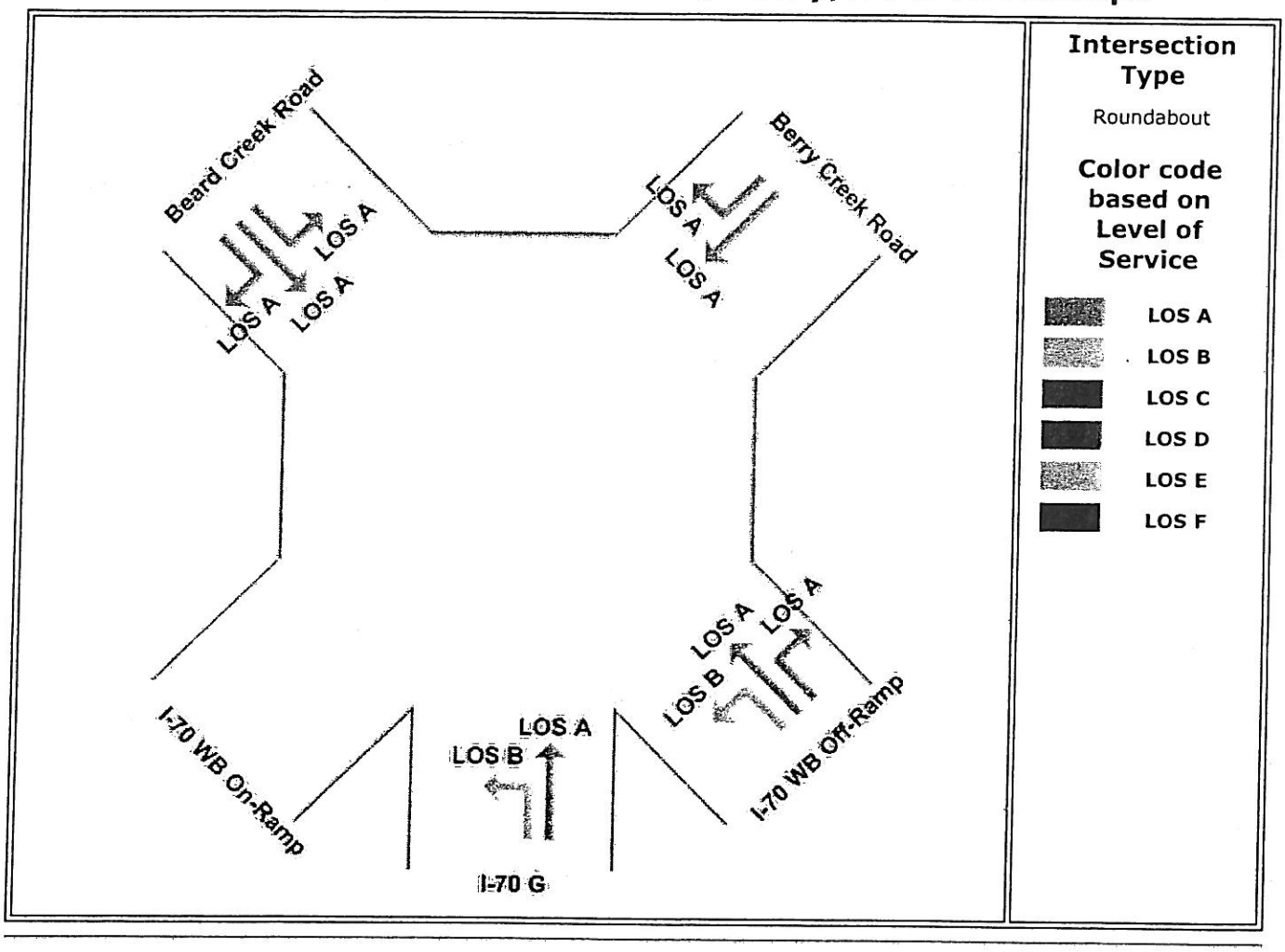
aaTraffic SIDRA

Based on Delay (HCM method)

I-70 G: Edwards Spur Road - Beard/Berry/I-70 WB Ramps



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Intersection Summary

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aaTraffic SIDRA

I-70 G: Edwards Spur Road - Beard/Berry/I-70 WB Ramps

Performance Measure	Vehicles	Persons
Demand Flow	2341 veh/h	3512 pers/h
Degree of Saturation	0.884	
Capacity (Total)	6349 veh/h	
95% Back of Queue (ft)	402 ft (OFF-RAMP)	
95% Back of Queue (veh)	15.8 veh	
Control Delay (Total)	11.21 veh-h/h	16.82 pers-h/h
Control Delay (Average)	17.2 s/veh	17.2 s/pers
Level of Service	LOS B	
Level of Service (Worst Movement)	LOS C	
Total Effective Stops	4473 veh/h	6710 pers/h
Effective Stop Rate	1.91 per veh	1.91 per pers
Travel Distance (Total)	983.4 veh-mi/h	1475.1 pers-mi/h
Travel Distance (Average)	2218 ft	2218 ft
Travel Time (Total)	41.3 veh-h/h	61.9 pers-h/h
Travel Time (Average)	63.5 secs	63.5 secs
Travel Speed	23.8 mph	23.8 mph
Operating Cost (Total)	872 $/h	872 $/h
Fuel Consumption (Total)	36.6 ga/h	
Carbon Dioxide (Total)	346.3 kg/h	
Hydrocarbons (Total)	0.543 kg/h	
Carbon Monoxide (Total)	15.84 kg/h	
NOX (Total)	0.577 kg/h	

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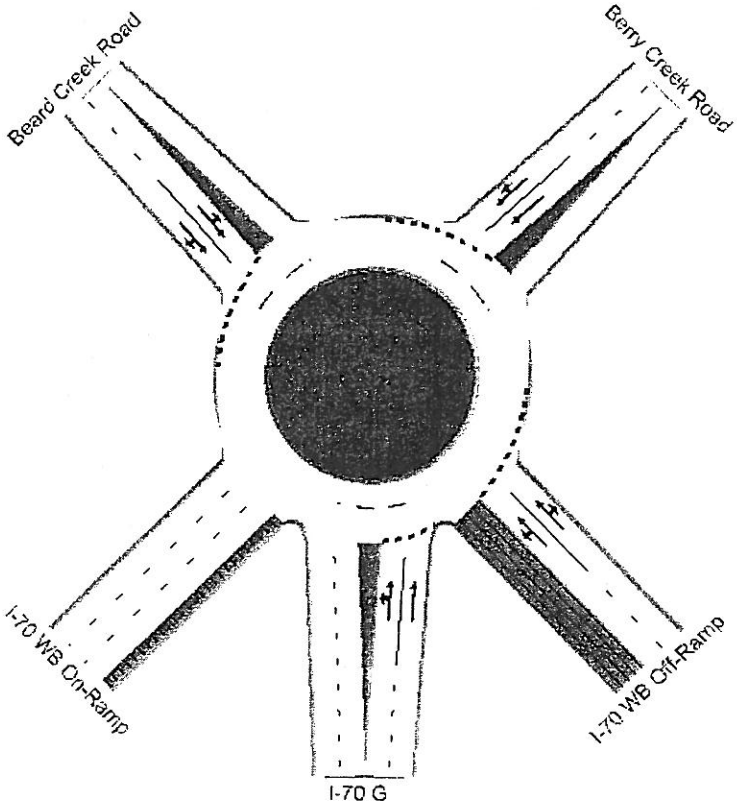
Beard Creek Road
Berry Creek Road
I-70 WB On-Ramp
I-70 WB Off-Ramp
I-70 G

Level of Service

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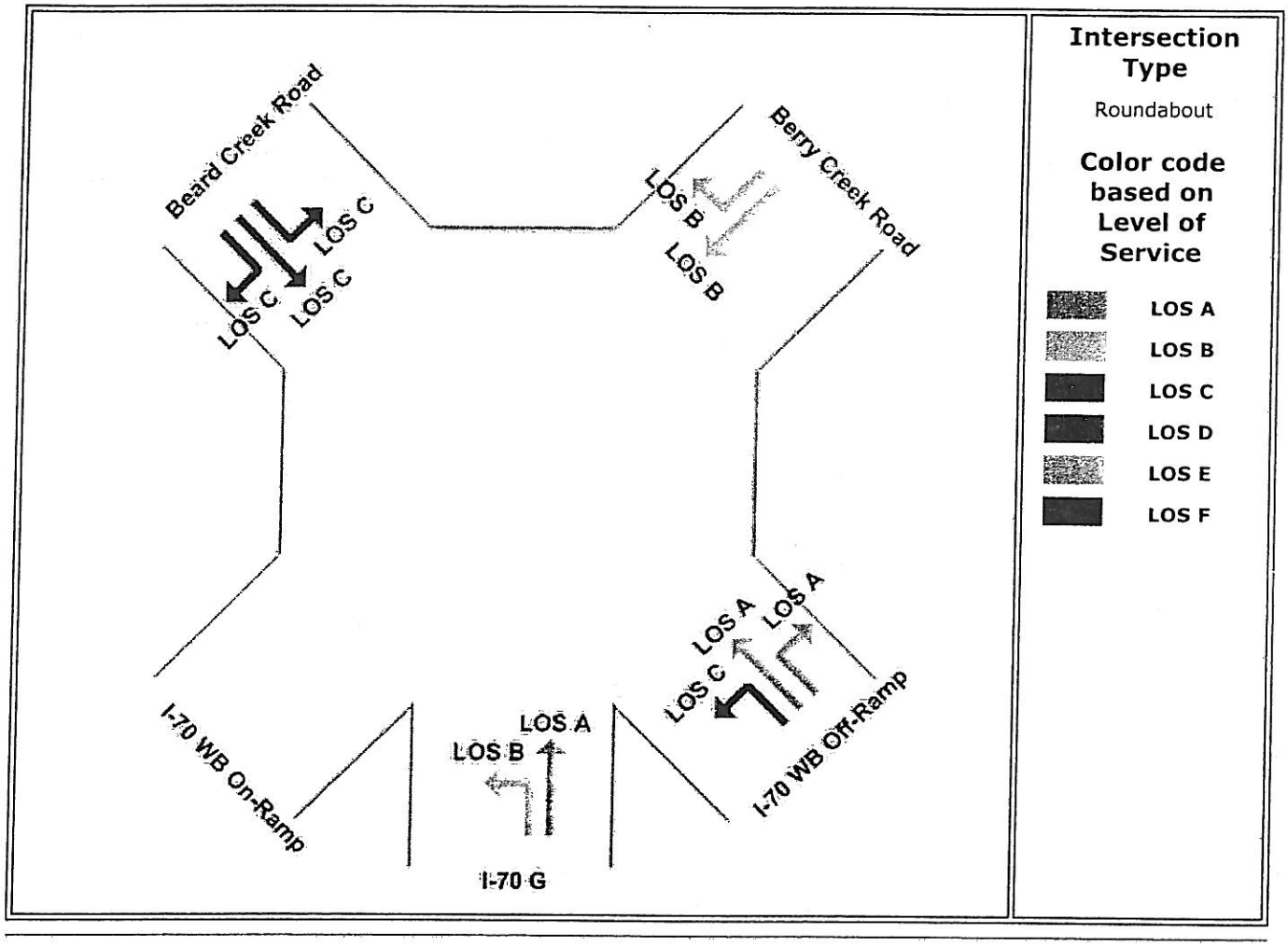
aaTraffic SIDRA

Based on Delay (HCM method)

I-70 G: Edwards Spur Road - Beard/Berry/I-70 WB Ramps



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Intersection Summary

akcelik & associates
aaTraffic SIDRA

I-70 G: Edwards Spur Road - I-70 Eastbound Ramps

Performance Measure	Vehicles	Persons
Demand Flow	2678 veh/h	4017 pers/h
Degree of Saturation	0.849	
Capacity (Total)	8009 veh/h	
95% Back of Queue (ft)	403 ft (OFF-RAMP)	
95% Back of Queue (veh)	15.9 veh	
Control Delay (Total)	4.04 veh-h/h	6.06 pers-h/h
Control Delay (Average)	5.4 s/veh	5.4 s/pers
Level of Service	LOS A	
Level of Service (Worst Movement)	LOS B	
Total Effective Stops	2708 veh/h	4062 pers/h
Effective Stop Rate	1.01 per veh	1.01 per pers
Travel Distance (Total)	1087.1 veh-mi/h	1630.6 pers-mi/h
Travel Distance (Average)	2143 ft	2143 ft
Travel Time (Total)	35.7 veh-h/h	53.5 pers-h/h
Travel Time (Average)	48.0 secs	48.0 secs
Travel Speed	30.5 mph	30.5 mph
Operating Cost (Total)	733 $/h	733 $/h
Fuel Consumption (Total)	35.9 ga/h	
Carbon Dioxide (Total)	340.0 kg/h	
Hydrocarbons (Total)	0.491 kg/h	
Carbon Monoxide (Total)	14.20 kg/h	
NOX (Total)	0.602 kg/h	

I:\03206\Traffic\SIDRA\Summer 2025 PIS\Spur - I70ER AM
Produced by aaSIDRA 2.0.1.206

