

26. *What are the distances from the subject property access point(s), in all directions, to the nearest intersection with another public roadway along the public roadway that serves the site?
- ☐ Northerly, sight distance See Exhibit 27.1 ☐ Southerly, sight distance _____
- ☐ Easterly, sight distance _____ ☐ Westerly, sight distance _____
27. *What are the distances from the subject property access point(s), in all directions, to the nearest driveway(s) along the public roadway that serves the site?
- ☐ Northerly, sight distance See Exhibit 27.1 ☐ Southerly, sight distance _____
- ☐ Easterly, sight distance _____ ☐ Westerly, sight distance _____
28. *What are the distances from the subject property access point(s), in all directions, to the nearest blind curve(s) along the public roadway that serves the site?
- ☐ Northerly, sight distance See Exhibit 27.1 ☐ Southerly, sight distance _____
- ☐ Easterly, sight distance _____ ☐ Westerly, sight distance _____
29. *What are the distances from the subject property access point(s), in all directions, to the nearest blind hill(s) along the public roadway that serves the site?
- ☐ Northerly, sight distance See Exhibit 27.1 ☐ Southerly, sight distance _____
- ☐ Easterly, sight distance _____ ☐ Westerly, sight distance _____
30. *Identify any and all hazardous conditions with regard to the public roadway(s) that provide access to the subject property in the general area of the subject property:
- A small section of pavement on the west side adjacent to Access #1 on CR 3A was in need of repair at the time of the site visit. This may have been repaired.

If the public roadway(s) that currently serve the subject property have any hazardous conditions, then recommendations shall be made for improvements that will decrease the hazardous conditions on the public roadway(s):

- 1) Repair of the damaged pavement along the west side of the roadway within a limited section along CR 3A (southbound) adjacent to Access #1 is recommended if this has not already been repaired.
- 2) The fence along the curve of CR 3A, between Access 3 and Access 4: if this fence is within the roadway clear zone, and not a "breakaway" design per the AASHTO design guide, the fence should be relocated out of the clear zone or removed.

31. *Explain what effect the proposed use will have on the existing traffic in the neighborhood. If no change is expected, please explain why no change is expected:
- Small businesses on CR 3A will benefit from the development of the resort and the new area residents.
32. *Will the proposed use, due to the increase in traffic or the type of vehicle traffic generated by the proposed use, change the level and or type of required maintenance for the public roadway(s) that serve the site?
- ☐ Yes ☒ No
- Please explain:
- The trip generation of this development will be significantly lower than the historic commercial uses, with fewer heavy truck and bus trips generated. The vehicle trips to be generated will be predominantly passenger vehicles (cars, SUVs, pickup trucks, and motorcycles), which have significantly lower impact on roadway pavement.

If the proposed use, due to the increase in traffic or the type of vehicle traffic generated by the proposed use, changes the level and or type of required maintenance for the public roadway(s) that serve the site, then recommendations shall be made that would lessen the maintenance impact for the entity in control of maintenance of the public roadway(s):

N/A

Note: If improvements are required, it may be mandatory that such improvement be installed prior to final approval of the application.

33. *Are new roadways proposed to be constructed, on or off site, in association with the proposed project?

☐ Yes ☒ No

If yes, provide evidence that the roadways will be constructed to conform to natural contours in order to minimize soil disturbance, cut and fills, protect drainageways and not create unstable slopes.

N/A

34. Provide an analysis of the existing traffic volumes on the adjacent roadway system, including the average weekday traffic (vehicles per day) and the weekday peak-hour traffic (vehicles per hour –am and pm), showing the dates and times of traffic counts or source utilized for traffic volume counts. Determine the existing level of service or percentage of roadway capacity currently in use.

Roadway name US Highway 50 Average weekday traffic See attached Exhibit 34.1
Weekday peak-hour traffic _____ AM, _____ dates, _____ times
Weekday peak-hour traffic _____ PM, _____ dates, _____ times
Current level of service - % of roadway in use All turns LOS C or better (see attached Exhibits for LOS)

Roadway name County Road 3A Average weekday traffic See attached Exhibit 34.1
Weekday peak-hour traffic _____ AM, _____ dates, _____ times
Weekday peak-hour traffic _____ PM, _____ dates, _____ times
Current level of service - % of roadway in use All turns LOS A (see attached Exhibits for LOS)

Roadway name _____ Average weekday traffic _____
Weekday peak-hour traffic _____ AM, _____ dates, _____ times
Weekday peak-hour traffic _____ PM, _____ dates, _____ times
Current level of service - % of roadway in use _____

35. Provide an estimate of the probable traffic directional distribution from and to the subject property based on the proposed use(s) and assignment of the estimated traffic volumes to the adjacent roadway network. Estimate the future background and resulting total traffic volumes (including the estimated generated traffic due to the proposed use) on the adjacent roadway system for a twenty (20) year design period, showing volumes for both left and right turn movements as well as through traffic.

Exhibit 35.1 (attached) shows the directional-distribution estimate of 90% to/from the east of CR 3A on US 50, 9% to/from the west of CR 3A on US 50, and 1% to/from the south towards Royal Gorge Park. Exhibit 35.2 (attached) presents the projected site-generated traffic volumes. Exhibit 35.3 (attached) shows the resulting total traffic volumes. Long-term 2044 background traffic volumes are attached in Exhibit 35.4, while long-term total 2044 volumes (2044 background + site) are shown in Exhibit 35.5).

36. Determine the projected future levels of service or percentage of roadway capacity to be in use at the subject property's access points and key adjacent intersections. Provide recommendations for street and access improvements if any portions of the roadways do not have the capacity to accept the additional estimated traffic volumes. All necessary improvements will be required to be designed, completed and accepted by the County prior to any final action regarding the application.

All individual turning movements and approaches are projected to operate at LOS C or better through the 20-year horizon at all access intersections with CR 3A and US 50. Based on projected site-generated traffic volumes and CDOT NR-B turn-lane design criteria, auxiliary left- and right-turn deceleration lanes are not required at any access point. See attached Exhibits for LOS summary.

37. Please provide any additional information considered by the Certifying Engineer to be pertinent to the roadway impact in association with the proposed project:

The access-point intersections should be stop-sign-controlled. If stop signs are not already installed, they should be added. Some may require relocation and resetting of the signposts. LSC recommends the open-access frontage previously used for the former tourist business north of Access 3 be physically closed off and the roadway striping should be modified to close any gaps in the centerline or edge stripes. LSC recommends modification of Access 3 to limit the access opening to about 30 to 40 feet wide (exclusive of radii), at a location that maintains good sight distance in both directions, and with an alignment perpendicular to CR 3A for at least 50 feet back from the end of the radii. Other than this recommended, defined access opening, the remaining paved access frontage previously used for the former tourist businesses should be physically closed off and the roadway striping should be modified to close any gaps in the centerline or edge stripes. Closure of the previously used, wide access openings will allow significant land area to be utilized for other purposes. Potentially, a right-in-only access could be considered and some of the existing pavement could be repurposed as a southbound right-turn lane, even though not required for the turning volume. Please refer to Exhibits 37.1 and 37.2. The east access - no 5 should be modified as shown in Exhibits 37.1.

I hereby certify that the foregoing information was prepared by myself or under my direct supervision and is true and correct to the best of my knowledge and belief.



Jeffrey C. Hodsdon
Colorado Licensed Professional Engineer

Date

4/30/25

Seal

If not completed by an Engineer, then the following acknowledgement shall be signed by the applicant and/or owner.

By signing this Application, the Applicant, or the agent/representative acting with due authorization on behalf of the Applicant, hereby certifies that all information contained in the application and any attachments to the Application, is true and correct to the best of Applicant's knowledge and belief.

Applicant understands that any required private or public improvements imposed as a contingency for approval of the application may be required as a part of the approval process.

Fremont County hereby advises Applicant that if any material information contained herein is determined to be misleading, inaccurate or false, the Board of Commissioners may take any and all reasonable and appropriate steps to declare actions of the Board regarding the Application to be null and void.

Signing this Application is a declaration by the Applicant to conform to all plans, drawings, and commitments submitted with or contained within this Application, provided that the same is in conformance with the Fremont County Zoning Resolution.

Applicant Printed Name

Signature

Date

Owner Printed Name

Signature

Date

Exhibits



Exhibit 5.1

Trip Generation Estimate

Royal Gorge Ranch and Resort

ITE Land Use		Value	Units ¹	Trip Generation Rates ²						Trips Generated					
Code	Description			Average Weekday	A.M. Peak	Out	In	P.M. Peak	Out	Average Weekday	A.M. Peak	Out	In	P.M. Peak	Out
260	Recreational Homes	138	DU	3.47	0.13	0.09	0.11	0.17	0.17	479	18	14	16	23	23
¹ DU = dwelling units															
² Source: Trip Generation, 11th Edition (2021) by the Institute of Transportation Engineers (ITE)															
Trip generation rates are in terms of trips per day per dwelling unit, or trips per hour per dwelling unit (for the peak hours)															
Trips generated are in terms of trips per day, or trips per hour (for the peak hours)															
Updated: 03/11/2024															

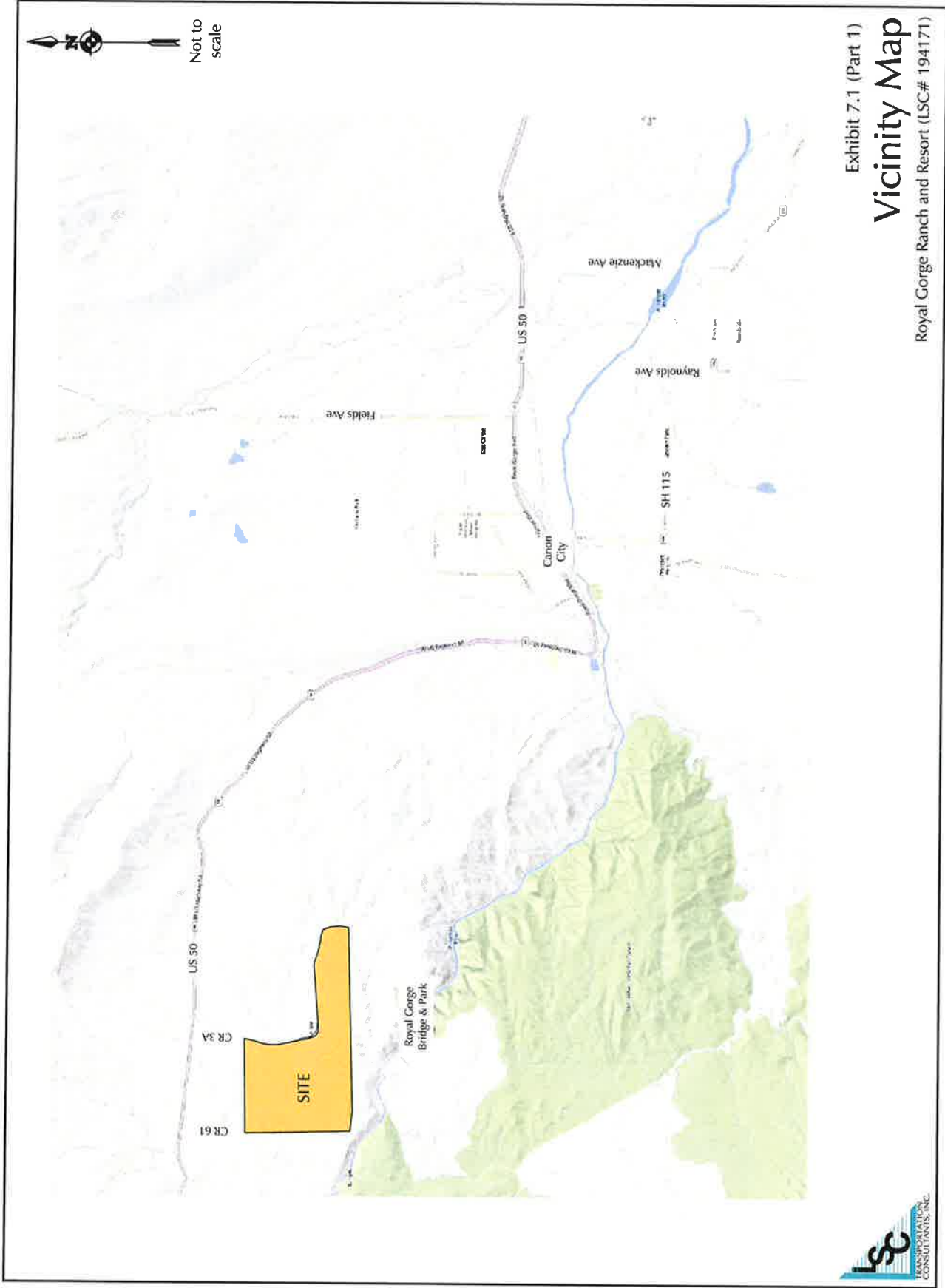


Exhibit 7.1 (Part 1)