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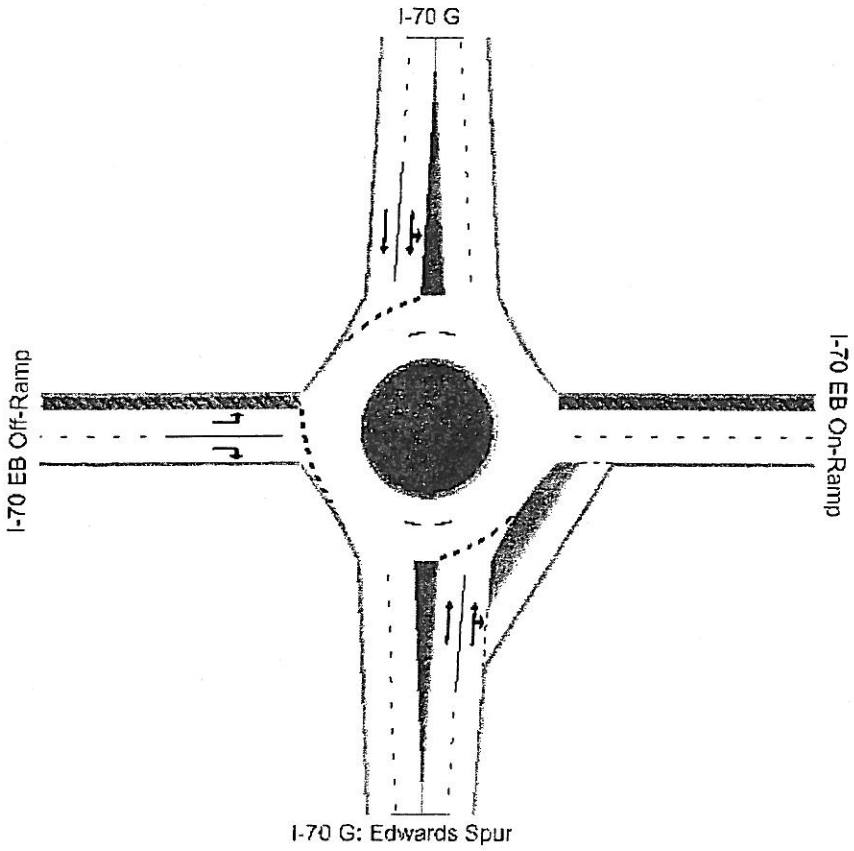
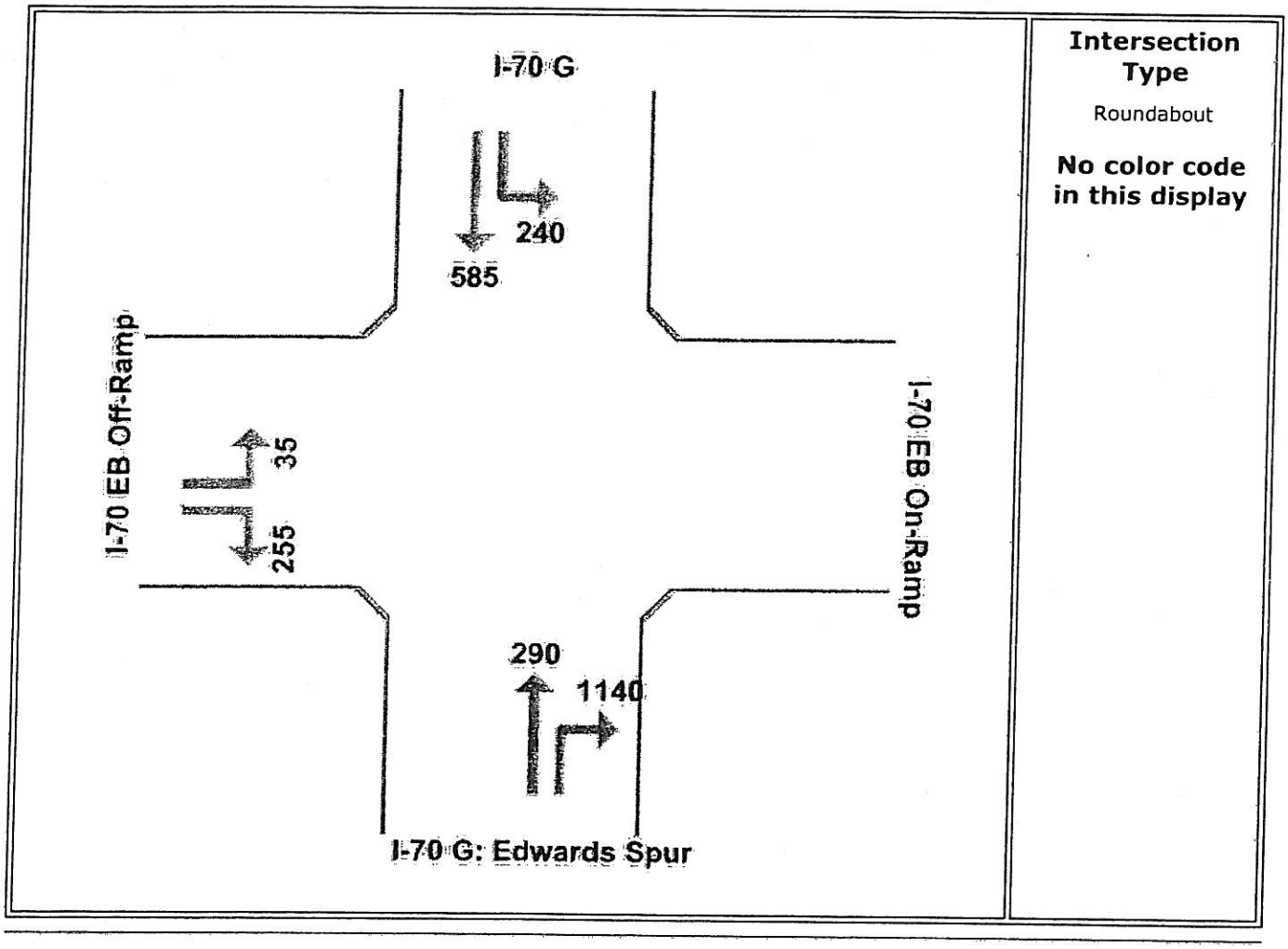

I-70 G
I-70 EB Off-Ramp
I-70 EB On-Ramp
I-70 G: Edwards Spur

Input Volumes

akcelik & associates
aaTraffic SIDRA

Total flow rates as given by the user (veh/60 min)

I-70 G: Edwards Spur Road - I-70 Eastbound Ramps



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Level of Service

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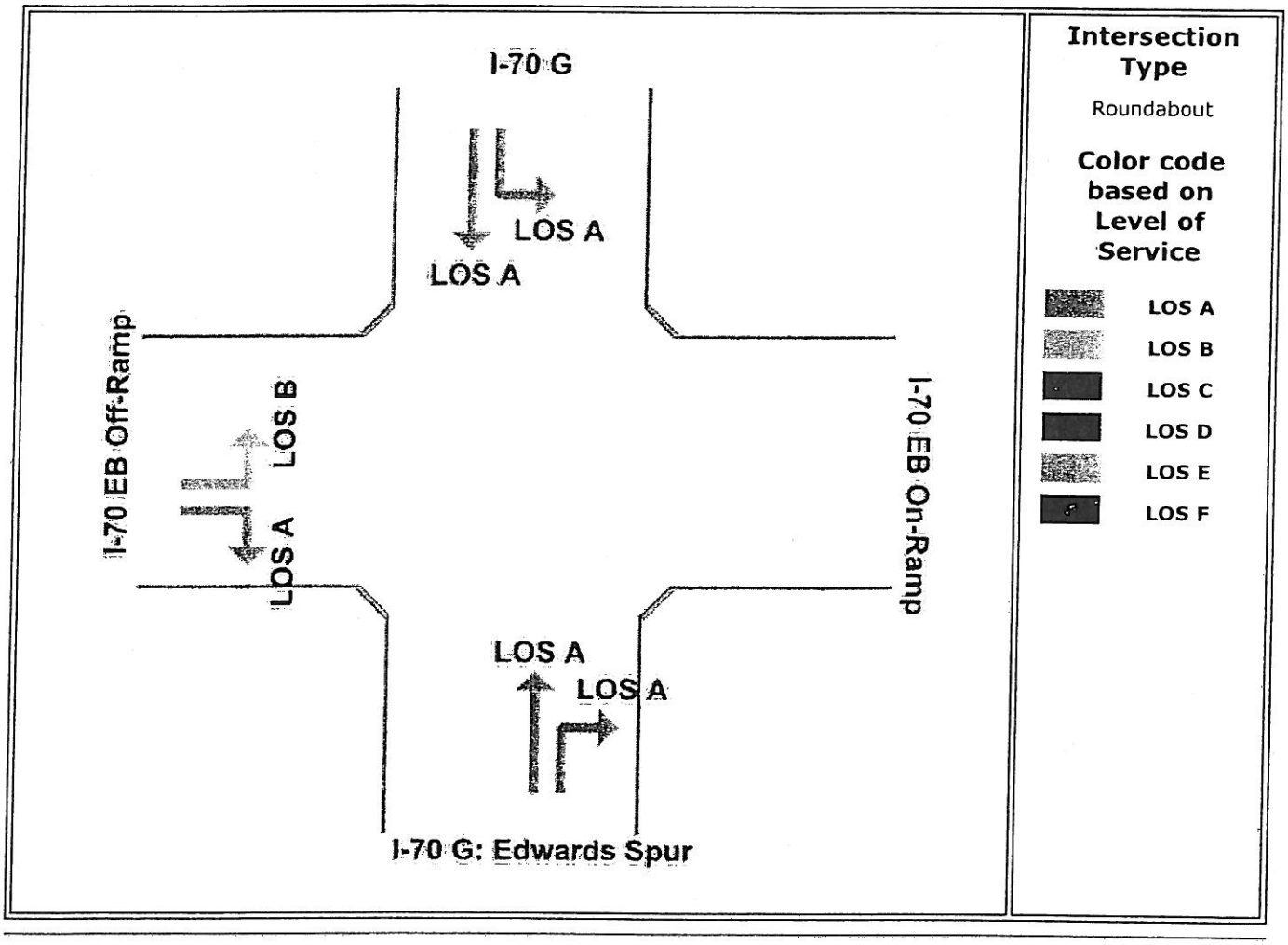
aaTraffic SIDRA

Based on Delay (HCM method)

I-70 G: Edwards Spur Road - I-70 Eastbound Ramps



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Intersection Summary

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aaTraffic SIDRA

I-70 G: Edwards Spur Road - I-70 Eastbound Ramps

Performance Measure	Vehicles	Persons
Demand Flow	3273 veh/h	4910 pers/h
Degree of Saturation	0.570	
Capacity (Total)	8452 veh/h	
95% Back of Queue (ft)	122 ft	
95% Back of Queue (veh)	4.8 veh	
Control Delay (Total)	3.11 veh-h/h	4.66 pers-h/h
Control Delay (Average)	3.4 s/veh	3.4 s/pers
Level of Service	LOS A	
Level of Service (Worst Movement)	LOS B	
Total Effective Stops	2084 veh/h	3126 pers/h
Effective Stop Rate	0.64 per veh	0.64 per pers
Travel Distance (Total)	1323.3 veh-mi/h	1985.0 pers-mi/h
Travel Distance (Average)	2135 ft	2135 ft
Travel Time (Total)	41.7 veh-h/h	62.6 pers-h/h
Travel Time (Average)	45.9 secs	45.9 secs
Travel Speed	31.7 mph	31.7 mph
Operating Cost (Total)	885 $/h	885 $/h
Fuel Consumption (Total)	42.4 ga/h	
Carbon Dioxide (Total)	401.8 kg/h	
Hydrocarbons (Total)	0.566 kg/h	
Carbon Monoxide (Total)	14.56 kg/h	
NOX (Total)	0.681 kg/h	

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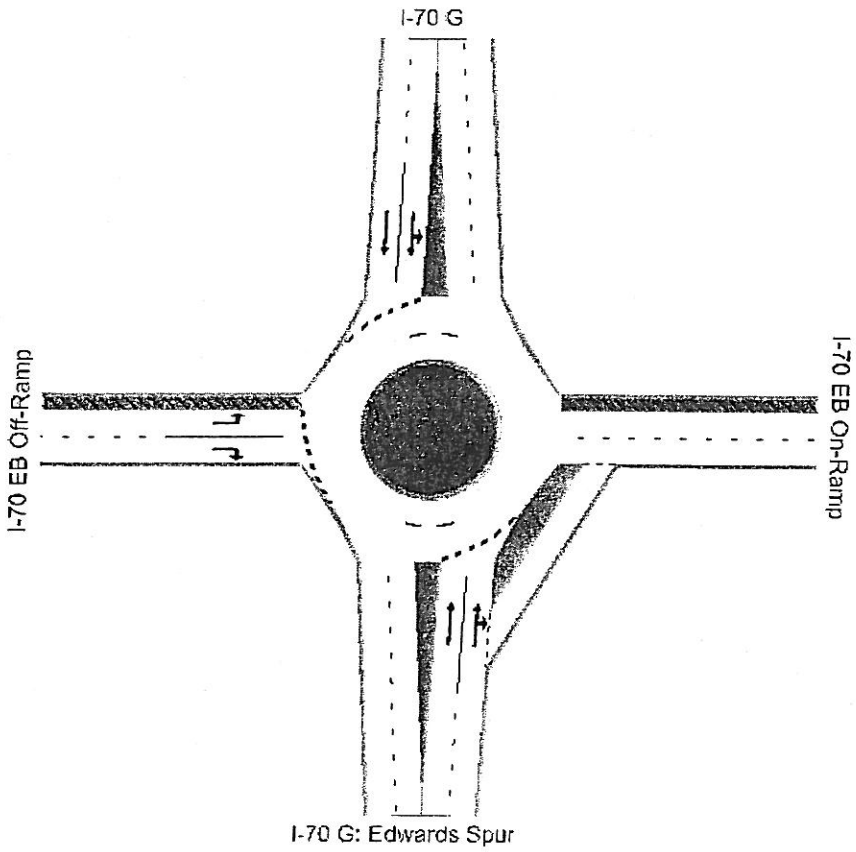
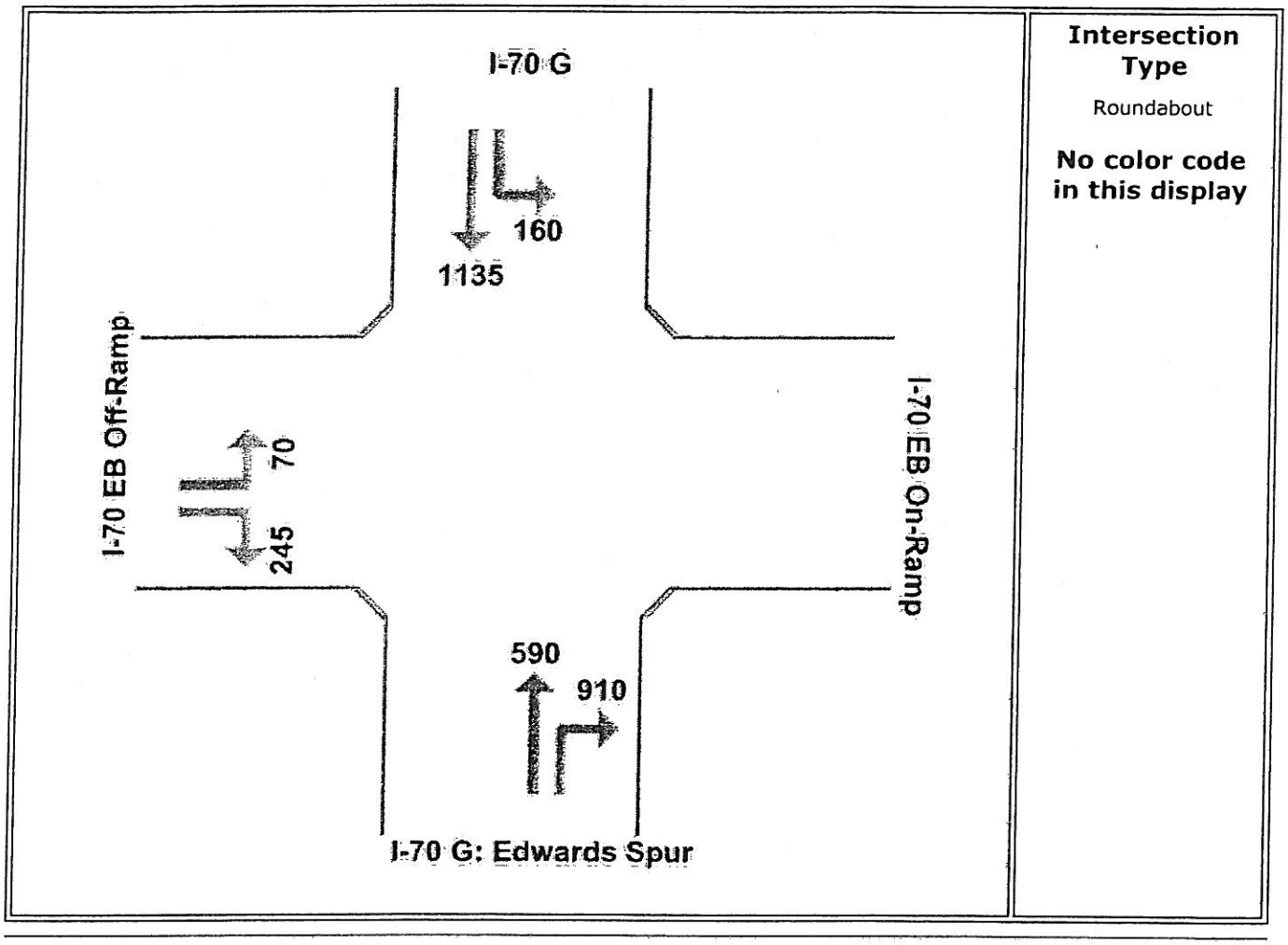

I-70 G
I-70 EB Off-Ramp
I-70 EB On-Ramp
I-70 G: Edwards Spur

Input Volumes

akcelik & associates
aaTraffic SIDRA

Total flow rates as given by the user (veh/60 min)

I-70 G: Edwards Spur Road - I-70 Eastbound Ramps



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Akcelik & Associates Pty Ltd

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Level of Service

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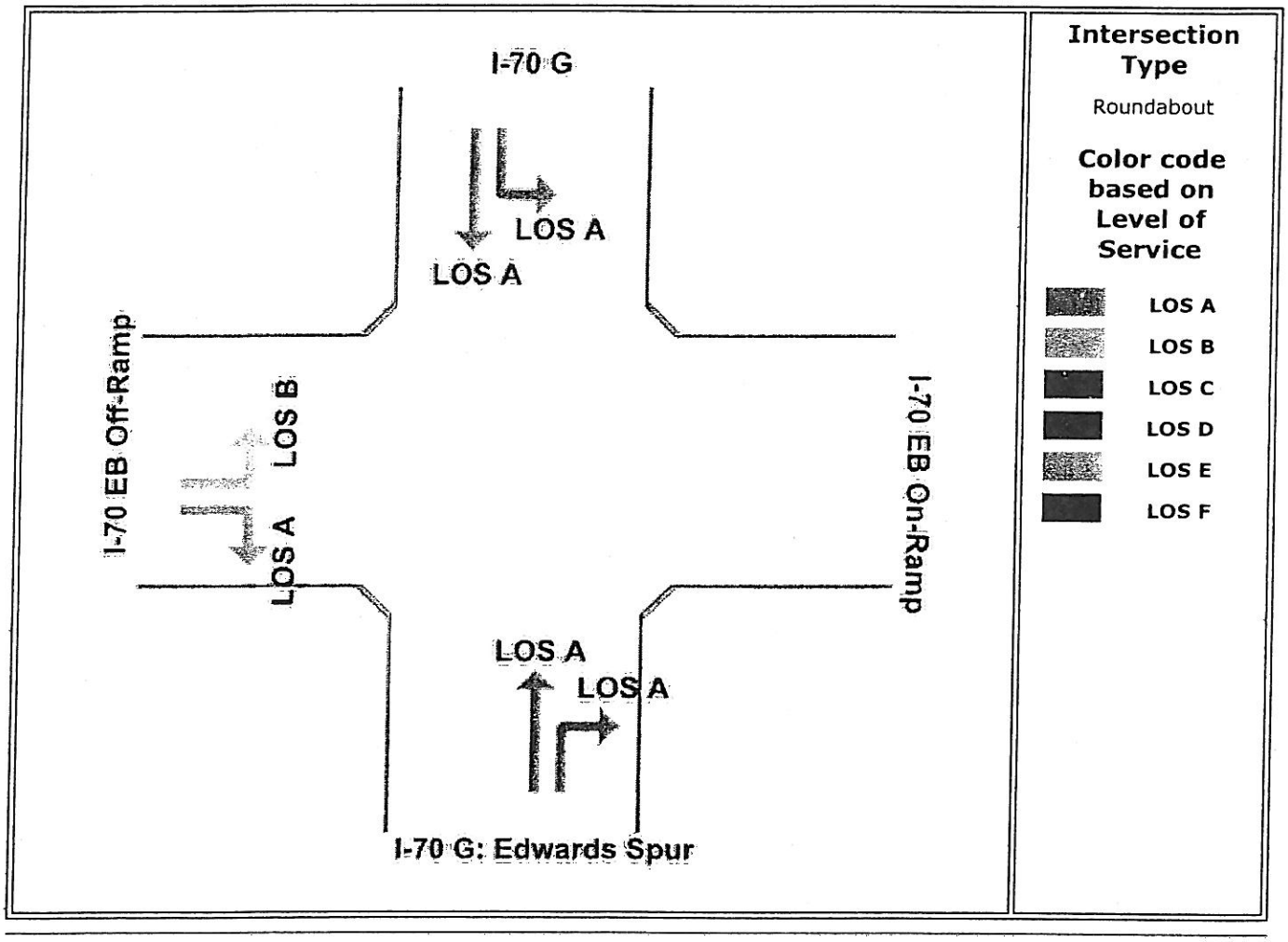
Based on Delay (HCM method)

I-70 G: Edwards Spur Road - I-70 Eastbound Ramps



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Intersection Summary

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aaTraffic SIDRA

I-70 G: Edwards Spur Road - Miller Ranch Road

Performance Measure	Vehicles	Persons
Demand Flow	2992 veh/h	4488 pers/h
Degree of Saturation	0.665	
Capacity (Total)	6700 veh/h	
95% Back of Queue (ft)	194 ft	
95% Back of Queue (veh)	7.7 veh	
Control Delay (Total)	6.45 veh-h/h	9.67 pers-h/h
Control Delay (Average)	7.8 s/veh	7.8 s/pers
Level of Service	LOS A	
Level of Service (Worst Movement)	LOS B	
Total Effective Stops	4035 veh/h	6052 pers/h
Effective Stop Rate	1.35 per veh	1.35 per pers
Travel Distance (Total)	1234.3 veh-mi/h	1851.4 pers-mi/h
Travel Distance (Average)	2178 ft	2178 ft
Travel Time (Total)	42.2 veh-h/h	63.3 pers-h/h
Travel Time (Average)	50.8 secs	50.8 secs
Travel Speed	29.3 mph	29.3 mph
Operating Cost (Total)	852 $/h	852 $/h
Fuel Consumption (Total)	41.8 ga/h	
Carbon Dioxide (Total)	395.8 kg/h	
Hydrocarbons (Total)	0.584 kg/h	
Carbon Monoxide (Total)	17.91 kg/h	
NOX (Total)	0.715 kg/h	

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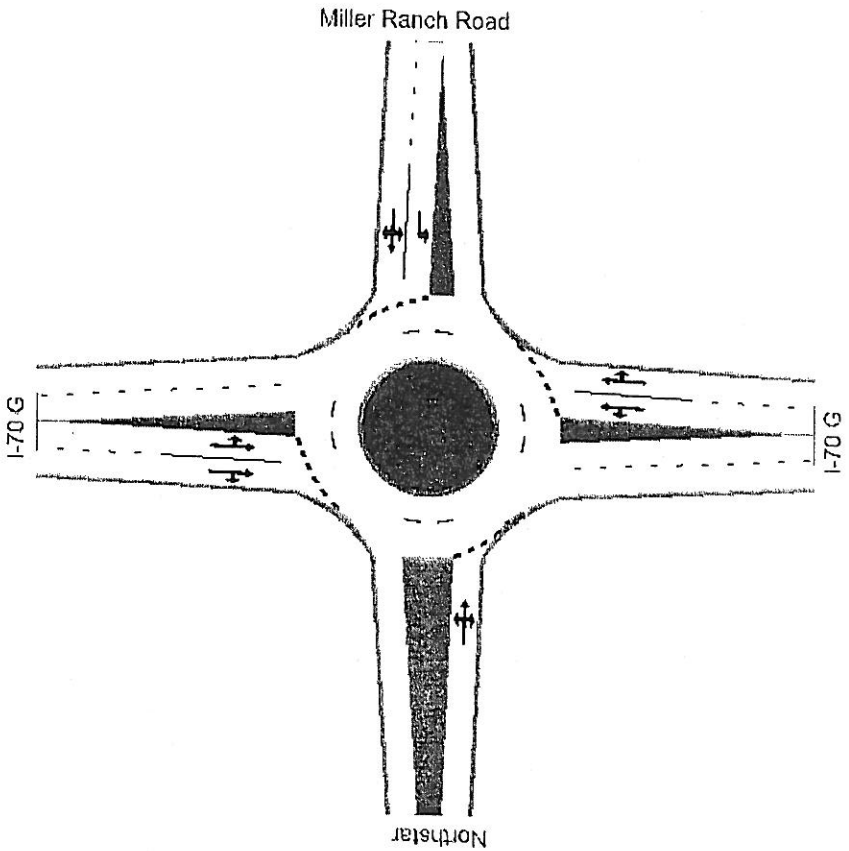
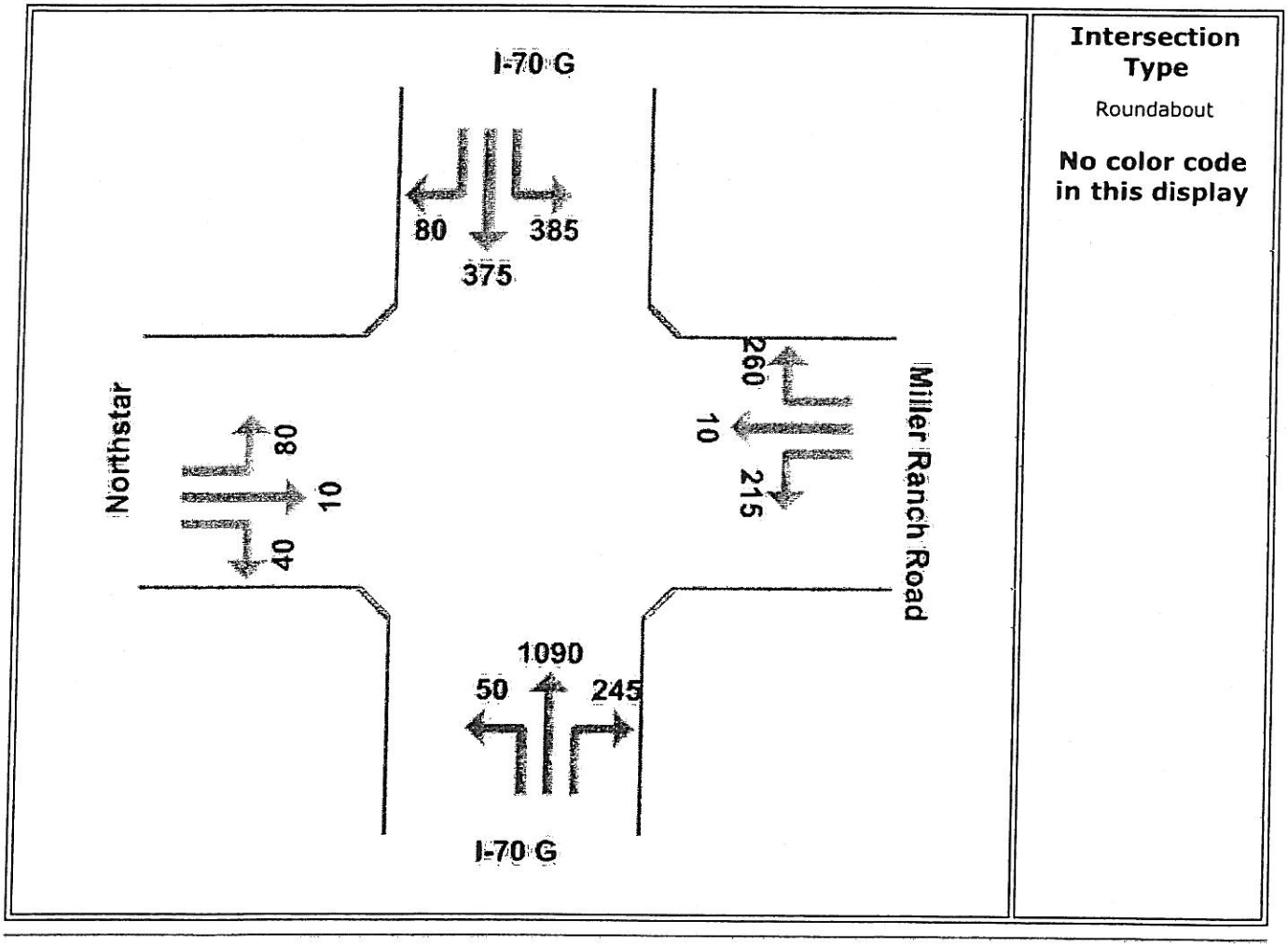