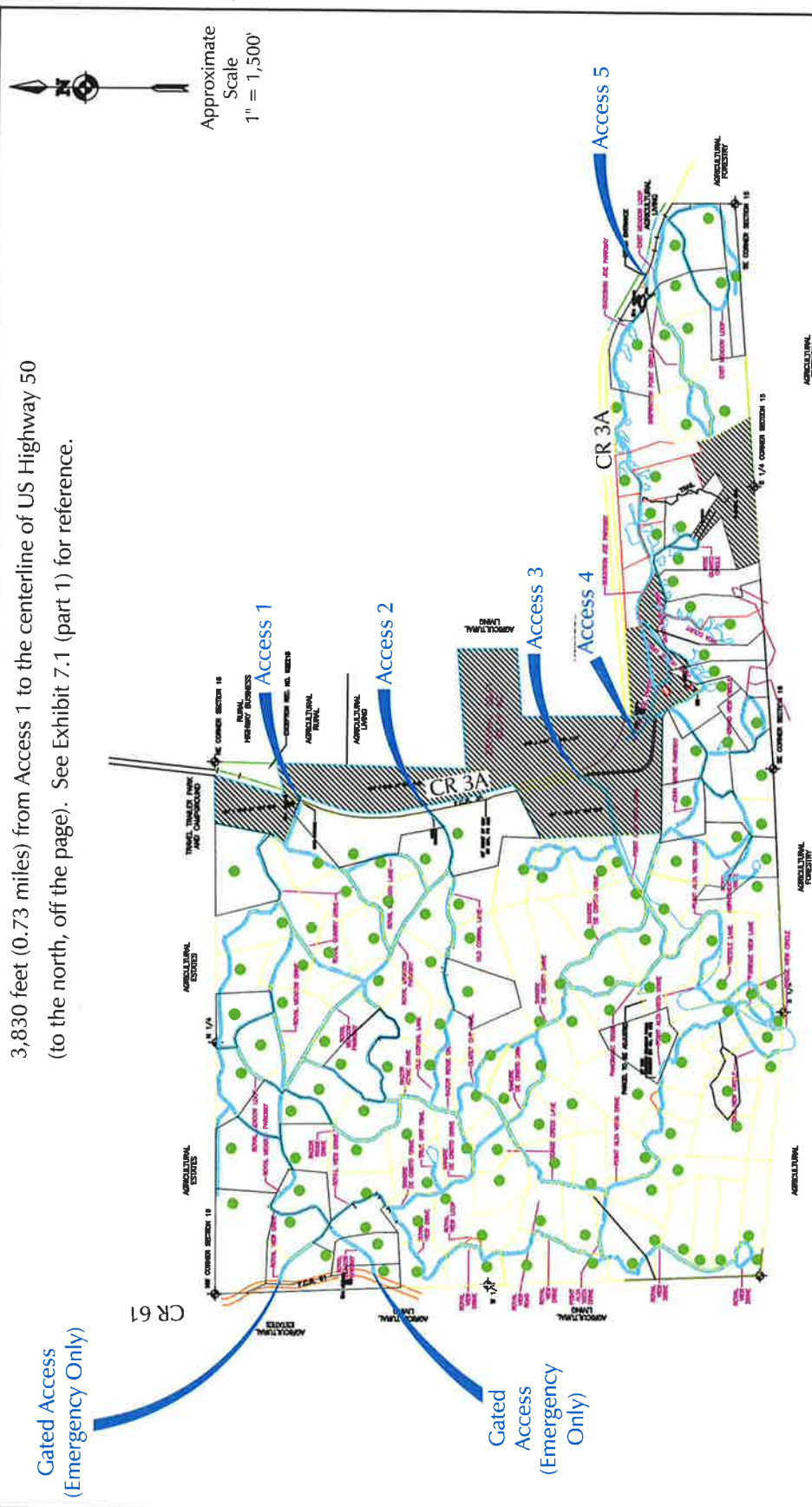
Vicinity Map

Royal Gorge Ranch and Resort (LSC# 194171)

3,830 feet (0.73 miles) from Access 1 to the centerline of US Highway 50
(to the north, off the page). See Exhibit 7.1 (part 1) for reference.

Gated Access
(Emergency Only)

Gated Access
(Emergency Only)



See Next Page for the Latest Version

Exhibit 7.1 (Part 2)

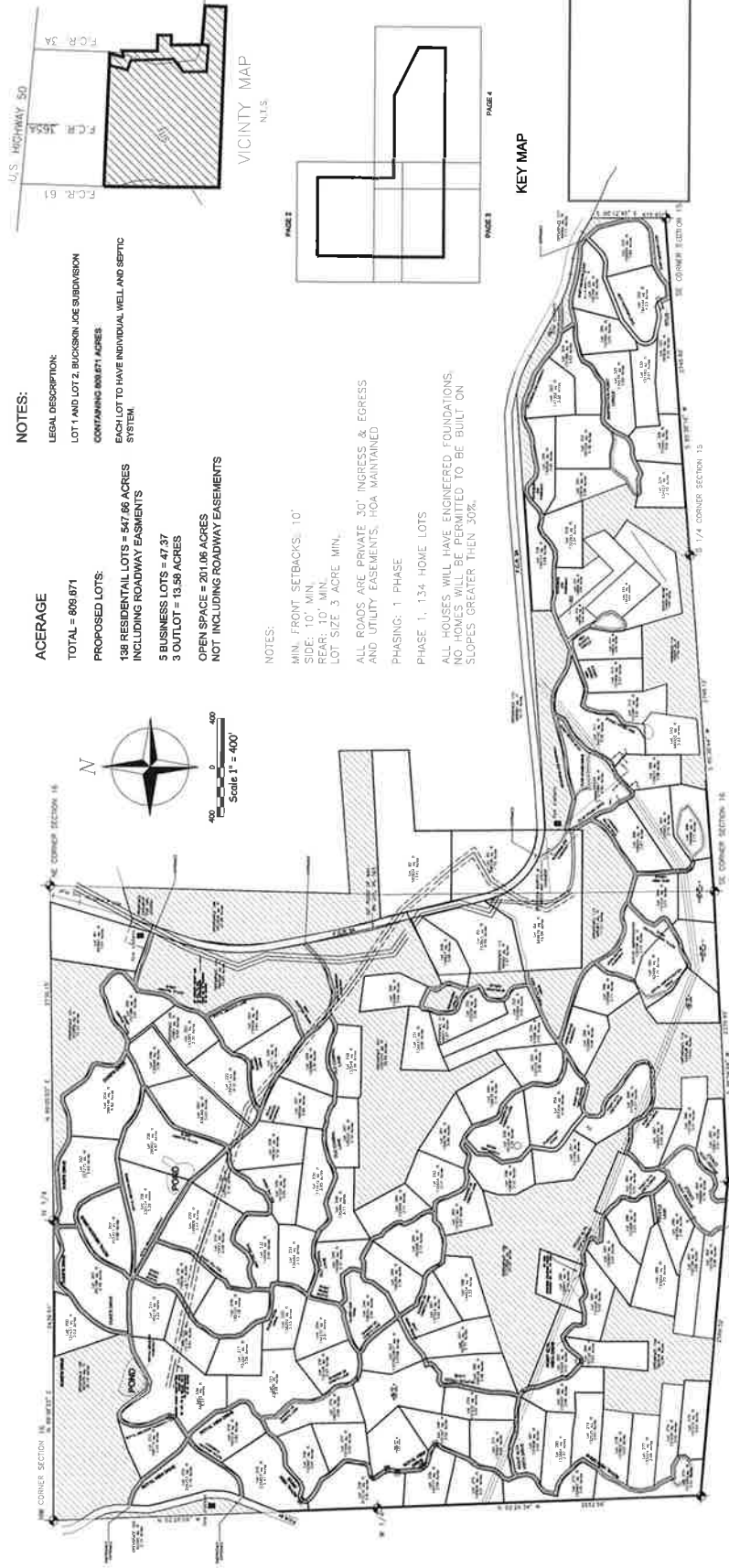
Site Plan

Royal Gorge Ranch and Resort (LSC# 194171)



SKETCH PLAN FOR ROYAL GORGE RANCH AND RESORT

A PLANNED UNIT DEVELOPMENT LOCATED WITHIN SECTION 15 AND 16,
TOWNSHIP 18 SOUTH, RANGE 71 WEST OF THE 6TH P.M., FREMONT COUNTY, COLORADO



CORNERSTONE
LAND SURVEYING, L.L.C.
1022 PHAY AVE
CANON CITY, COLORADO 81212
719-275-8881
4-30-25

NOTES:
ACCORDING TO C.R.S. 17-1-102, YOU MUST COMRADE ANY LEGAL ACTION BASED UPON ANY
EJECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU HAVE RECEIVED THIS SURVEY. NO
EJECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU HAVE RECEIVED THIS SURVEY. NO
EJECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU HAVE RECEIVED THIS SURVEY. NO

Drawn: [Name] Date: [Date]