Miller Ranch Road
I-70 G
I-70 G
Northstar

Input Volumes

akcelik & associates
aaTraffic SIDRA

Total flow rates as given by the user (veh/60 min)

I-70 G: Edwards Spur Road - Miller Ranch Road



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Level of Service

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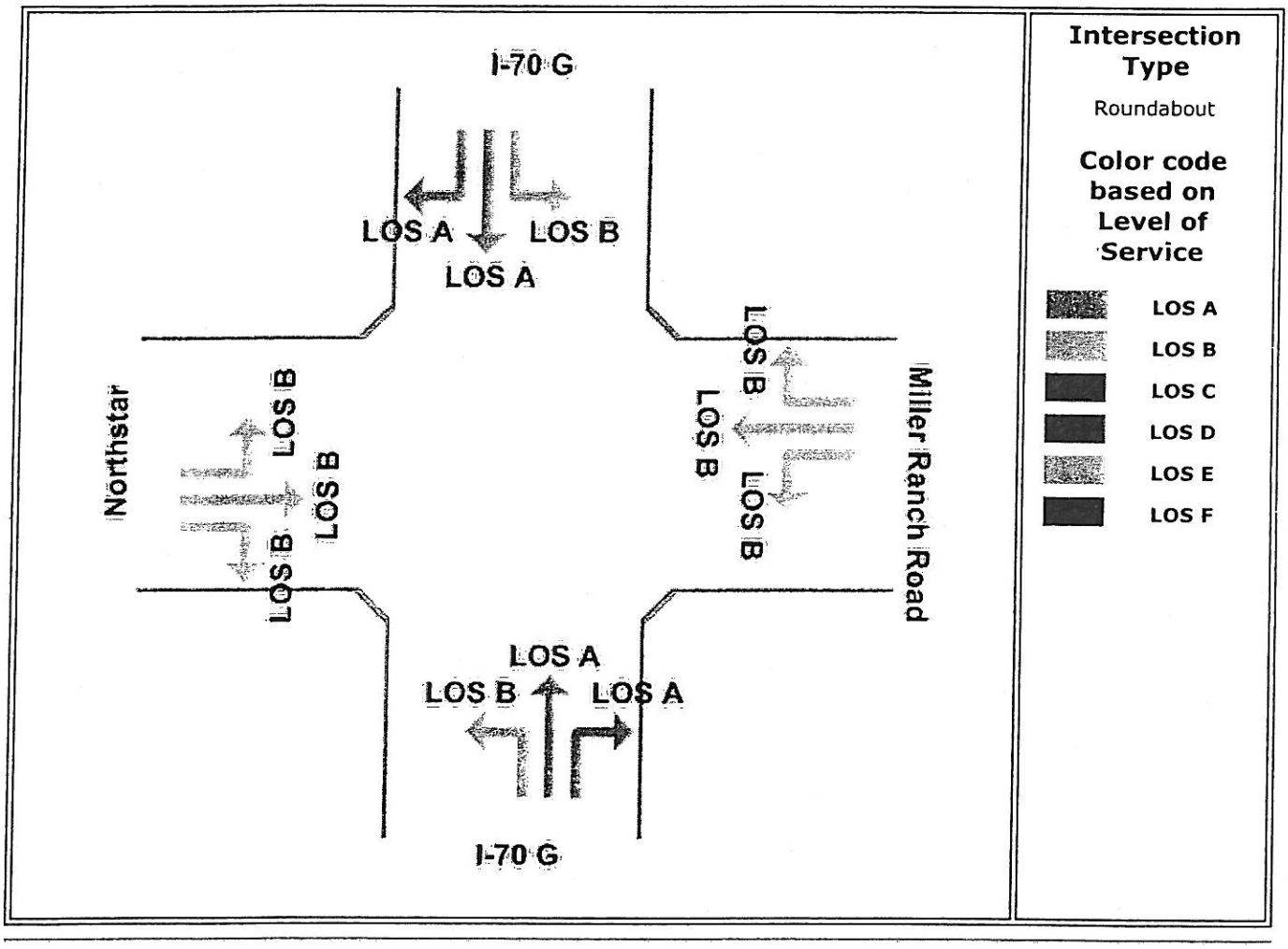
aaTraffic SIDRA

Based on Delay (HCM method)

I-70 G: Edwards Spur Road - Miller Ranch Road



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Intersection Summary

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aaTraffic SIDRA

I-70 G: Edwards Spur Road - Miller Ranch Road

Performance Measure	Vehicles	Persons
Demand Flow	3697 veh/h	5546 pers/h
Degree of Saturation	0.700	
Capacity (Total)	6417 veh/h	
95% Back of Queue (ft)	215 ft	
95% Back of Queue (veh)	8.5 veh	
Control Delay (Total)	7.84 veh-h/h	11.76 pers-h/h
Control Delay (Average)	7.6 s/veh	7.6 s/pers
Level of Service	LOS A	
Level of Service (Worst Movement)	LOS B	
Total Effective Stops	4814 veh/h	7220 pers/h
Effective Stop Rate	1.30 per veh	1.30 per pers
Travel Distance (Total)	1517.8 veh-mi/h	2276.8 pers-mi/h
Travel Distance (Average)	2168 ft	2168 ft
Travel Time (Total)	52.1 veh-h/h	78.1 pers-h/h
Travel Time (Average)	50.7 secs	50.7 secs
Travel Speed	29.2 mph	29.2 mph
Operating Cost (Total)	1047 $/h	1047 $/h
Fuel Consumption (Total)	51.4 ga/h	
Carbon Dioxide (Total)	487.1 kg/h	
Hydrocarbons (Total)	0.718 kg/h	
Carbon Monoxide (Total)	21.99 kg/h	
NOX (Total)	0.881 kg/h	

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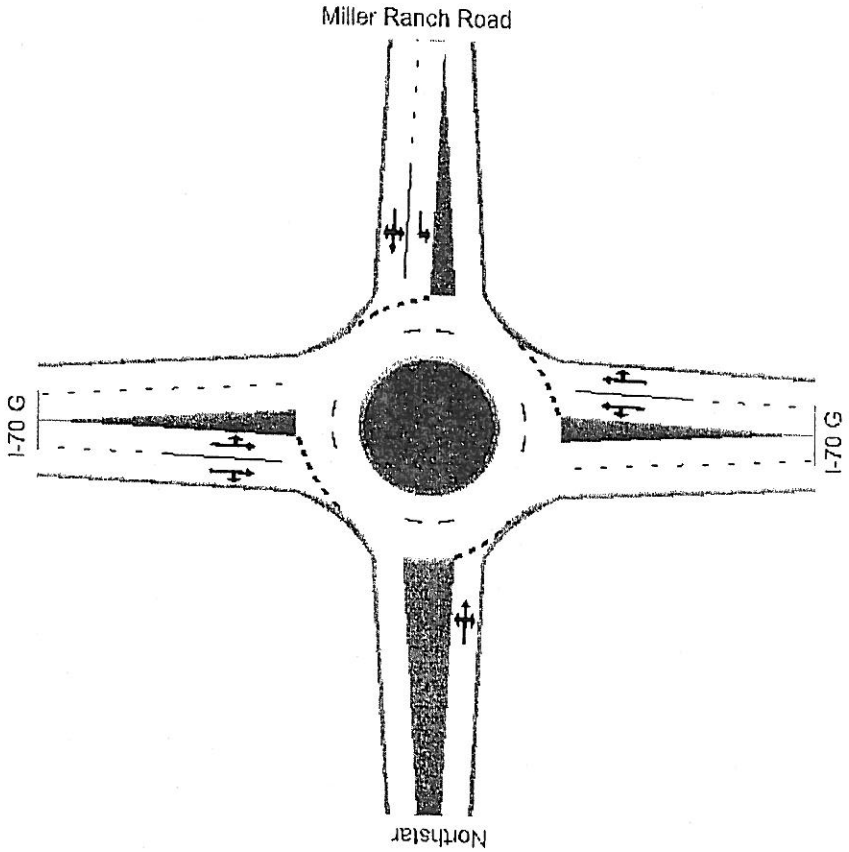
Miller Ranch Road
I-70 G
I-70 G
Northstar

Input Volumes

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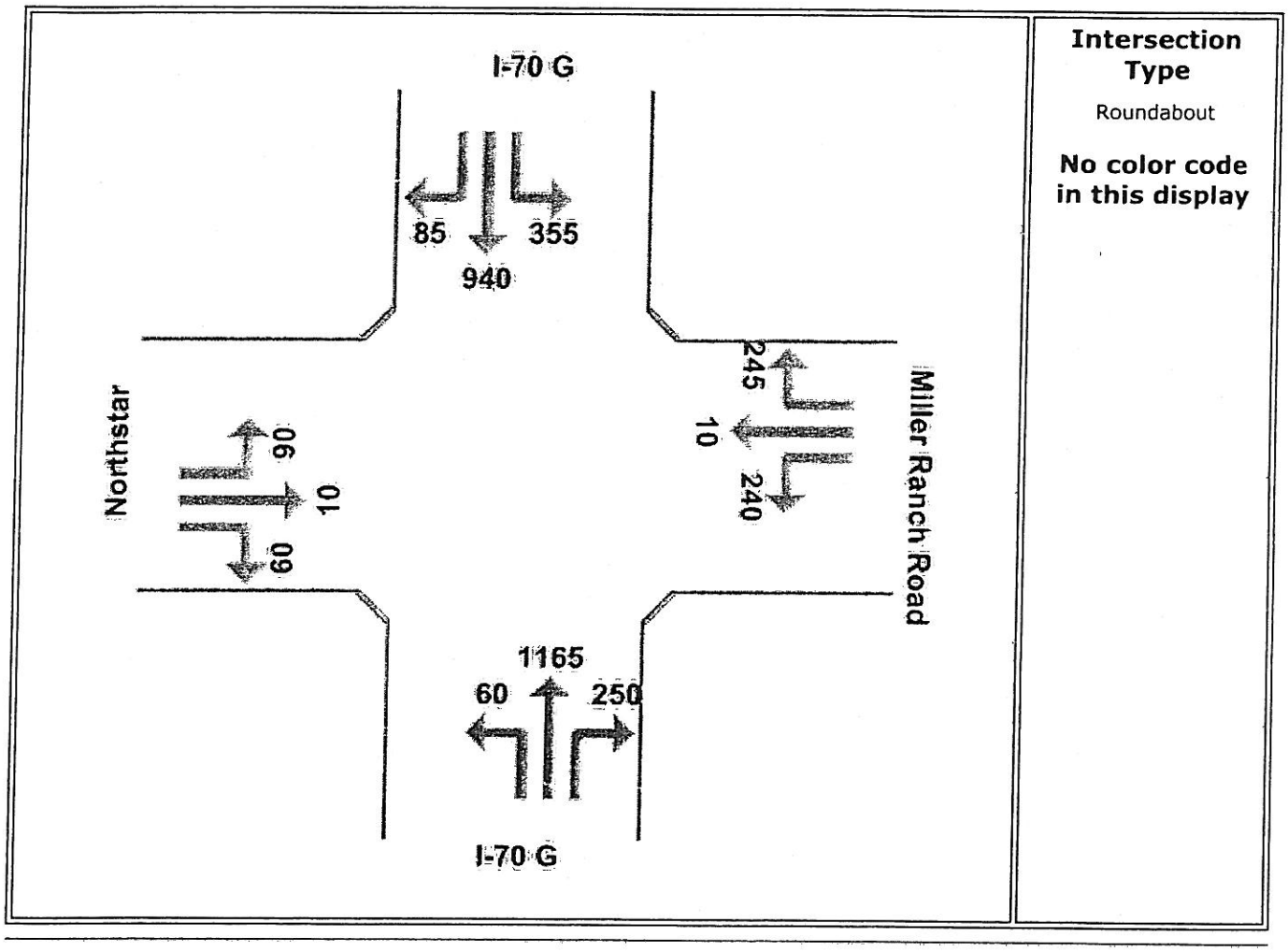
aaTraffic SIDRA

Total flow rates as given by the user (veh/60 min)