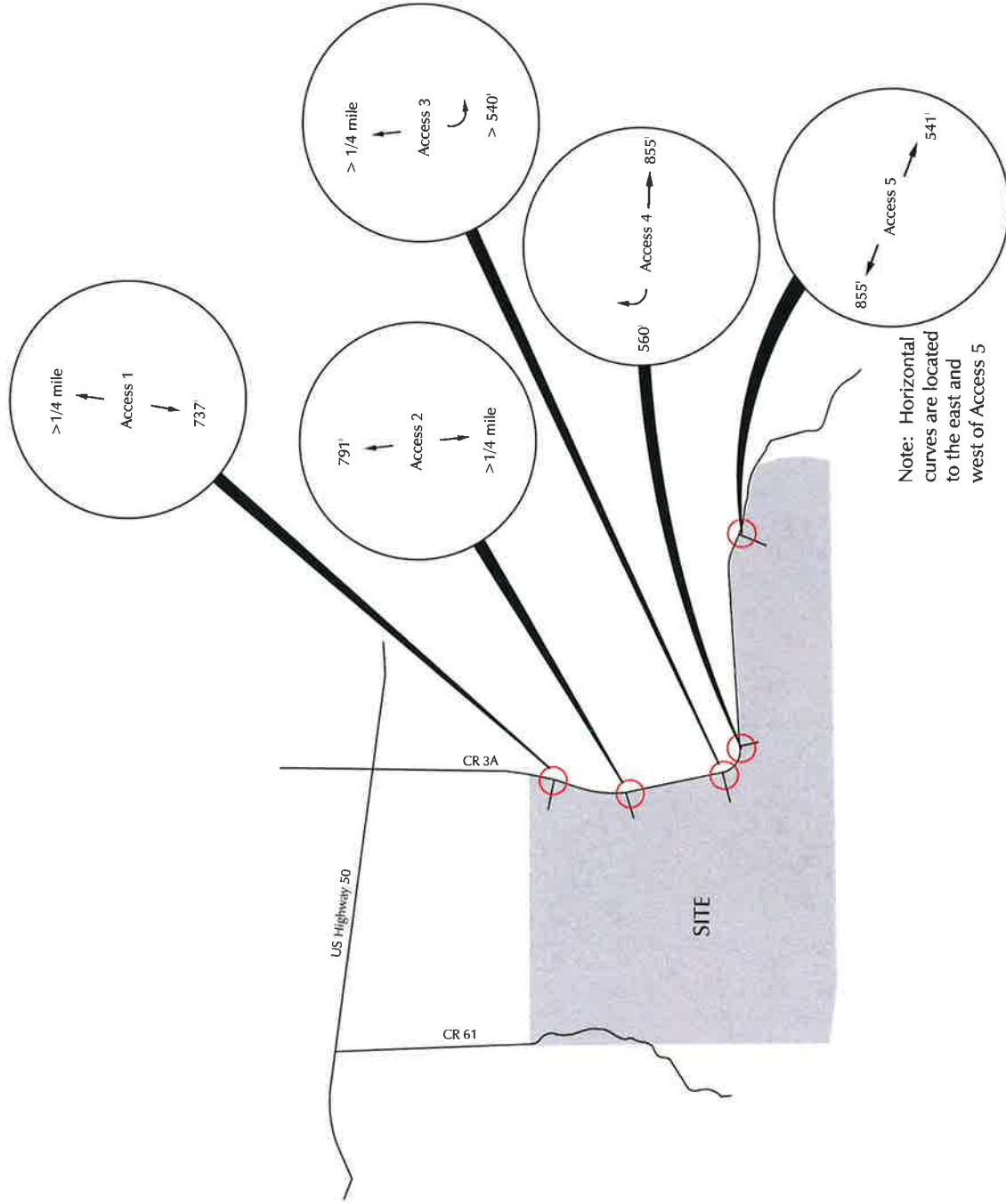


Exhibit 27.1
Sight Distances
Royal Gorge Ranch and Resort (LSC# 194171)

XXX' Field-measured lines of sight along CR 3A from the site access points



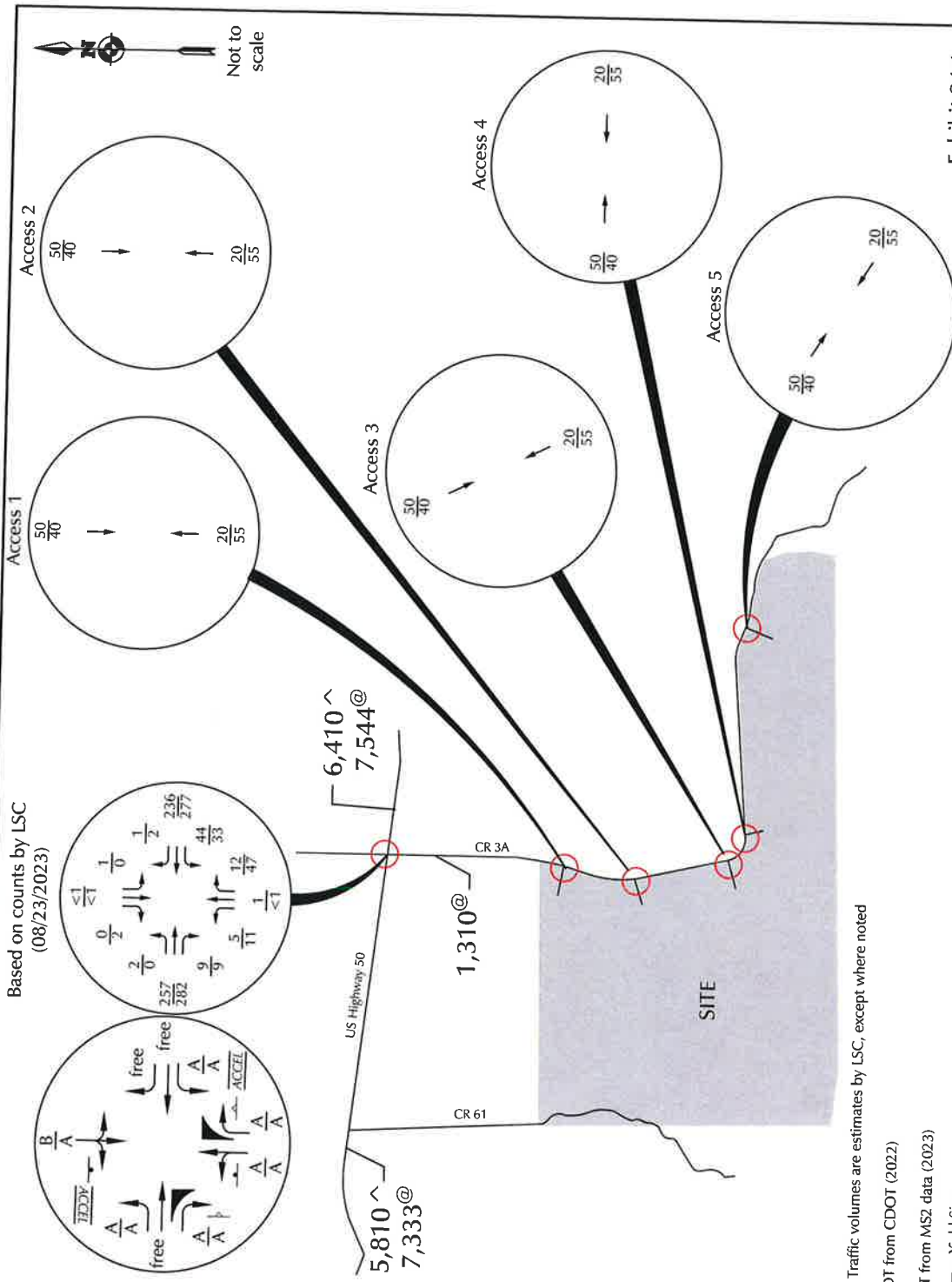


Exhibit 34.1 Baseline Traffic, Lane Geometry, and Traffic Control

Royal Gorge Ranch and Resort (LSC# 194171)

Note: Traffic volumes are estimates by LSC, except where noted

^ AADT from CDOT (2022)

@ ADT from MSZ data (2023)

— = Yield Sign

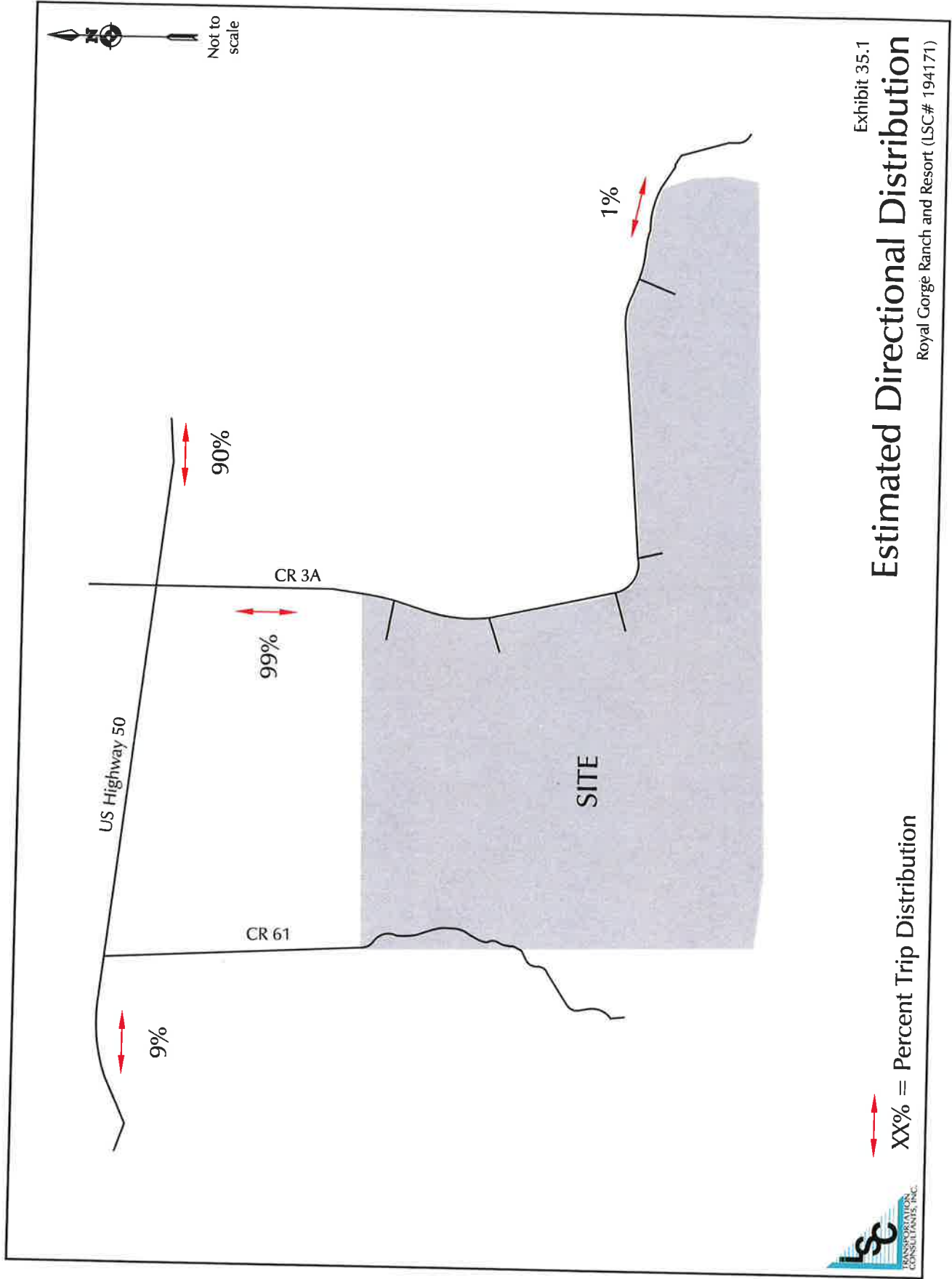
⊥ = Stop Sign

$\frac{XX}{XX}$ = Weekday AM Peak-Hour Traffic (veh/hr)

$\frac{XX}{XX}$ = Weekday PM Peak-Hour Traffic (veh/hr)

X,XXX = Average Weekday Traffic (vehicles per day)