I-70 G: Edwards Spur Road - Miller Ranch Road



Intersection Type

Roundabout

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Level of Service

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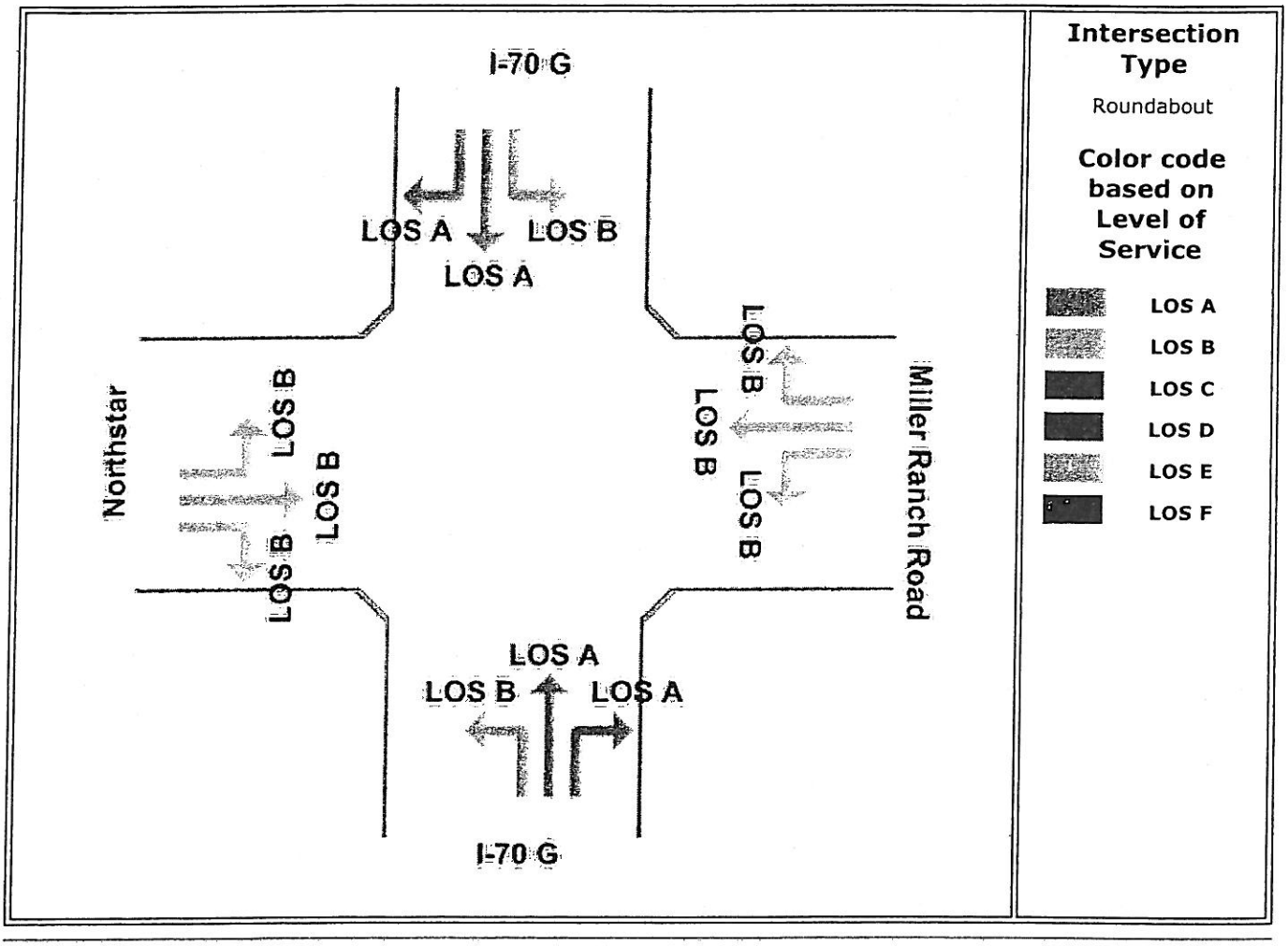
aaTraffic SIDRA

Based on Delay (HCM method)

I-70 G: Edwards Spur Road - Miller Ranch Road



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Intersection Summary

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aaTraffic SIDRA

I-70 G:Edwards Spur Road - Old Edwards Estates/Rest Area

Performance Measure	Vehicles	Persons
Demand Flow	2152 veh/h	3228 pers/h
Degree of Saturation	0.413	
Capacity (Total)	8385 veh/h	
95% Back of Queue (ft)	71 ft	
95% Back of Queue (veh)	2.8 veh	
Control Delay (Total)	3.57 veh-h/h	5.35 pers-h/h
Control Delay (Average)	6.0 s/veh	6.0 s/pers
Level of Service	LOS A	
Level of Service (Worst Movement)	LOS B	
Total Effective Stops	1866 veh/h	2799 pers/h
Effective Stop Rate	0.87 per veh	0.87 per pers
Travel Distance (Total)	940.4 veh-mi/h	1410.6 pers-mi/h
Travel Distance (Average)	2307 ft	2307 ft
Travel Time (Total)	25.3 veh-h/h	37.9 pers-h/h
Travel Time (Average)	42.3 secs	42.3 secs
Travel Speed	37.2 mph	37.2 mph
Operating Cost (Total)	554 $/h	554 $/h
Fuel Consumption (Total)	34.1 ga/h	
Carbon Dioxide (Total)	322.6 kg/h	
Hydrocarbons (Total)	0.471 kg/h	
Carbon Monoxide (Total)	15.12 kg/h	
NOX (Total)	0.698 kg/h	

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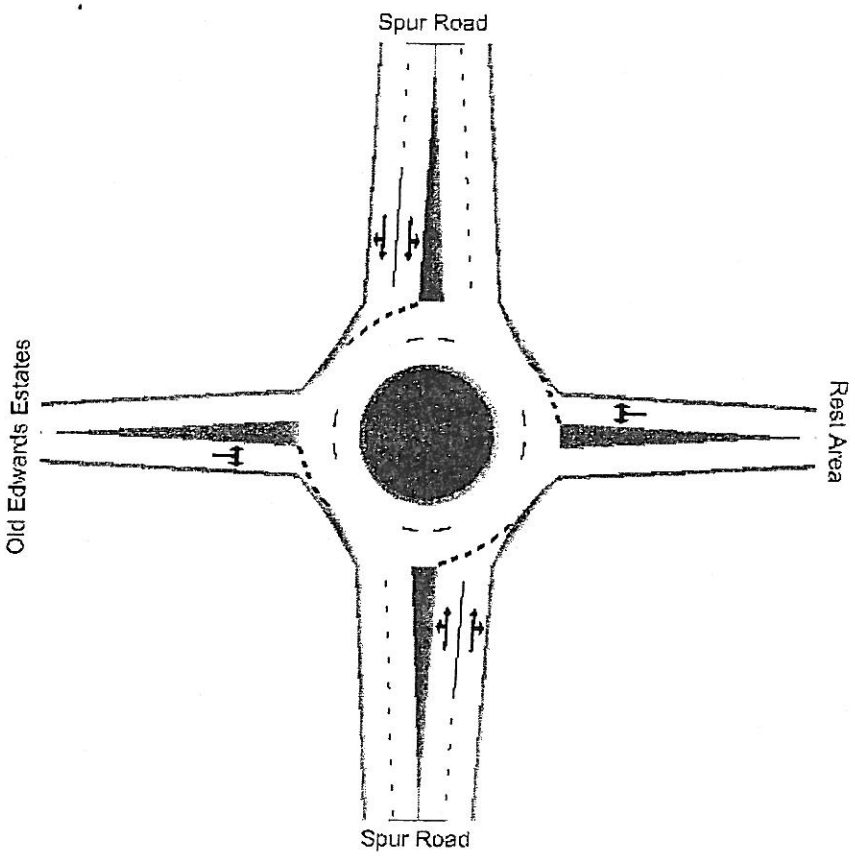
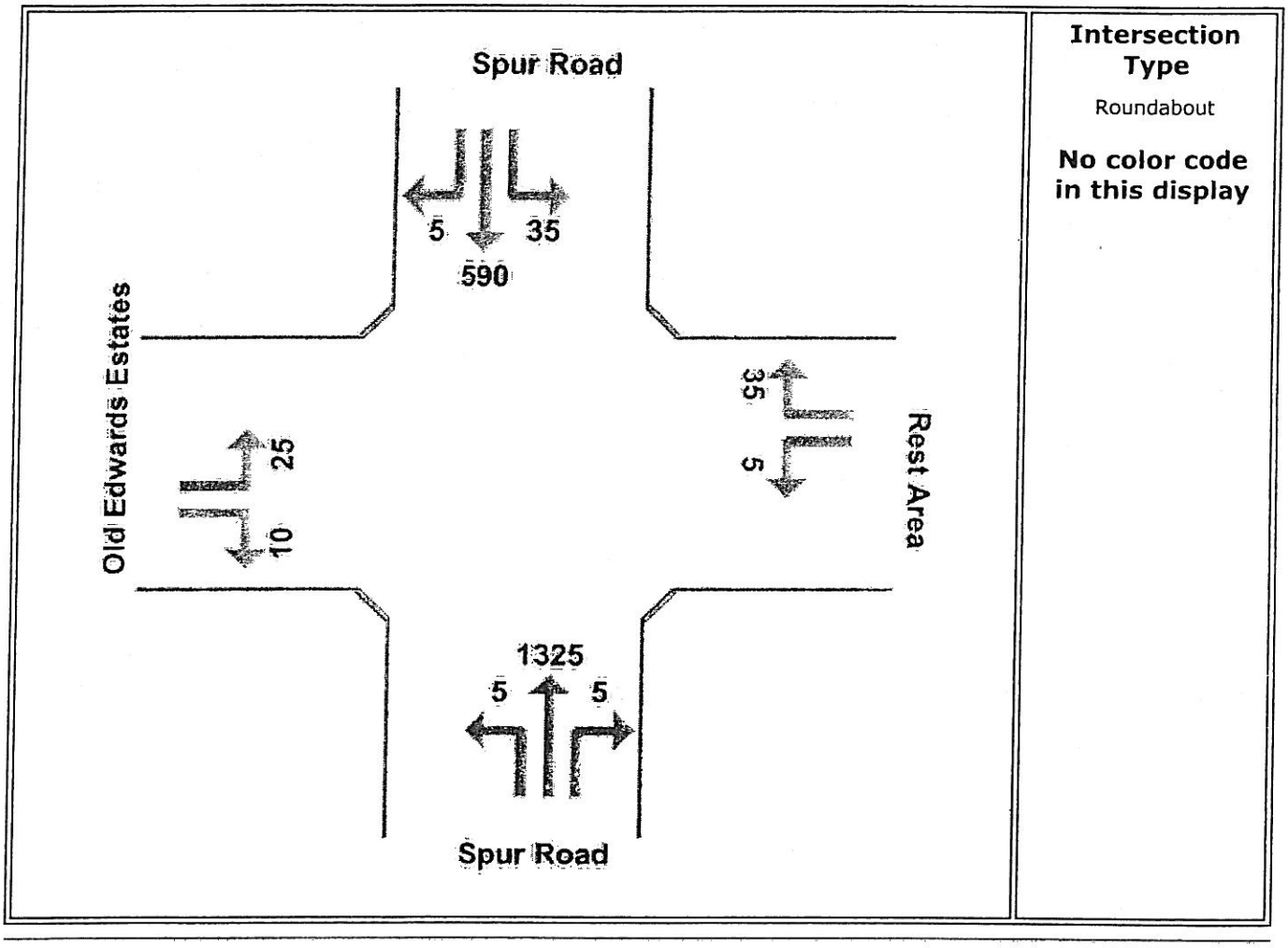

Spur Road
Old Edwards Estates
Rest Area
Spur Road

Input Volumes

akcelik & associates
aaTraffic SIDRA

Total flow rates as given by the user (veh/60 min)

I-70 G:Edwards Spur Road - Old Edwards Estates/Rest Area



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Level of Service

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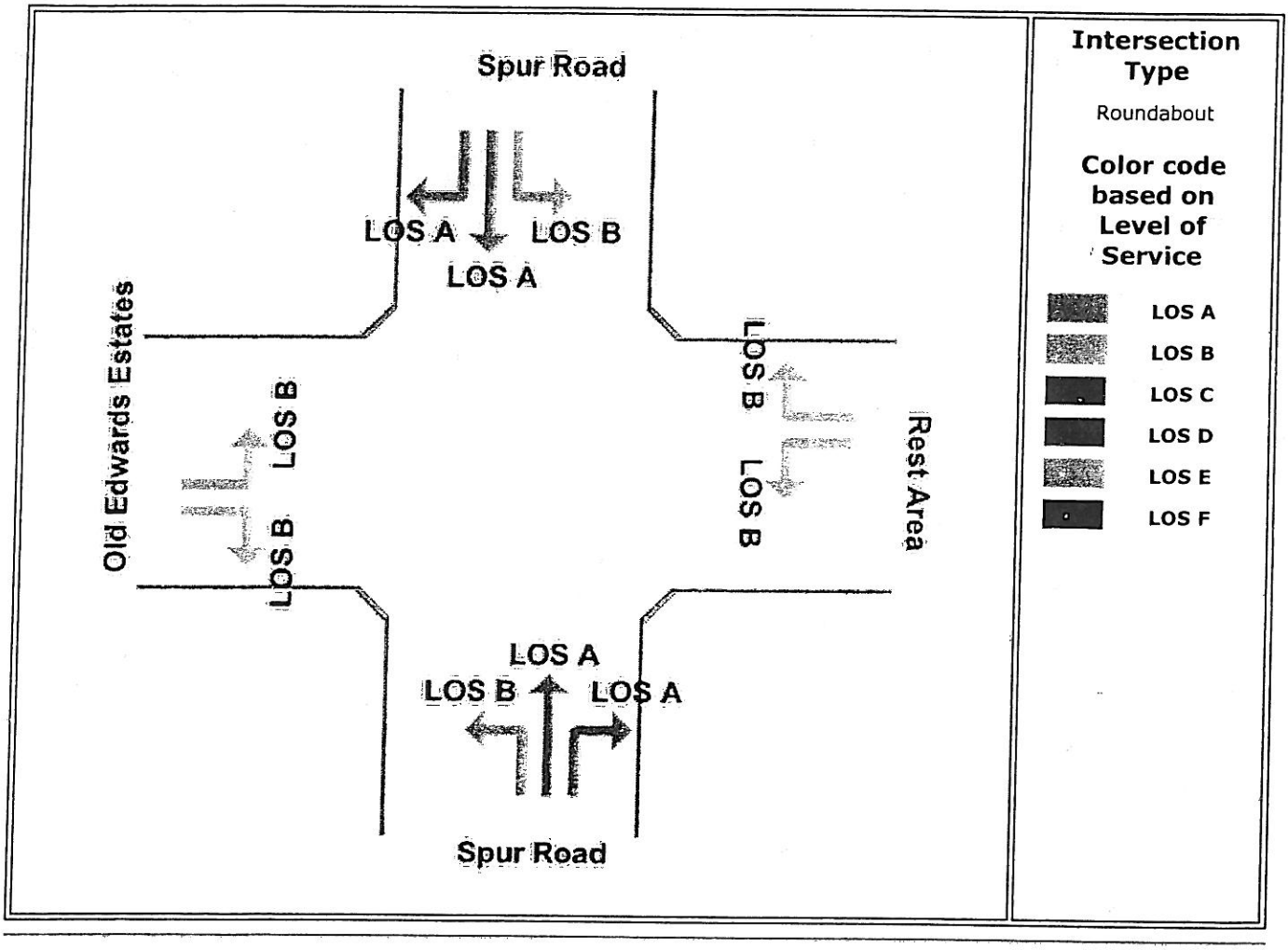
aaTraffic SIDRA