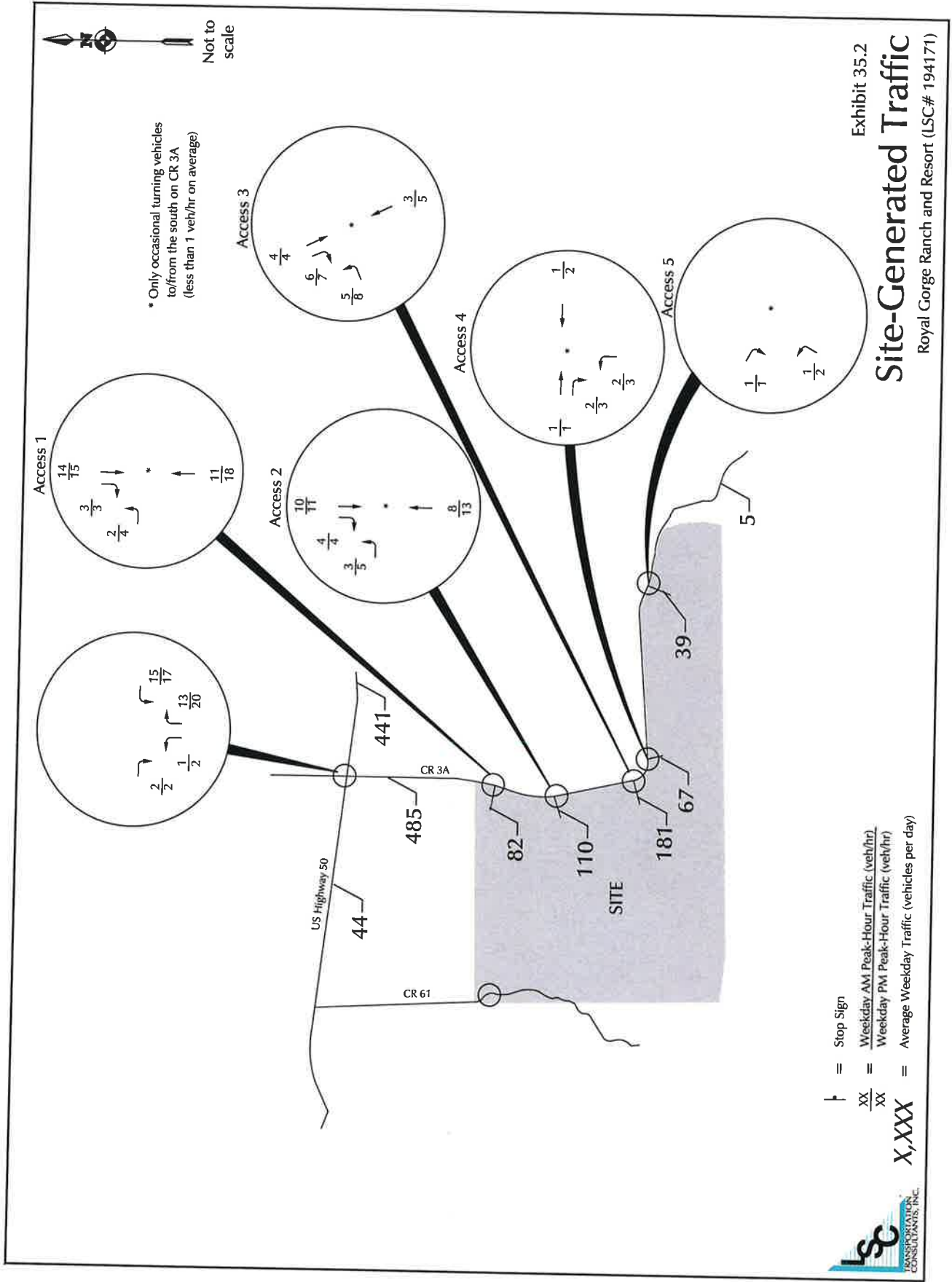


Exhibit 35.2

Site-Generated Traffic

Royal Gorge Ranch and Resort (LSC# 194171)

X,XXX



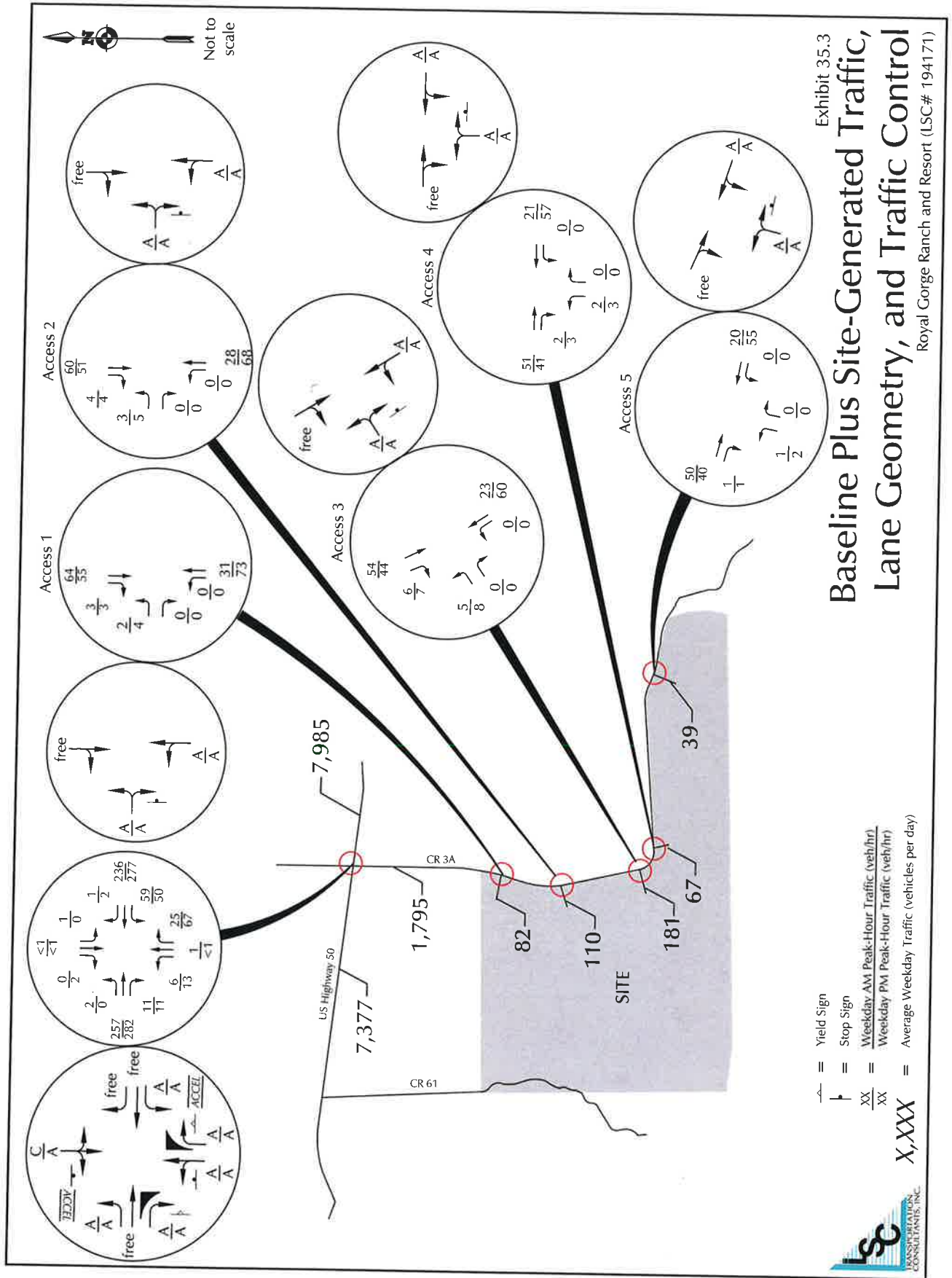


Exhibit 35.3
**Baseline Plus Site-Generated Traffic,
 Lane Geometry, and Traffic Control**
 Royal Gorge Ranch and Resort (LSC# 194171)



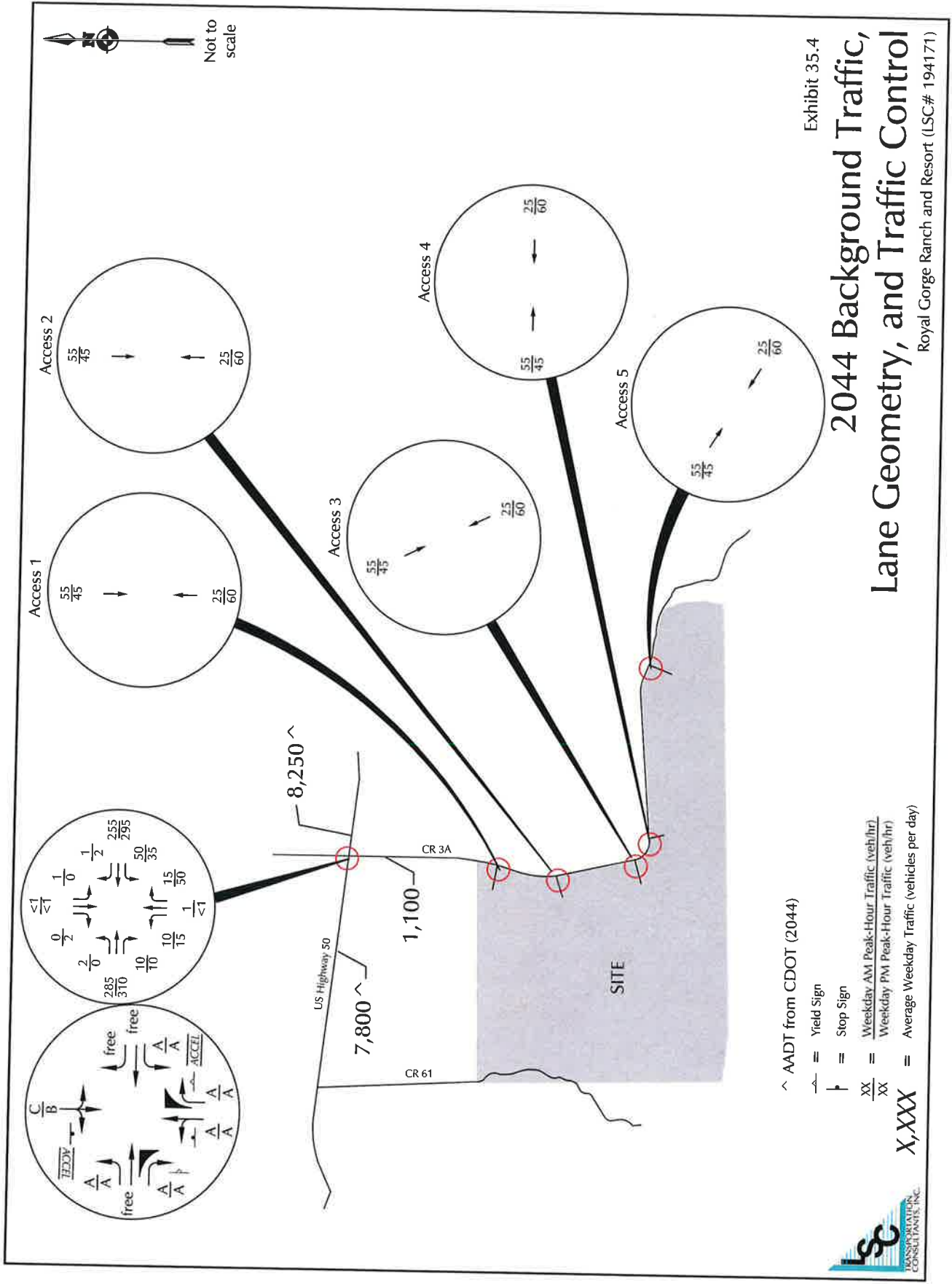
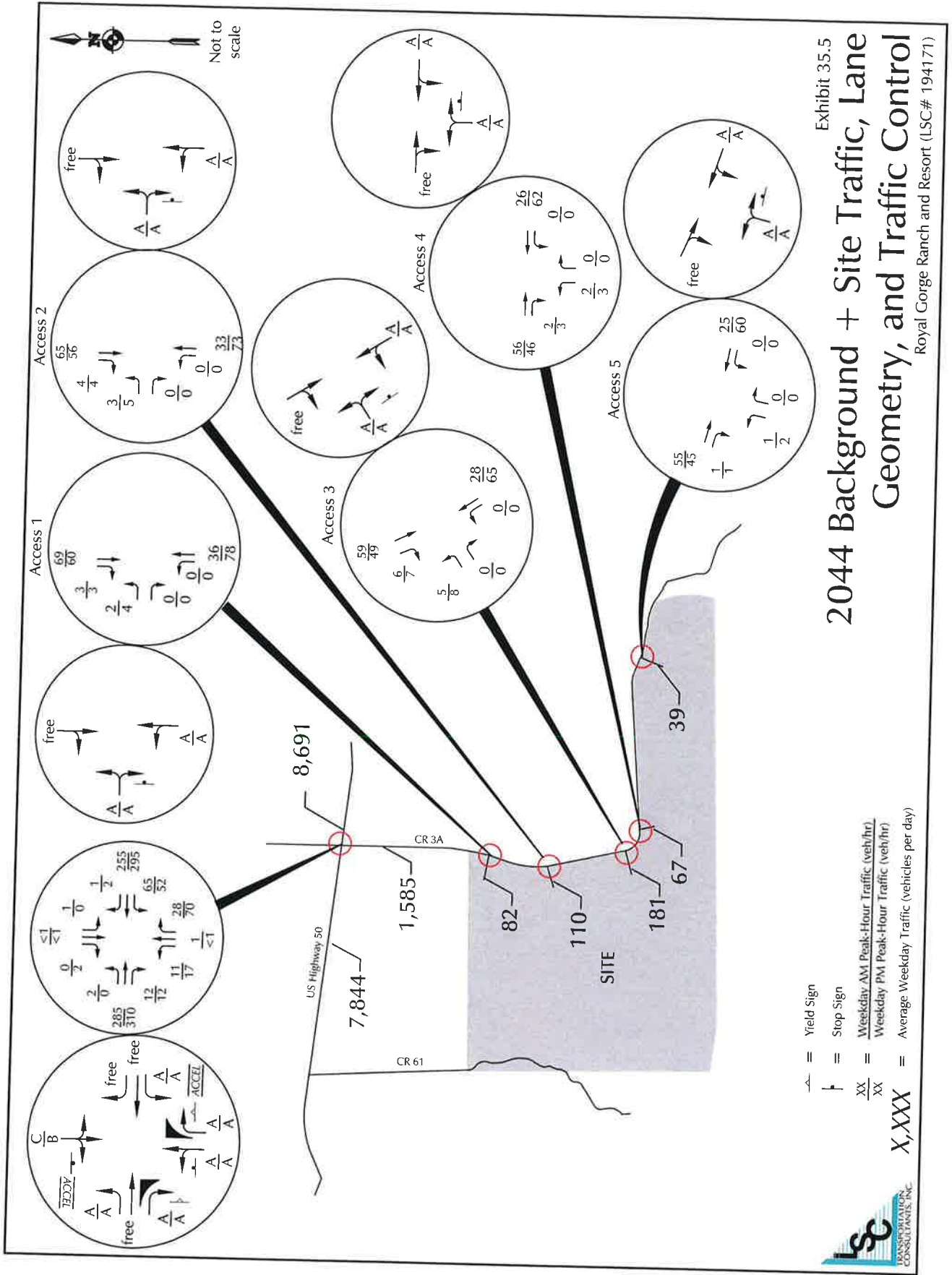


Exhibit 35.4
2044 Background Traffic,
Lane Geometry, and Traffic Control
Royal Gorge Ranch and Resort (LSC# 194171)





Access 5 Recommended Modifications



Access 3 Recommended Access Drive Alignment and Closure of Open Frontage to CR 3A

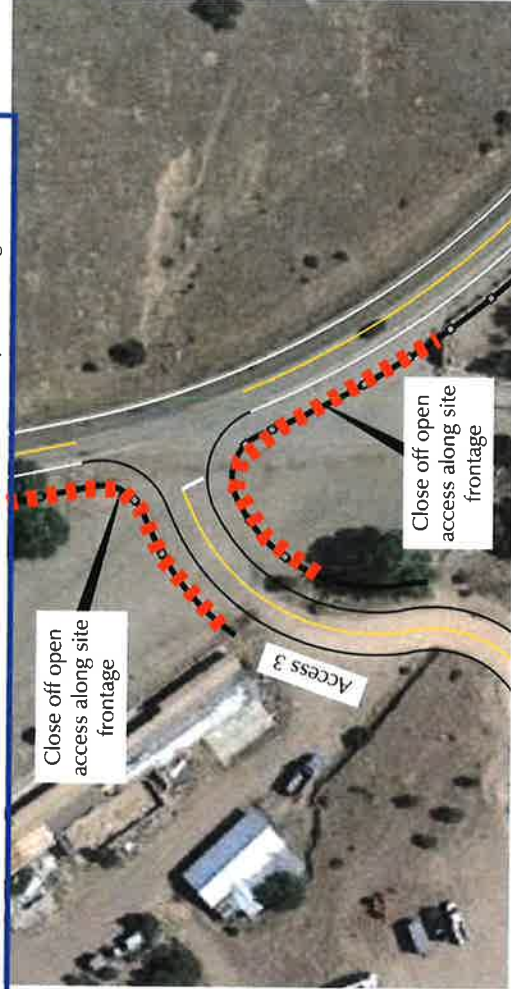


Exhibit 37.1 Recommended Access Modifications (Part 1)

Royal Gorge Ranch and Resort (LSC# 194171)

Closure of Open Access Along the Site Frontage North of Access 3



1" = 80'
scale



Exhibit 37.2 Recommended Access Modifications (Part 2)

Royal Gorge Ranch and Resort (LSC# 194171)



1" = 80'
scale

Potential Right-In-Only Option with Closure of Open Access Along the Site Frontage North of Access 3



Exhibit 37.3

Recommended Access Modifications (Part 3)

Royal Gorge Ranch and Resort (LSC# 194171)

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
Colorado Springs, CO 80909
719-633-2868

File Name : CR 3A - Hwy 50 AM 8-23

Site Code : 194170

Start Date : 8/23/2023

Page No : 1

Groups Printed- Unshifted

Start Time	CR 3A Southbound					Hwy 50 Westbound					CR 3A Northbound					Hwy 50 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:30	0	0	0	0	0	0	7	0	0	7	2	0	0	0	2	1	22	0	0	23	32
07:35	0	0	0	0	0	0	11	2	0	13	2	0	0	0	2	0	13	0	0	13	28
07:40	0	0	0	0	0	0	9	0	0	9	1	0	0	0	1	0	29	0	0	29	39
07:45	0	0	0	0	0	0	17	3	0	20	3	0	0	0	3	0	16	0	0	16	39
07:50	0	0	0	0	0	1	18	1	0	20	0	0	0	0	0	1	24	0	0	25	45
07:55	0	0	0	0	0	0	15	2	0	17	0	0	0	0	0	0	10	0	0	10	27
Total	0	0	0	0	0	1	77	8	0	86	8	0	0	0	8	2	114	0	0	116	210
08:00	0	0	0	0	0	0	21	6	0	27	0	0	0	0	0	0	16	0	0	16	43
08:05	0	0	0	0	0	0	23	6	0	29	1	0	0	0	1	1	13	0	0	14	44
08:10	0	0	0	0	0	0	24	5	0	29	1	0	0	0	1	1	28	0	0	29	59
08:15	0	0	0	0	0	0	20	2	0	22	2	0	0	0	2	0	11	0	0	11	35
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08:25	0	0	0	0	0	1	12	2	0	15	0	0	0	0	0	0	26	0	0	26	41
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09:20	0	0	0	0	0	0	15	4	0	19	0	0	0	0	0	1	18	1	0	20	39
09:25	0	0	0	0	0	0	24	6	0	30	1	0	1	0	2	2	25	0	0	27	59
Grand Total	0	0	1	0	1	3	436	75	0	514	25	1	5	0	31	13	471	2	0	486	1032
Apprch %	0	0	100	0		0.6	84.8	14.6	0		80.6	3.2	16.1	0		2.7	96.9	0.4	0		
Total %	0	0	0.1	0	0.1	0.3	42.2	7.3	0	49.8	2.4	0.1	0.5	0	3	1.3	45.6	0.2	0	47.1	

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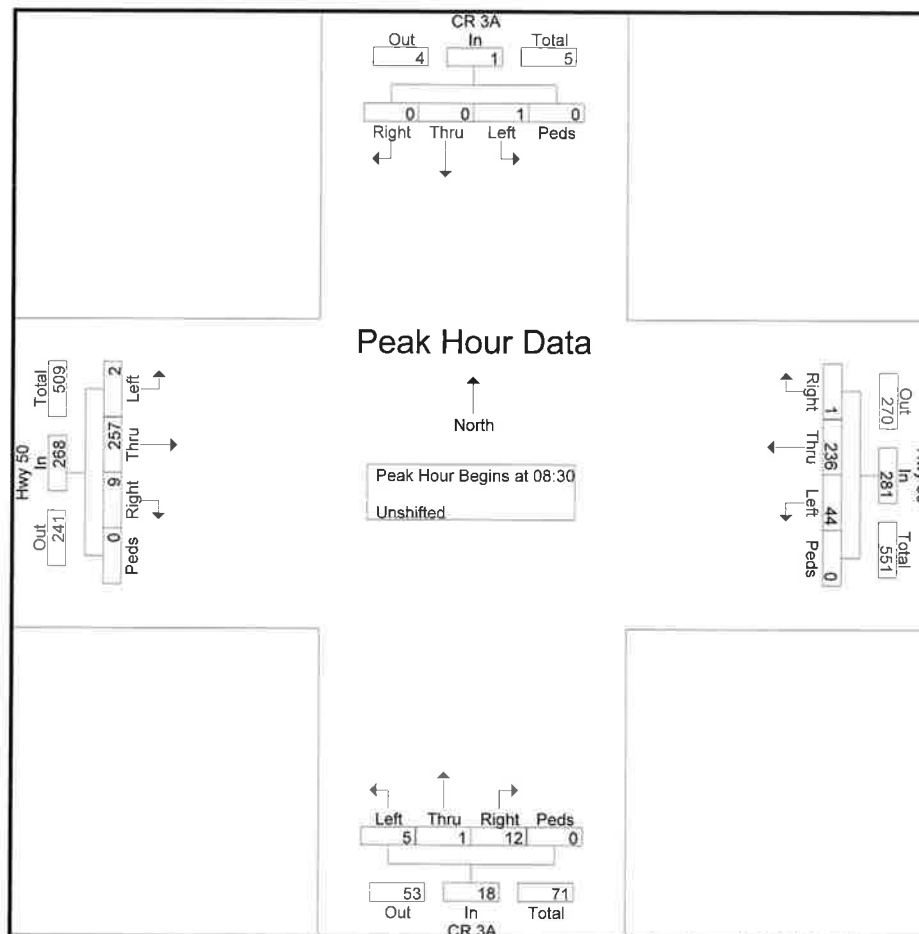
File Name : CR 3A - Hwy 50 AM 8-23