Based on Delay (HCM method)

I-70 G:Edwards Spur Road - Old Edwards Estates/Rest Area



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Intersection Summary

akcelik & associates
aaTraffic SIDRA

I-70 G:Edwards Spur Road - Old Edwards Estates/Rest Area

Performance Measure	Vehicles	Persons
Demand Flow	2893 veh/h	4340 pers/h
Degree of Saturation	0.444	
Capacity (Total)	8147 veh/h	
95% Back of Queue (ft)	79 ft	
95% Back of Queue (veh)	3.1 veh	
Control Delay (Total)	4.78 veh-h/h	7.17 pers-h/h
Control Delay (Average)	5.9 s/veh	5.9 s/pers
Level of Service	LOS A	
Level of Service (Worst Movement)	LOS B	
Total Effective Stops	2488 veh/h	3731 pers/h
Effective Stop Rate	0.86 per veh	0.86 per pers
Travel Distance (Total)	1262.7 veh-mi/h	1894.1 pers-mi/h
Travel Distance (Average)	2305 ft	2305 ft
Travel Time (Total)	33.8 veh-h/h	50.8 pers-h/h
Travel Time (Average)	42.1 secs	42.1 secs
Travel Speed	37.3 mph	37.3 mph
Operating Cost (Total)	741 $/h	741 $/h
Fuel Consumption (Total)	45.7 ga/h	
Carbon Dioxide (Total)	432.4 kg/h	
Hydrocarbons (Total)	0.630 kg/h	
Carbon Monoxide (Total)	20.15 kg/h	
NOX (Total)	0.936 kg/h	

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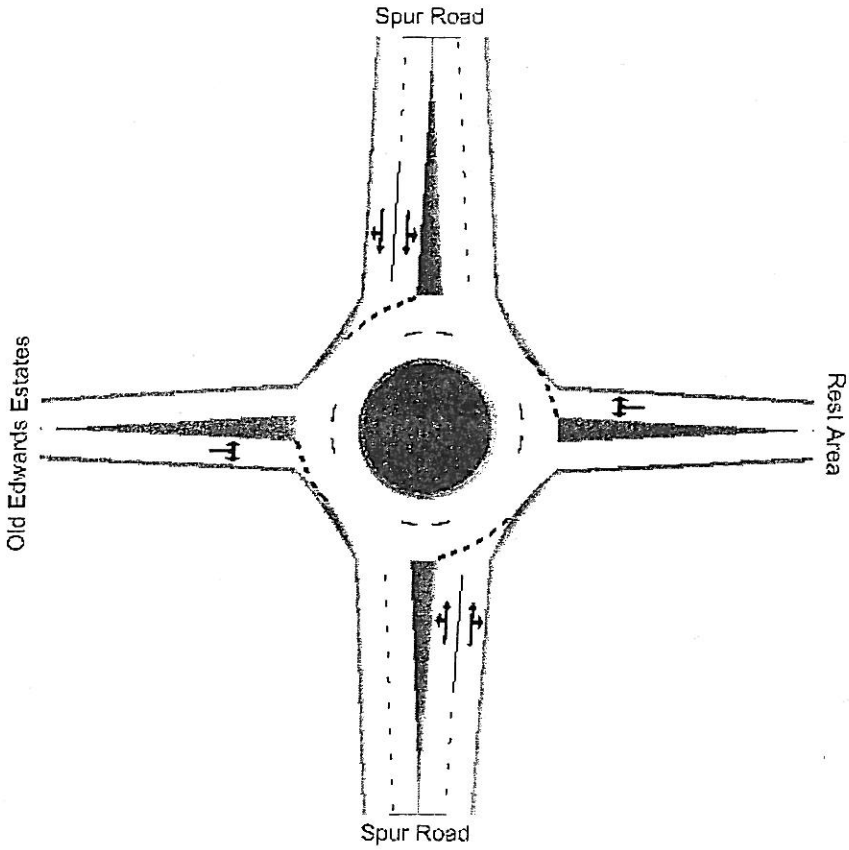
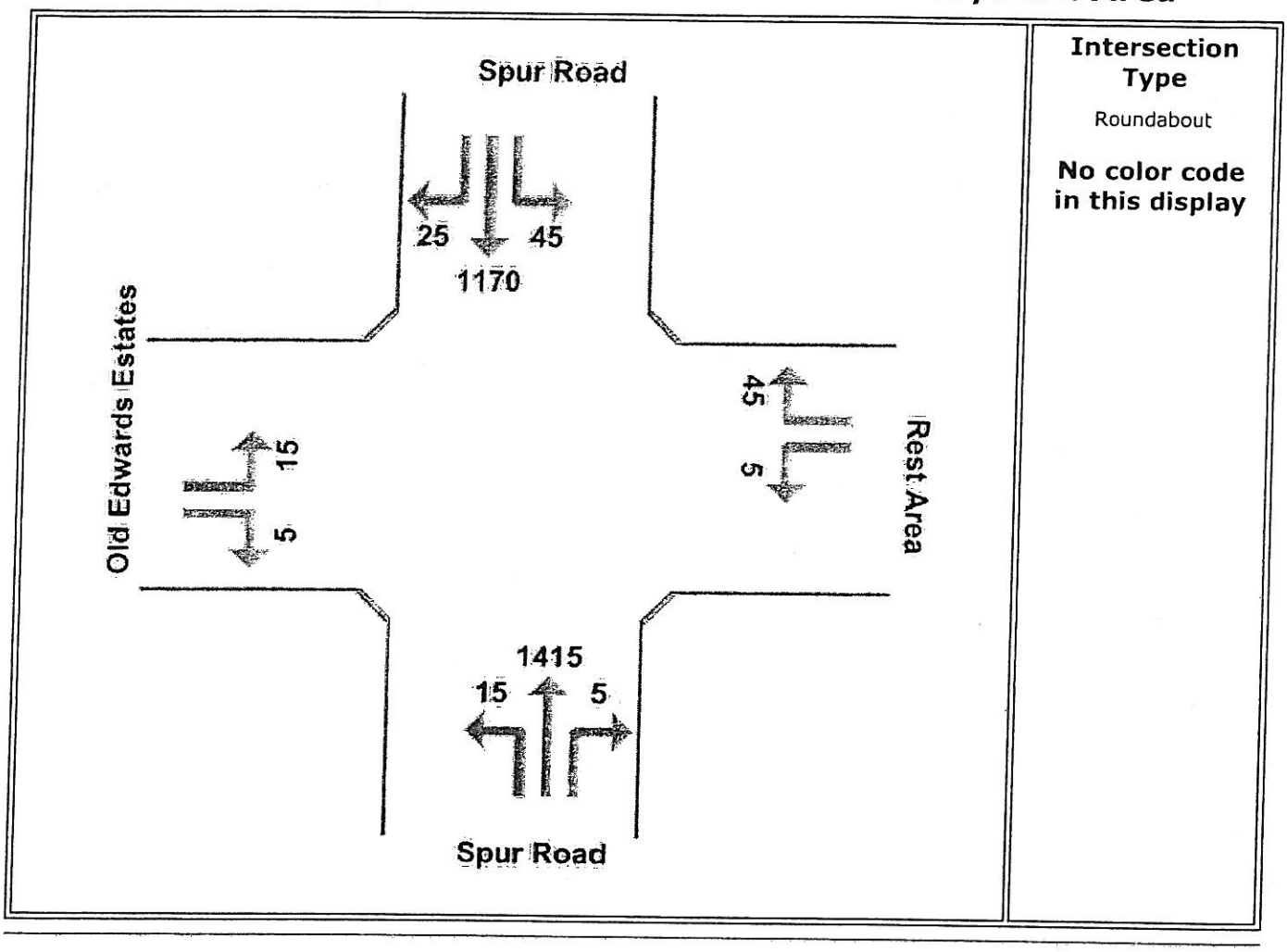

Spur Road
Old Edwards Estates
Rest Area
Spur Road

Input Volumes

akcelik & associates
aaTraffic SIDRA

Total flow rates as given by the user (veh/60 min)

I-70 G:Edwards Spur Road - Old Edwards Estates/Rest Area



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Level of Service

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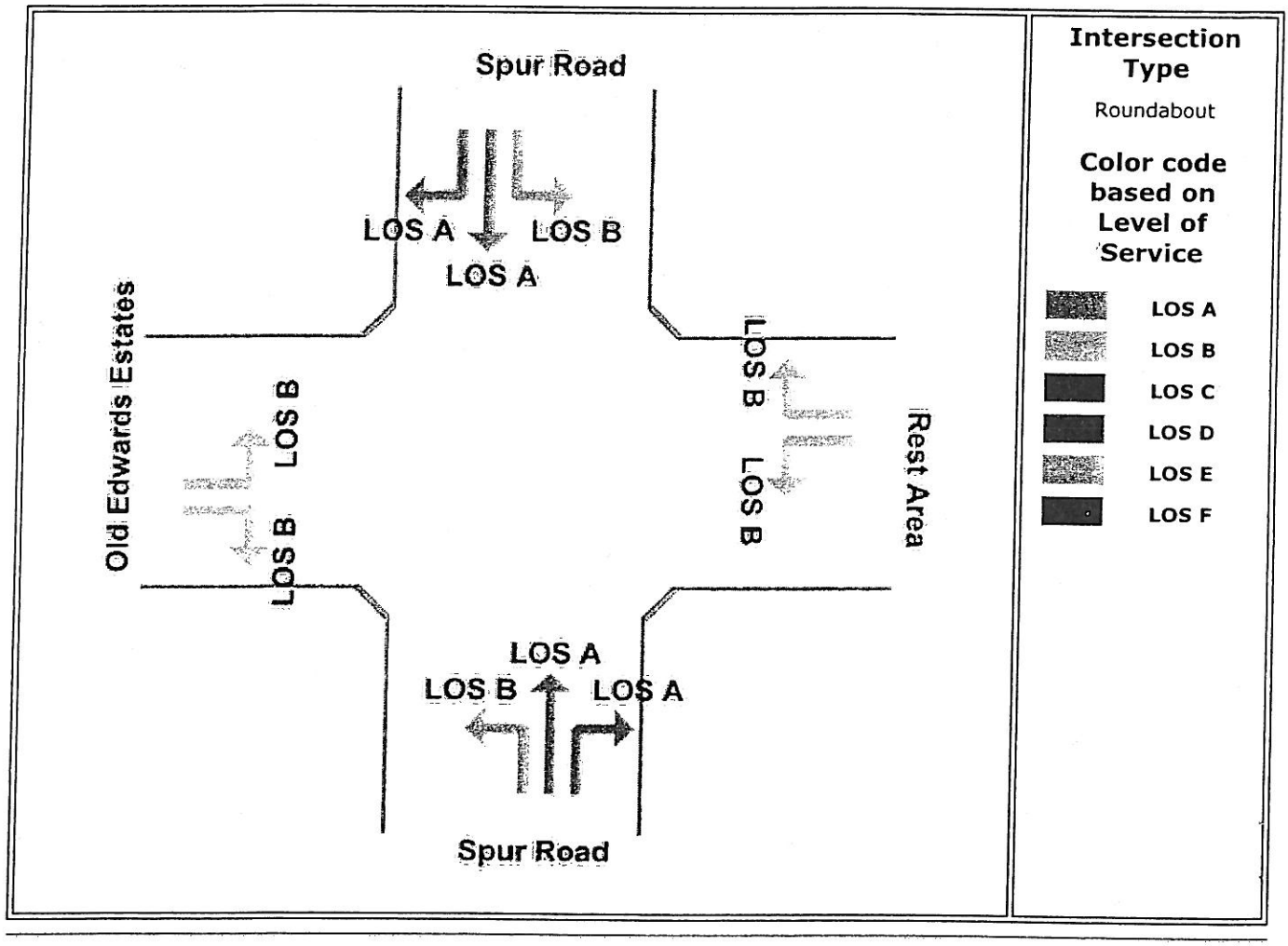
aaTraffic SIDRA

Based on Delay (HCM method)

I-70 G:Edwards Spur Road - Old Edwards Estates/Rest Area



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Intersection Summary

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aaTraffic SIDRA

I-70 G: Edwards Spur Road - State Highway 6

Performance Measure	Vehicles	Persons
Demand Flow	5097 veh/h	7646 pers/h
Degree of Saturation	0.752	
Capacity (Total)	8249 veh/h	
95% Back of Queue (ft)	157 ft	
95% Back of Queue (veh)	6.2 veh	
Control Delay (Total)	15.19 veh-h/h	22.78 pers-h/h
Control Delay (Average)	10.7 s/veh	10.7 s/pers
Level of Service	LOS B	
Level of Service (Worst Movement)	LOS C	
Total Effective Stops	9039 veh/h	13559 pers/h
Effective Stop Rate	1.77 per veh	1.77 per pers
Travel Distance (Total)	2101.9 veh-mi/h	3152.8 pers-mi/h
Travel Distance (Average)	2177 ft	2177 ft
Travel Time (Total)	75.2 veh-h/h	112.9 pers-h/h
Travel Time (Average)	53.1 secs	53.1 secs
Travel Speed	27.9 mph	27.9 mph
Operating Cost (Total)	1520 $/h	1520 $/h
Fuel Consumption (Total)	73.2 ga/h	
Carbon Dioxide (Total)	693.4 kg/h	
Hydrocarbons (Total)	1.037 kg/h	
Carbon Monoxide (Total)	32.11 kg/h	
NOX (Total)	1.256 kg/h	