Site Code : 194170

Start Date : 8/23/2023

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	CR 3A Southbound					Hwy 50 Westbound					CR 3A Northbound					Hwy 50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:30 to 09:25 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:30																					
08:30	0	0	0	0	0	0	22	3	0	25	0	0	0	0	0	0	16	0	0	16	41
08:35	0	0	0	0	0	0	18	3	0	21	1	0	0	0	1	1	18	0	0	19	41
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09:05	0	0	1	0	1	1	14	1	0	16	1	0	1	0	2	0	15	0	0	15	34
09:10	0	0	0	0	0	0	30	4	0	34	1	1	0	0	2	0	27	0	0	27	63
09:15	0	0	0	0	0	0	22	2	0	24	4	0	1	0	5	1	30	1	0	32	61
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09:25	0	0	0	0	0	0	24	6	0	30	1	0	1	0	2	2	25	0	0	27	59
Total Volume	0	0	1	0	1	1	236	44	0	281	12	1	5	0	18	9	257	2	0	268	568
% App. Total	0	0	100	0		0.4	84	15.7	0		66.7	5.6	27.8	0		3.4	95.9	0.7	0		
PHF	.000	.000	.083	.000	.083	.083	.656	.611	.000	.689	.250	.083	.208	.000	.300	.375	.714	.167	.000	.698	.751

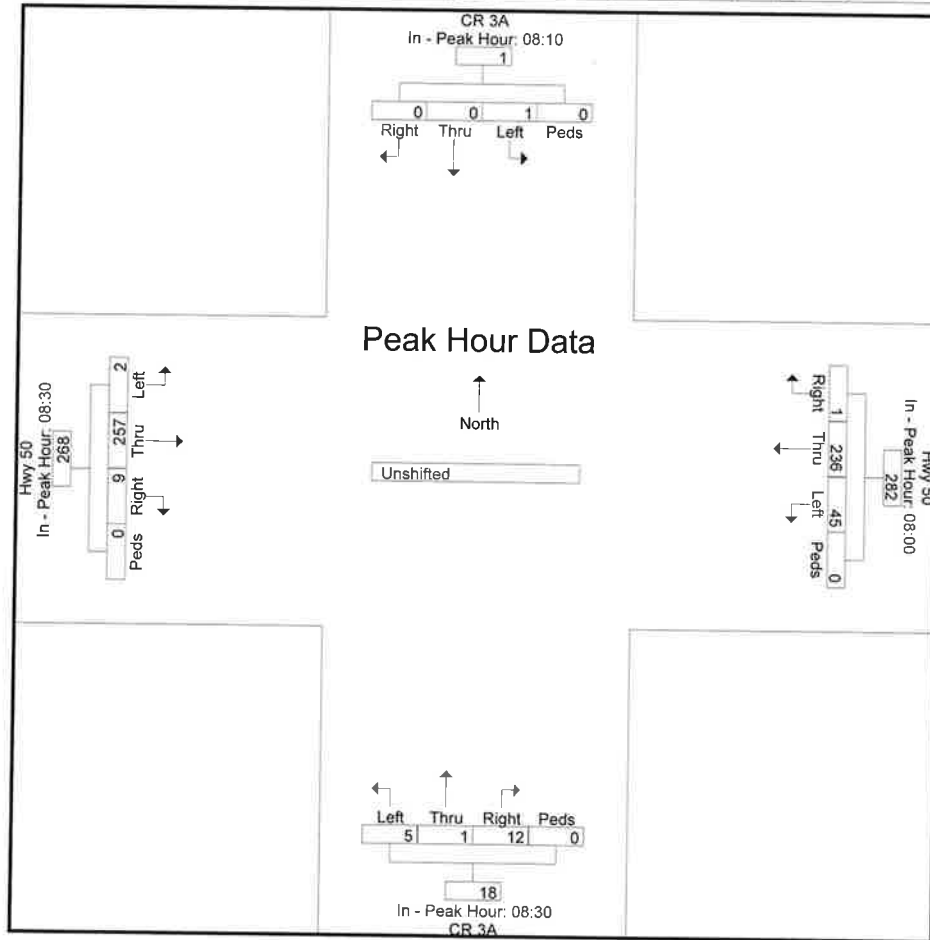


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File Name : CR 3A - Hwy 50 AM 8-23
Site Code : 194170
Start Date : 8/23/2023
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	CR 3A Southbound					Hwy 50 Westbound					CR 3A Northbound					Hwy 50 Eastbound					
Start Time	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Int. Total
Peak Hour Analysis From 07:30 to 09:25 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
08:10						08:00					08:30					08:30					
+0 mins.	0	0	0	0	0	0	21	6	0	27	0	0	0	0	0	0	16	0	0	16	
+5 mins.	0	0	0	0	0	0	23	6	0	29	1	0	0	0	1	1	18	0	0	19	
+10 mins.	0	0	0	0	0	0	24	5	0	29	1	0	0	0	1	2	24	0	0	26	
+15 mins.	0	0	0	0	0	0	20	2	0	22	0	0	0	0	0	0	20	0	0	20	
+20 mins.	0	0	0	0	0	0	23	2	0	25	0	0	0	0	0	1	15	0	0	16	
+25 mins.	0	0	0	0	0	1	12	2	0	15	3	0	2	0	5	1	30	0	0	31	
+30 mins.	0	0	0	0	0	0	22	3	0	25	0	0	0	0	0	0	19	0	0	19	
+35 mins.	0	0	0	0	0	0	18	3	0	21	1	0	1	0	2	0	15	0	0	15	
+40 mins.	0	0	0	0	0	0	16	1	0	17	1	1	0	0	2	0	27	0	0	27	
+45 mins.	0	0	0	0	0	0	18	4	0	22	4	0	1	0	5	1	30	1	0	32	
+50 mins.	0	0	0	0	0	0	18	5	0	23	0	0	0	0	0	1	18	1	0	20	
+55 mins.	0	0	1	0	1	0	21	6	0	27	1	0	1	0	2	2	25	0	0	27	
Total Volume	0	0	1	0	1	1	236	45	0	282	12	1	5	0	18	9	257	2	0	268	
% App. Total	0	0	100	0		0.4	83.7	16	0		66.7	5.6	27.8	0		3.4	95.9	0.7	0		
PHF	.000	.000	.083	.000	.083	.083	.819	.625	.000	.810	.250	.083	.208	.000	.300	.375	.714	.167	.000	.698	



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Groups Printed- Unshifted

Start Time	CR 3A Southbound					Hwy 50 Westbound					CR 3A Northbound					Hwy 50 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
15:00	0	0	0	0	0	0	14	6	0	20	8	0	2	0	10	0	17	0	0	17	47
15:05	0	0	0	0	0	0	17	1	0	18	8	0	0	0	8	1	29	0	0	30	56
15:10	0	0	0	0	0	0	19	3	0	22	2	0	1	0	3	1	20	0	0	21	46
15:15	0	0	0	0	0	0	20	1	0	21	5	0	3	0	8	1	20	0	0	21	50
15:20	0	0	0	0	0	0	24	4	0	28	2	0	0	0	2	1	22	0	0	23	53
15:25	0	0	0	0	0	1	20	4	0	25	5	0	0	0	5	0	29	0	0	29	59
15:30	0	0	0	0	0	0	27	4	0	31	5	0	0	0	5	2	33	0	0	35	71
15:35	0	0	0	0	0	0	20	2	0	22	11	0	1	0	12	1	13	0	0	14	48
15:40	0	0	0	0	0	0	31	1	0	32	6	0	5	0	11	0	21	0	0	21	64
15:45	0	0	0	0	0	0	13	2	0	15	2	0	0	0	2	0	23	0	0	23	40
15:50	0	0	0	0	0	1	19	2	0	22	1	0	0	0	1	0	24	0	0	24	47
15:55	0	0	0	0	0	0	28	3	0	31	5	0	0	0	5	1	18	0	0	19	55
Total	0	0	0	0	0	2	252	33	0	287	60	0	12	0	72	8	269	0	0	277	636
16:00	0	0	0	0	0	0	29	2	0	31	5	0	0	0	5	1	26	0	0	27	63
16:05	0	0	0	0	0	0	20	4	0	24	1	0	1	0	2	1	28	0	0	29	55
16:10	1	0	0	0	1	0	22	2	0	24	2	0	1	0	3	2	22	0	0	24	52
16:15	1	0	0	0	1	0	24	3	0	27	2	0	3	0	5	0	23	0	0	23	56
16:20	0	0	0	0	0	0	23	2	0	25	2	0	2	0	4	0	17	0	0	17	46
16:25	0	0	0	0	0	0	15	5	0	20	5	0	3	0	8	1	13	1	0	15	43
16:30	0	0	0	0	0	0	15	2	0	17	2	0	0	0	2	2	20	0	0	22	41
16:35	0	0	0	0	0	0	15	2	0	17	2	0	4	0	6	2	20	0	0	22	45
16:40	0	0	0	0	0	0	20	3	0	23	9	0	1	0	10	3	24	0	0	27	60
16:45	0	0	0	0	0	0	20	1	0	21	2	0	0	0	2	0	15	0	0	15	38
16:50	0	0	0	0	0	0	25	3	0	28	5	0	2	0	7	0	18	0	0	18	53
16:55	0	0	2	0	2	0	17	1	0	18	7	0	4	0	11	0	19	0	0	19	50
Total	2	0	2	0	4	0	245	30	0	275	44	0	21	0	65	12	245	1	0	258	602
17:00	0	1	0	0	1	0	20	1	0	21	6	0	1	0	7	1	9	0	0	10	39
17:05	0	0	0	0	0	0	23	1	0	24	3	0	0	0	3	0	18	0	0	18	45
17:10	0	1	1	0	2	0	25	0	0	25	2	0	3	0	5	0	22	0	0	22	54
17:15	0	0	0	0	0	0	22	1	0	23	1	0	2	0	3	1	11	0	0	12	38
17:20	0	0	0	0	0	1	23	1	0	25	4	0	1	0	5	0	20	0	0	20	50
17:25	0	0	0	0	0	0	16	2	0	18	2	0	0	0	2	0	11	0	0	11	31
Grand Total	2	2	3	0	7	3	626	69	0	698	122	0	40	0	162	22	605	1	0	628	1495
Apprch %	28.6	28.6	42.9	0		0.4	89.7	9.9	0		75.3	0	24.7	0		3.5	96.3	0.2	0		
Total %	0.1	0.1	0.2	0	0.5	0.2	41.9	4.6	0	46.7	8.2	0	2.7	0	10.8	1.5	40.5	0.1	0	42	

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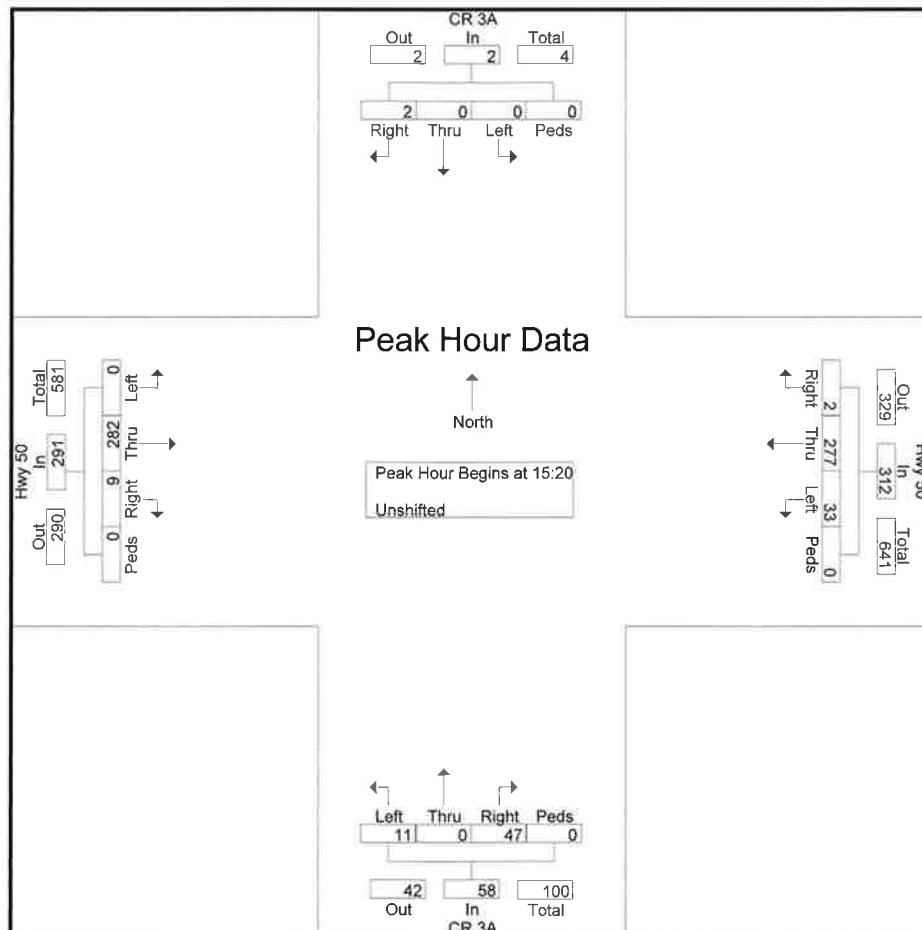
File Name : CR 3A - Hwy 50 PM 8-23

Site Code : 194170

Start Date : 8/23/2023

Page No : 2

	CR 3A Southbound					Hwy 50 Westbound					CR 3A Northbound					Hwy 50 Eastbound					
Start Time	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	InL Total
Peak Hour Analysis From 15:00 to 17:25 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 15:20																					
15:20	0	0	0	0	0	0	24	4	0	28	2	0	0	0	2	1	22	0	0	23	53
15:25	0	0	0	0	0	1	20	4	0	25	5	0	0	0	5	0	29	0	0	29	59
15:30	0	0	0	0	0	0	27	4	0	31	5	0	0	0	5	2	33	0	0	35	71
15:35	0	0	0	0	0	0	20	2	0	22	11	0	1	0	12	1	13	0	0	14	48
15:40	0	0	0	0	0	0	31	1	0	32	6	0	5	0	11	0	21	0	0	21	64
15:45	0	0	0	0	0	0	13	2	0	15	2	0	0	0	2	0	23	0	0	23	40
15:50	0	0	0	0	0	1	19	2	0	22	1	0	0	0	1	0	24	0	0	24	47
15:55	0	0	0	0	0	0	28	3	0	31	5	0	0	0	5	1	18	0	0	19	55
16:00	0	0	0	0	0	0	29	2	0	31	5	0	0	0	5	1	26	0	0	27	63
16:05	0	0	0	0	0	0	20	4	0	24	1	0	1	0	2	1	28	0	0	29	55
16:10	1	0	0	0	1	0	22	2	0	24	2	0	1	0	3	2	22	0	0	24	52
16:15	1	0	0	0	1	0	24	3	0	27	2	0	3	0	5	0	23	0	0	23	56
Total Volume	2	0	0	0	2	2	277	33	0	312	47	0	11	0	58	9	282	0	0	291	663
% App. Total	100	0	0	0		0.6	88.8	10.6	0		81	0	19	0		3.1	96.9	0	0		
PHF	.167	.000	.000	.000	.167	.167	.745	.688	.000	.813	.356	.000	.183	.000	.403	.375	.712	.000	.000	.693	.778



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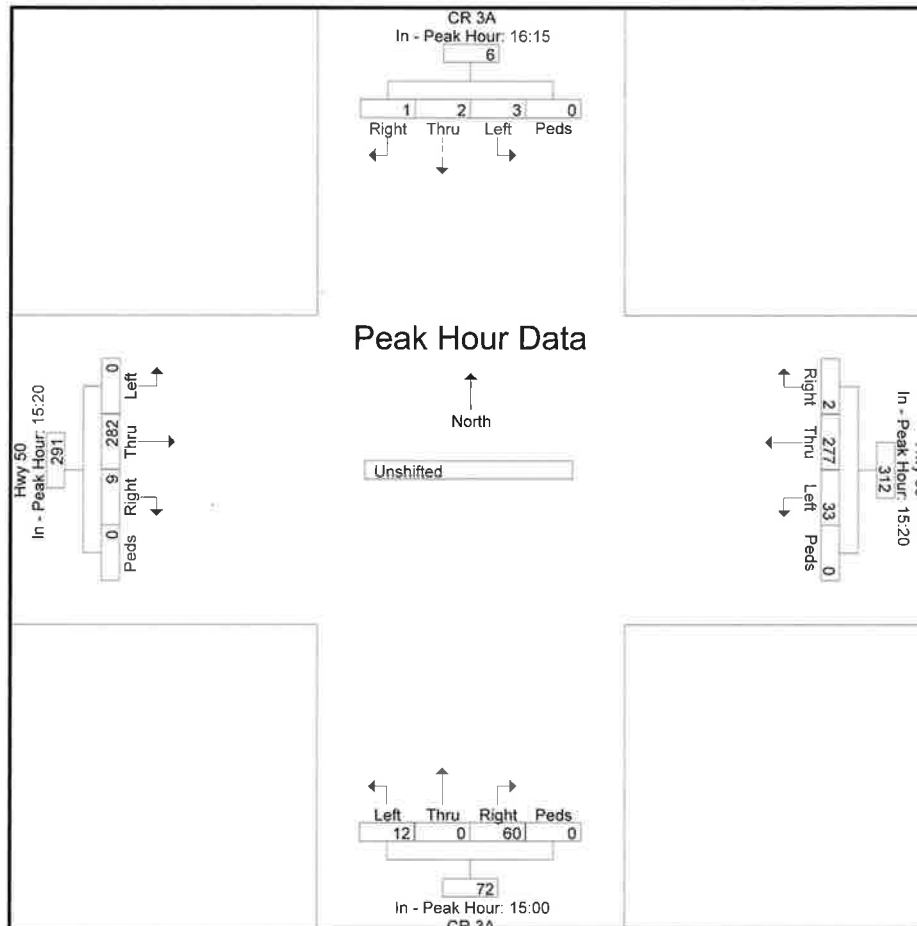
File Name : CR 3A - Hwy 50 PM 8-23

Site Code : 194170

Start Date : 8/23/2023

Page No : 3

	CR 3A Southbound					Hwy 50 Westbound					CR 3A Northbound					Hwy 50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 15:00 to 17:25 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
16:15						15:20					15:00					15:20					
+0 mins.	1	0	0	0	1	0	24	4	0	28	8	0	2	0	10	1	22	0	0	23	
+5 mins.	0	0	0	0	0	1	20	4	0	25	8	0	0	0	8	0	29	0	0	29	
+10 mins.	0	0	0	0	0	0	27	4	0	31	2	0	1	0	3	2	33	0	0	35	
+15 mins.	0	0	0	0	0	0	20	2	0	22	5	0	3	0	8	1	13	0	0	14	
+20 mins.	0	0	0	0	0	0	31	1	0	32	2	0	0	0	2	0	21	0	0	21	
+25 mins.	0	0	0	0	0	0	13	2	0	15	5	0	0	0	5	0	23	0	0	23	
+30 mins.	0	0	0	0	0	1	19	2	0	22	5	0	0	0	5	0	24	0	0	24	
+35 mins.	0	0	0	0	0	0	28	3	0	31	11	0	1	0	12	1	18	0	0	19	
+40 mins.	0	0	2	0	2	0	29	2	0	31	6	0	5	0	11	1	26	0	0	27	
+45 mins.	0	1	0	0	1	0	20	4	0	24	2	0	0	0	2	1	28	0	0	29	
+50 mins.	0	0	0	0	0	0	22	2	0	24	1	0	0	0	1	2	22	0	0	24	
+55 mins.	0	1	1	0	2	0	24	3	0	27	5	0	0	0	5	0	23	0	0	23	
Total Volume	1	2	3	0	6	2	277	33	0	312	60	0	12	0	72	9	282	0	0	291	
% App. Total	16.7	33.3	50	0		0.6	88.8	10.6	0		83.3	0	16.7	0		3.1	96.9	0	0		
PHF	.083	.167	.125	.000	.250	.167	.745	.688	.000	.813	.455	.000	.200	.000	.500	.375	.712	.000	.000	.693	



Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱	↰	↑	↱		↕			↕	
Traffic Vol, veh/h	2	257	9	44	236	1	5	1	12	1	0	0
Future Vol, veh/h	2	257	9	44	236	1	5	1	12	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Yield	-	-	Stop
Storage Length	545	-	165	365	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	279	10	48	257	1	6	1	15	1	0	0

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	258	0	0	279	0	0	637	637	279	637	636	257
Stage 1	-	-	-	-	-	-	283	283	-	353	353	-
Stage 2	-	-	-	-	-	-	354	354	-	284	283	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1307	-	-	1284	-	-	390	395	760	390	395	782
Stage 1	-	-	-	-	-	-	724	677	-	664	631	-
Stage 2	-	-	-	-	-	-	663	630	-	723	677	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1307	-	-	1284	-	-	378	380	760	370	380	782
Mov Cap-2 Maneuver	-	-	-	-	-	-	378	380	-	370	380	-
Stage 1	-	-	-	-	-	-	723	676	-	663	608	-
Stage 2	-	-	-	-	-	-	638	607	-	706	676	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.2	8.2	14.8
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1135	1307	-	-	1284	-	-	370
HCM Lane V/C Ratio	0.02	0.002	-	-	0.037	-	-	0.003
HCM Control Delay (s)	8.2	7.8	-	-	7.9	-	-	14.8
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗		↕			↕	
Traffic Vol, veh/h	0	282	9	33	277	2	11	0	47	0	0	2
Future Vol, veh/h	0	282	9	33	277	2	11	0	47	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Yield	-	-	Stop
Storage Length	545	-	165	365	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	83	83	83	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	307	10	36	301	2	13	0	57	0	0	3