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Input Volumes

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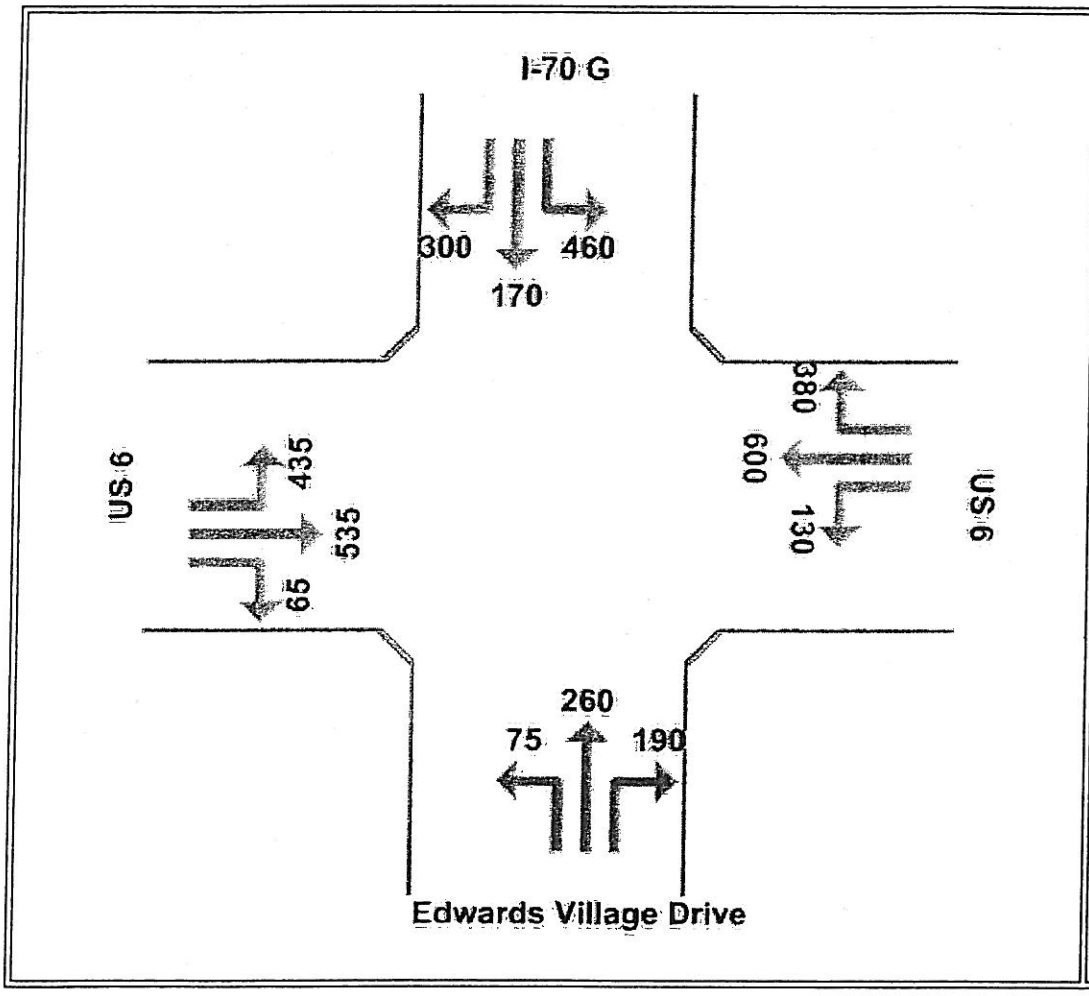
aaTraffic SIDRA

Total flow rates as given by the user (veh/60 min)

I-70 G: Edwards Spur Road - State Highway 6



Intersection Type

Roundabout

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Level of Service

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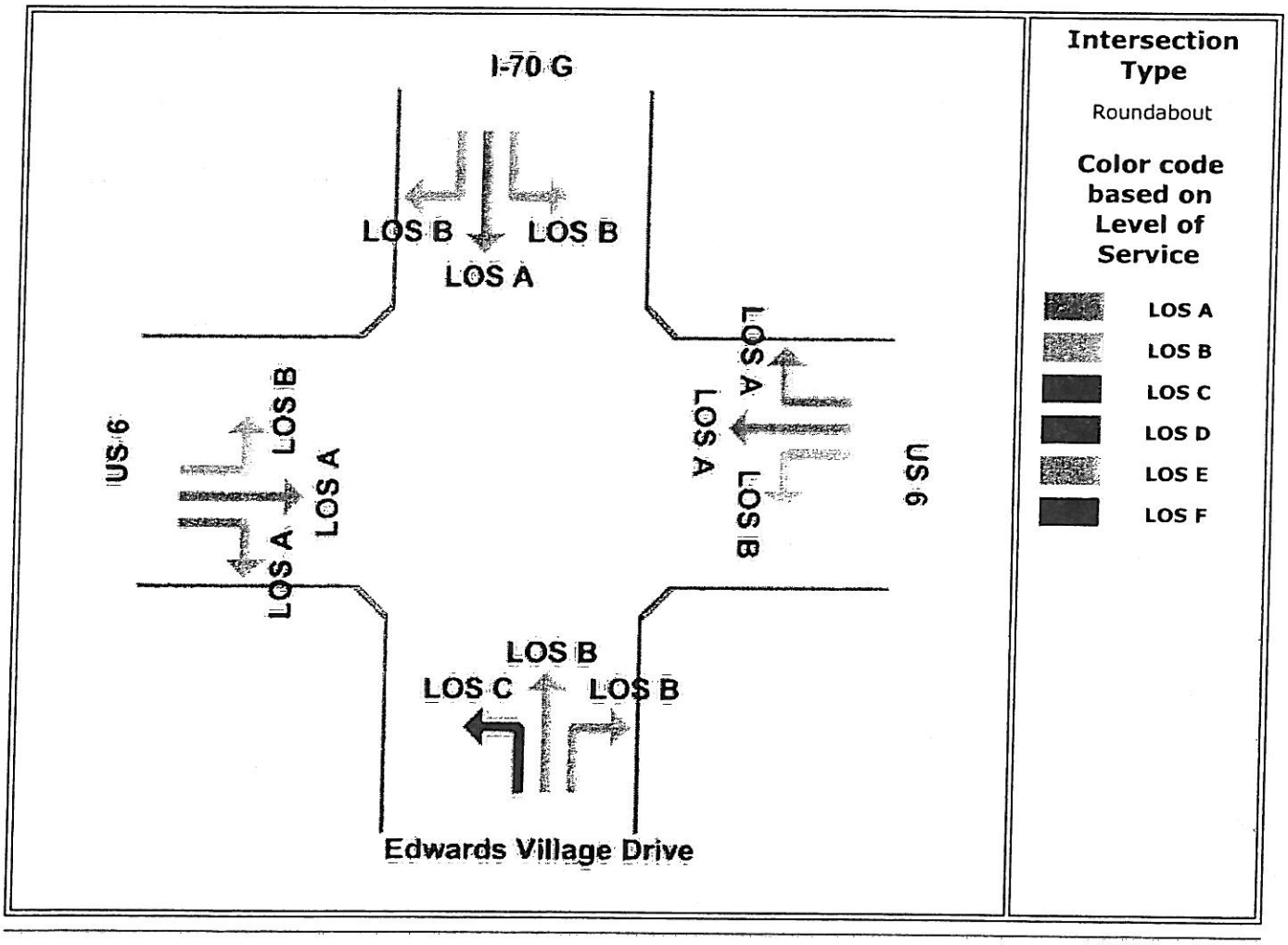
aaTraffic SIDRA

Based on Delay (HCM method)

I-70 G: Edwards Spur Road - State Highway 6



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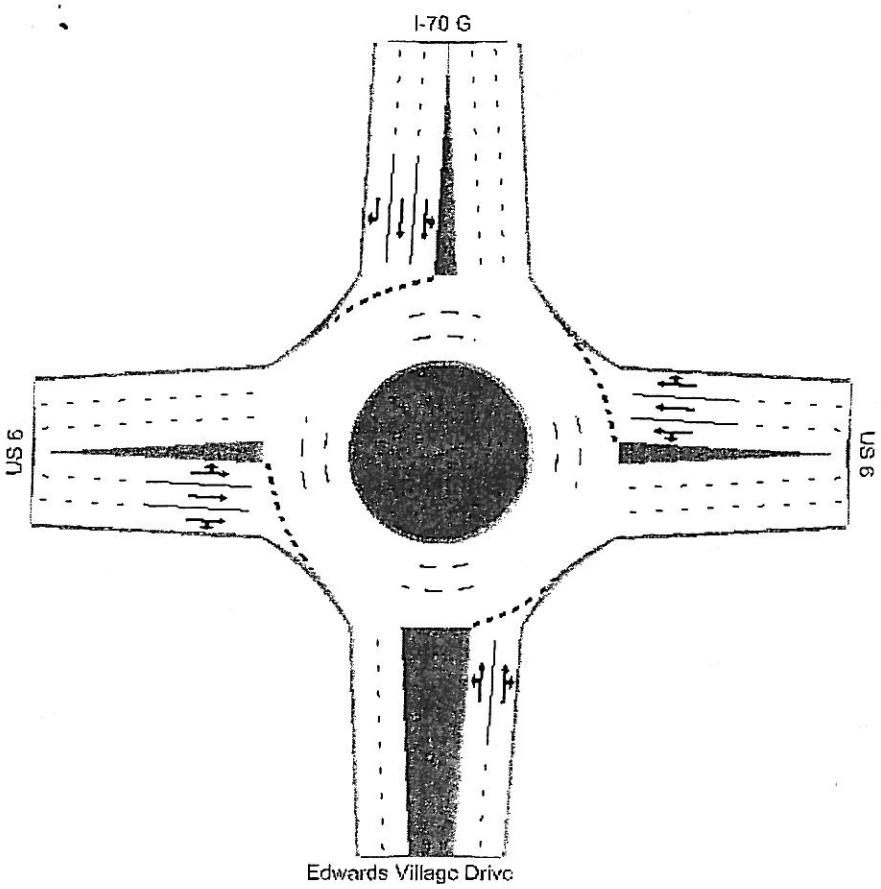
I-70 G
US 6
US 6
Edwards Village Drive

Intersection Summary

akcelik & associates
aaTraffic SIDRA

I-70 G: Edwards Spur Road - State Highway 6

Performance Measure	Vehicles	Persons
Demand Flow	3789 veh/h	5684 pers/h
Degree of Saturation	0.508	
Capacity (Total)	9628 veh/h	
95% Back of Queue (ft)	83 ft	
95% Back of Queue (veh)	3.3 veh	
Control Delay (Total)	8.46 veh-h/h	12.69 pers-h/h
Control Delay (Average)	8.0 s/veh	8.0 s/pers
Level of Service	LOS A	
Level of Service (Worst Movement)	LOS B	
Total Effective Stops	4966 veh/h	7449 pers/h
Effective Stop Rate	1.31 per veh	1.31 per pers
Travel Distance (Total)	1575.6 veh-mi/h	2363.4 pers-mi/h
Travel Distance (Average)	2196 ft	2196 ft
Travel Time (Total)	54.3 veh-h/h	81.5 pers-h/h
Travel Time (Average)	51.6 secs	51.6 secs
Travel Speed	29.0 mph	29.0 mph
Operating Cost (Total)	1104 $/h	1104 $/h
Fuel Consumption (Total)	53.5 ga/h	
Carbon Dioxide (Total)	506.6 kg/h	
Hydrocarbons (Total)	0.748 kg/h	
Carbon Monoxide (Total)	22.65 kg/h	
NOX (Total)	0.908 kg/h	

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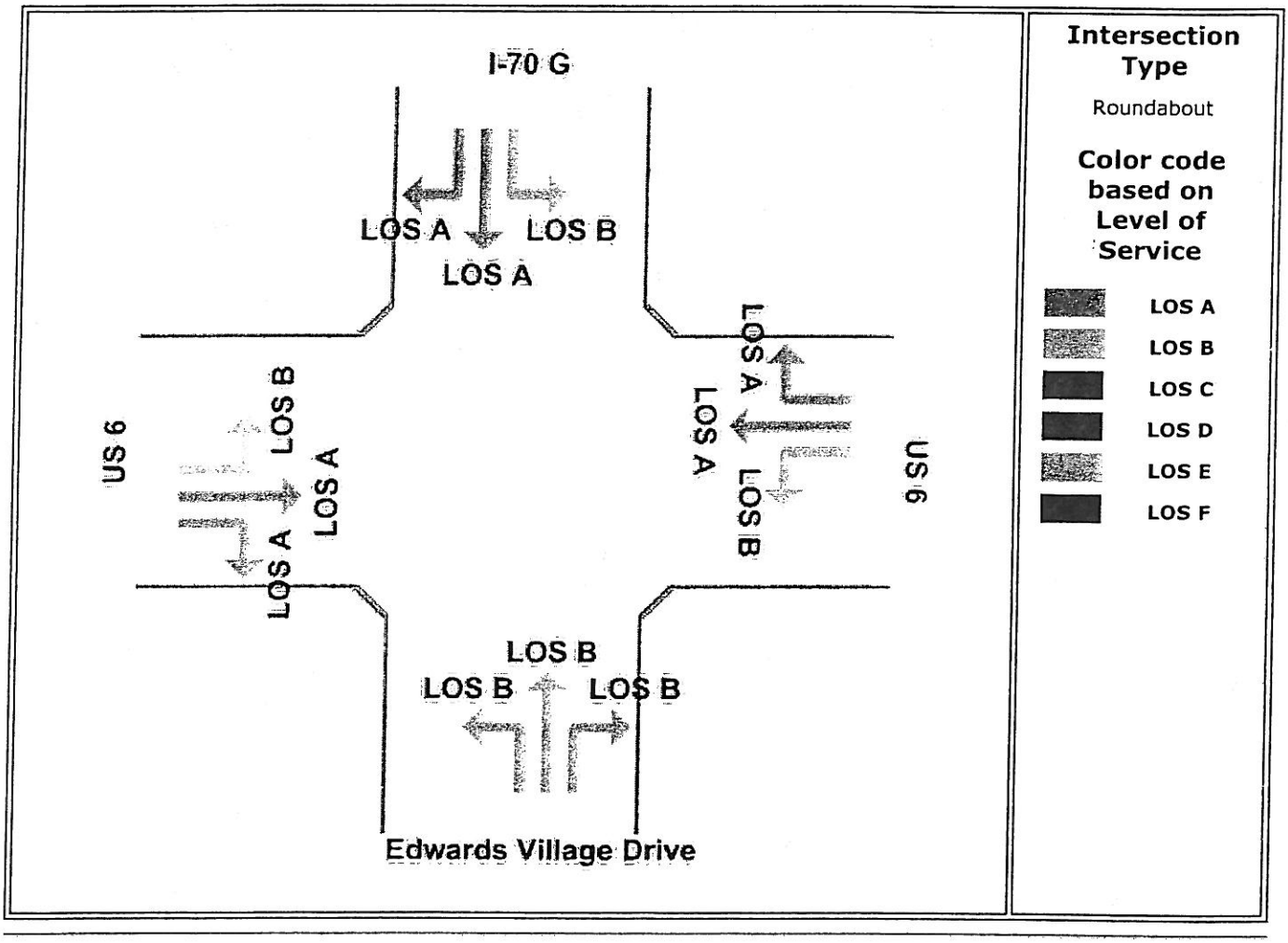
Level of Service

akcelik & associates
aaTraffic SIDRA

Based on Delay (HCM method)

I-70 G: Edwards Spur Road - State Highway 6



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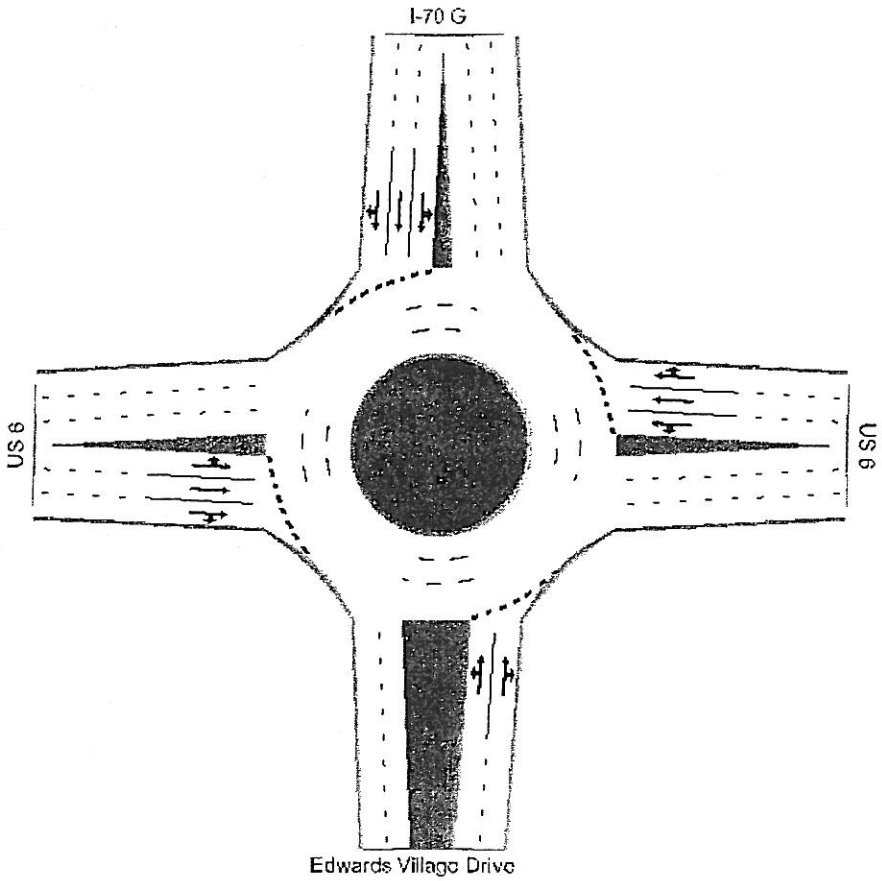
I-70 G
US 6
US 6
Edwards Village Drive

FUTURE LAND USE PROJECTIONS

III. PROJECTED FUTURE CONDITIONS

To provide a basis for roadway, access, and traffic control improvements to be incorporated into the Access Control Plan, long range future land use and traffic projections were prepared. The projected future conditions in the Edwards Area are based on build out occurring within a 20 year design horizon (approximately the year 2015).

Land Use

Future potential land uses for the Edwards Area were projected based on development plans and proposals on file with Eagle County and on data contained in the Eagle County Master Plan, 1996, which identifies future land uses as well as build-out potentials for existing developments. The available data were combined to estimate the potential additional development that would access the roadways within the study area. Table 4 summarizes the existing and projected future levels of residential development in the Edwards Area, and Table 5 summarizes the non-residential data.

Table 4.
Comparison of Existing and Future Development (Residential)

Development	Units Built	Units to be Built	Total Units
Cordillera	80	830	910
St. Clare of Assisi	0	8	8
Red Canyon Estates	13	0	13
SH 6 Residences	20	75	95
Lake Creek Apartments	250	0	250
Cordillera Valley Club	0	175	175
Eagle River Mobile Homes	380	0	380
Brett Ranch	0	206	206
B & B/Eaton	0	175	175
Edwards Village/Homestead	400	440	840
Lake Creek Developments	94	108	202
South Forty	20	15	35
The Reserve	131	0	131
Lone Pines/River Pines	37	38	75
Beals Piece	0	50	50
Arrowhead	250	107	357
Redhawk at Arrowhead	0	42	42
Old Edwards Estates	54	0	54
Singletree	449	339	788
Berry Creek Filing No. 5	0	200	200
Moonridge	60	20	80
Beard Creek Residences	6	0	6
Total	**2,244**	**2,828**	**5,072**

As shown, there are projected to be approximately 2.25 times as many residences as existing within the Edwards Area by the year 2015.

Table 5.
Comparison of Existing and Future Development (Non-Residential)

Development	Built	To be Built	Total
St. Clare of Assisi	0	92 KSF	92 KSF
Edwards Building Center	2 Acres	0	2 Acres
Rock & Materials Yard	2 Acres	0	2 Acres
Brett Ranch	0	24 KSF	24 KSF
B & B/Eaton	0	218 KSF	218 KSF
Riverwalk	130 KSF	132 KSF	262 KSF
Edwards Plaza	15 KSF	0	15 KSF
Remonov	8 KSF	167 KSF	175 KSF
Edwards Business Center	45 KSF	0	45 KSF
Northstar	0	50 KSF	50 KSF
Texaco	10 KSF	5 KSF	15 KSF
Health Center	0	108 KSF	108 KSF
Total (1)	**208 KSF**	**796 KSF**	**1,004 KSF**

By the year 2015, there is projected to be approximately 5 times more commercial development as currently exists in the Edwards Area.

Traffic

The above developments were grouped into 17 traffic analysis zones within the Edwards area, based on location and access. Figure 6 illustrates the zones used in this analysis.

The traffic generation potentials for the land uses in each zone were based primarily on available traffic studies on file with Eagle County; for those developments for which traffic studies were unavailable, trip generation estimates were prepared using rates and equations contained in TRIP GENERATION, 5th Edition, Institute of Transportation Engineers, 1991. Table 6 summarizes the resultant trip generation estimates by traffic analysis zone.

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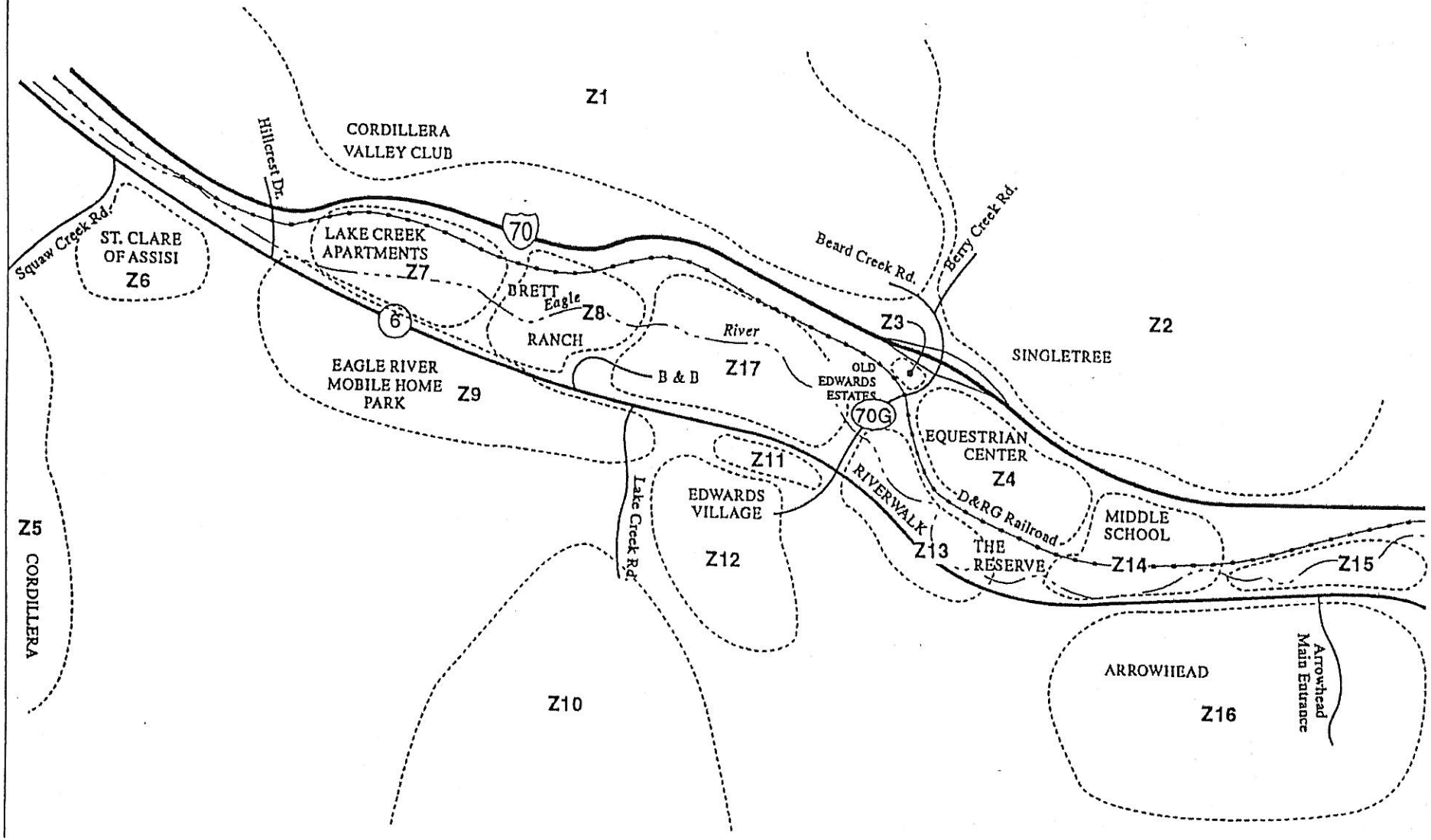

North

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Figure 6

Traffic Analysis Zones

Table 6.
Edwards Area New Development Trip Generation

Zone	Development	Quantity	Daily Trips
1.	Cordillera Valley Club	175 DU	1,480
	Health Center	108 KSF	2,130
	Moonridge	20 DU	170
		Zone 1 Subtotal	3,780
2.	Singletree	339 DU	2,880
3.	Northstar	50 KSF	2,940
4.	Berry Creek Filing No. 5	140 DU	1,190
	Texaco	5 KSF	860
	Equestrian/Rec. Center	-	50
		Zone 4 Subtotal	2,100
5.	Cordillera	830 DU	3,220
6.	St. Clare of Assisi	-	2,460
7.	Brett Ranch	156 DU	940
8.	Brett Ranch	36 DU	220
		24 KSF	480
		Zone 8 Subtotal	700
9.	SH 6 Residential	75 DU	640
	Brett Ranch	14 DU	120
		Zone 9 Subtotal	760
10.	Lake Creek Developments	108 DU	920
11.	Remonov	83.5 KSF	1,200
12.	Remonov	83.5 KSF	1,200
	Edwards Village/Homestead	440 DU	3,740
	South Forty	15 DU	130
		Zone 12 Subtotal	5,070

Table 6. (Continued)
Edwards Area New Development Trip Generation

Zone	Development	Quantity	Daily Trips
13.	River Pines	38 DU	330
	Riverwalk	132.2 KSF	5,380
		Zone 13 Subtotal	5,710
14.	Beals Piece	50 DU	430
	Berry Creek Filing No. 5	60 DU	510
		Zone 14 Subtotal	940
15.	Redhawk at Arrowhead	42 DU	250
16.	Arrowhead	107 DU	910
17.	B & B/Eaton	175 DU	1,300
		218 KSF	6,930
		Zone 17 Subtotal	7,230
		Total New Daily Trips	**42,010**

As shown, new development will have the potential to generate an additional 42,000 vehicle trips per day onto the Edwards Area roadways. These new trips were assigned to the roadway network per the following trip distribution estimates (depicted in Figure 7):

- 25 percent west- 10 percent via I-70 and 15 percent via SH 6.
- 65 percent east- 35 percent via I-70 and 30 percent via SH 6.
- 10 percent internal- these trips would remain within the Edwards Area.

These estimates are based on the existing travel pattens in the Edwards Area, and on the proximity of Avon and Vail to the east.

Figure 8 illustrates traffic assignment for the projected new development within the Edwards Area. As shown, the additional traffic on SH 6 would range from approximately 6,000 vehicles per day (VPD) west of Squaw Creek Road to nearly 16,000 VPD immediately west of the I-70 G intersection. East of this intersection, the new development would add approximately 12,000 VPD to SH 6 traffic volumes. I-70 G would experience an additional 17,500 VPD as a result of the new development.