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	303	0	0	307	0	0	681	682	307	680	680	301
Stage 1	-	-	-	-	-	-	307	307	-	373	373	-
Stage 2	-	-	-	-	-	-	374	375	-	307	307	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1258	-	-	1254	-	-	364	372	733	365	373	739
Stage 1	-	-	-	-	-	-	703	661	-	648	618	-
Stage 2	-	-	-	-	-	-	647	617	-	703	661	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1258	-	-	1254	-	-	355	361	733	330	362	739
Mov Cap-2 Maneuver	-	-	-	-	-	-	355	361	-	330	362	-
Stage 1	-	-	-	-	-	-	703	661	-	648	600	-
Stage 2	-	-	-	-	-	-	626	599	-	649	661	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0		0.8		9.3		9.9	
HCM LOS					A		A	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	905	1258	-	-	1254	-	-	739
HCM Lane V/C Ratio	0.077	-	-	-	0.029	-	-	0.003
HCM Control Delay (s)	9.3	0	-	-	8	-	-	9.9
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱	↰	↑	↱		↕			↕	
Traffic Vol, veh/h	2	257	11	59	236	1	6	1	25	1	0	0
Future Vol, veh/h	2	257	11	59	236	1	6	1	25	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Yield	-	-	Stop
Storage Length	545	-	165	365	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	279	12	64	257	1	8	1	32	1	0	0

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	258	0	0	279	0	0	669	669	279	669	668	257
Stage 1	-	-	-	-	-	-	283	283	-	385	385	-
Stage 2	-	-	-	-	-	-	386	386	-	284	283	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1307	-	-	1284	-	-	371	379	760	371	379	782
Stage 1	-	-	-	-	-	-	724	677	-	638	611	-
Stage 2	-	-	-	-	-	-	637	610	-	723	677	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1307	-	-	1284	-	-	357	359	760	341	359	782
Mov Cap-2 Maneuver	-	-	-	-	-	-	357	359	-	341	359	-
Stage 1	-	-	-	-	-	-	723	676	-	637	580	-
Stage 2	-	-	-	-	-	-	605	580	-	690	676	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.6	8.9	15.6
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	973	1307	-	-	1284	-	-	341
HCM Lane V/C Ratio	0.042	0.002	-	-	0.05	-	-	0.004
HCM Control Delay (s)	8.9	7.8	-	-	8	-	-	15.6
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0.2	-	-	0

HCM 6th TWSC
2: CR 3A & Access 1

Existing + Site
AM

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			Y	Y	
Traffic Vol, veh/h	2	0	0	31	64	3
Future Vol, veh/h	2	0	0	31	64	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	0	0	40	77	4

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	119	79	81	0	-	0
Stage 1	79	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	877	981	1517	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	982	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	877	981	1517	-	-	-
Mov Cap-2 Maneuver	877	-	-	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	982	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1517	-	877	-	-
HCM Lane V/C Ratio	-	-	0.003	-	-
HCM Control Delay (s)	0	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Existing + Site AM
HCM 6th TWSC

Synchro 11 Report
JAB

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	WT			WT	WT	
Traffic Vol, veh/h	3	0	0	28	60	4
Future Vol, veh/h	3	0	0	28	60	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	0	36	72	5

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	111	75	77	0	-	0
Stage 1	75	-	-	-	-	-
Stage 2	36	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	886	986	1522	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	986	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	886	986	1522	-	-	-
Mov Cap-2 Maneuver	886	-	-	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	986	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1522	-	886	-	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	0	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 6th TWSC
4: CR 3A & Access 3

Existing + Site
AM

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	✕			✕	✕	
Traffic Vol, veh/h	5	0	0	23	54	7
Future Vol, veh/h	5	0	0	23	54	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	0	0	29	65	8

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	98	69	73	0	-	0
Stage 1	69	-	-	-	-	-
Stage 2	29	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	901	994	1527	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	994	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	901	994	1527	-	-	-
Mov Cap-2 Maneuver	901	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	994	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1527	-	901	-	-
HCM Lane V/C Ratio	-	-	0.007	-	-
HCM Control Delay (s)	0	-	9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Existing + Site AM
HCM 6th TWSC

Synchro 11 Report
JAB

HCM 6th TWSC
5: Access 4 & CR 3A

Existing + Site
AM

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Traffic Vol, veh/h	51	2	0	21	2	0
Future Vol, veh/h	51	2	0	21	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	61	2	0	27	3	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	63	0	89
Stage 1	-	-	-	-	62
Stage 2	-	-	-	-	27
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1540	-	912
Stage 1	-	-	-	-	961
Stage 2	-	-	-	-	996
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1540	-	912
Mov Cap-2 Maneuver	-	-	-	-	912
Stage 1	-	-	-	-	961
Stage 2	-	-	-	-	996

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	912	-	-	1540	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Existing + Site AM
HCM 6th TWSC

Synchro 11 Report
JAB

HCM 6th TWSC
6: Access 5 & CR 3A

Existing + Site
AM

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1			1	2	
Traffic Vol, veh/h	50	1	0	20	1	0
Future Vol, veh/h	50	1	0	20	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	1	0	26	1	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	61
Stage 1	-	-	61
Stage 2	-	-	26
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1542	914
Stage 1	-	-	962
Stage 2	-	-	997
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1542	914
Mov Cap-2 Maneuver	-	-	914
Stage 1	-	-	962
Stage 2	-	-	997

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	914	-	-	1542	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	8.9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Existing + Site AM
HCM 6th TWSC

Synchro 11 Report
JAB

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱	↰	↑	↱		↕			↕	
Traffic Vol, veh/h	0	282	11	50	277	2	13	0	67	0	0	2
Future Vol, veh/h	0	282	11	50	277	2	13	0	67	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Yield	-	-	Stop
Storage Length	545	-	165	365	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	83	83	83	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	307	12	54	301	2	16	0	81	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	303	0	0	307	0	0	717	718	307	716	716	301
Stage 1	-	-	-	-	-	-	307	307	-	409	409	-
Stage 2	-	-	-	-	-	-	410	411	-	307	307	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1258	-	-	1254	-	-	345	355	733	345	356	739
Stage 1	-	-	-	-	-	-	703	661	-	619	596	-
Stage 2	-	-	-	-	-	-	619	595	-	703	661	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1258	-	-	1254	-	-	333	340	733	297	341	739
Mov Cap-2 Maneuver	-	-	-	-	-	-	333	340	-	297	341	-
Stage 1	-	-	-	-	-	-	703	661	-	619	570	-
Stage 2	-	-	-	-	-	-	590	569	-	626	661	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.2	9.6	9.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	875	1258	-	-	1254	-	-	739
HCM Lane V/C Ratio	0.11	-	-	-	0.043	-	-	0.003
HCM Control Delay (s)	9.6	0	-	-	8	-	-	9.9
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	✕			✕	✕	
Traffic Vol, veh/h	4	0	0	73	55	3
Future Vol, veh/h	4	0	0	73	55	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	0	0	88	66	4

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	156	68	70	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	88	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	835	995	1531	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	835	995	1531	-	-	-
Mov Cap-2 Maneuver	835	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	935	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1531	-	835	-	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s)	0	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 6th TWSC
3: CR 3A & Access 2

Existing + Site
PM

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	5	0	0	68	51	4
Future Vol, veh/h	5	0	0	68	51	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	0	0	82	61	5

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	146	64	66
Stage 1	64	-	-
Stage 2	82	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	846	1000	1536
Stage 1	959	-	-
Stage 2	941	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	846	1000	1536
Mov Cap-2 Maneuver	846	-	-
Stage 1	959	-	-
Stage 2	941	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1536	-	846	-	-
HCM Lane V/C Ratio	-	-	0.008	-	-
HCM Control Delay (s)	0	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Existing + Site PM
HCM 6th TWSC

Synchro 11 Report
JAB

HCM 6th TWSC
4: CR 3A & Access 3

Existing + Site
PM

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	0	0	60	44	7
Future Vol, veh/h	8	0	0	60	44	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	0	0	72	53	8
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	129	57	61	0	-	0
Stage 1	57	-	-	-	-	-
Stage 2	72	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	865	1009	1542	-	-	-
Stage 1	966	-	-	-	-	-
Stage 2	951	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	865	1009	1542	-	-	-
Mov Cap-2 Maneuver	865	-	-	-	-	-
Stage 1	966	-	-	-	-	-
Stage 2	951	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.2	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1542	-	865	-	-	
HCM Lane V/C Ratio	-	-	0.012	-	-	
HCM Control Delay (s)	0	-	9.2	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Existing + Site PM
HCM 6th TWSC

Synchro 11 Report
JAB

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1			1	2	
Traffic Vol, veh/h	41	3	0	57	3	0
Future Vol, veh/h	41	3	0	57	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	4	0	69	4	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	57	0	124
Stage 1	-	-	-	-	55
Stage 2	-	-	-	-	69
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1547	-	871
Stage 1	-	-	-	-	968
Stage 2	-	-	-	-	954
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1547	-	871
Mov Cap-2 Maneuver	-	-	-	-	871
Stage 1	-	-	-	-	968
Stage 2	-	-	-	-	954

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	871	-	-	1547	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	9.2	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Traffic Vol, veh/h	40	1	0	55	2	0
Future Vol, veh/h	40	1	0	55	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	1	0	66	3	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	52
Stage 1	-	-	52
Stage 2	-	-	66
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1554	878
Stage 1	-	-	970
Stage 2	-	-	957
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1554	878
Mov Cap-2 Maneuver	-	-	878
Stage 1	-	-	970
Stage 2	-	-	957

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	878	-	-	1554	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	9.1	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗		↕			↕	
Traffic Vol, veh/h	2	285	10	50	255	1	10	1	15	1	0	0
Future Vol, veh/h	2	285	10	50	255	1	10	1	15	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Yield	-	-	Stop
Storage Length	545	-	165	365	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	310	11	54	277	1	13	1	19	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	278	0	0	310	0	0	700	700	310	700	699	277
Stage 1	-	-	-	-	-	-	314	314	-	385	385	-
Stage 2	-	-	-	-	-	-	386	386	-	315	314	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1285	-	-	1250	-	-	354	363	730	354	364	762
Stage 1	-	-	-	-	-	-	697	656	-	638	611	-
Stage 2	-	-	-	-	-	-	637	610	-	696	656	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1285	-	-	1250	-	-	342	347	730	332	348	762
Mov Cap-2 Maneuver	-	-	-	-	-	-	342	347	-	332	348	-
Stage 1	-	-	-	-	-	-	696	655	-	637	585	-
Stage 2	-	-	-	-	-	-	609	584	-	675	655	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.3	9.6	15.9
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	809	1285	-	-	1250	-	-	332
HCM Lane V/C Ratio	0.041	0.002	-	-	0.043	-	-	0.004
HCM Control Delay (s)	9.6	7.8	-	-	8	-	-	15.9
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱	↰	↑	↱		↕			↕	
Traffic Vol, veh/h	0	310	10	35	295	2	15	0	50	0	0	2
Future Vol, veh/h	0	310	10	35	295	2	15	0	50	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Yield	-	-	Stop
Storage Length	545	-	165	365	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	83	83	83	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	337	11	38	321	2	18	0	60	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	323	0	0	337	0	0	735	736	337	734	734	321
Stage 1	-	-	-	-	-	-	337	337	-	397	397	-
Stage 2	-	-	-	-	-	-	398	399	-	337	337	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1237	-	-	1222	-	-	335	346	705	336	347	720
Stage 1	-	-	-	-	-	-	677	641	-	629	603	-
Stage 2	-	-	-	-	-	-	628	602	-	677	641	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1237	-	-	1222	-	-	326	335	705	300	336	720
Mov Cap-2 Maneuver	-	-	-	-	-	-	326	335	-	300	336	-
Stage 1	-	-	-	-	-	-	677	641	-	629	584	-
Stage 2	-	-	-	-	-	-	606	583	-	619	641	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.8			9.3			10		
HCM LOS							A			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	917	1237	-	-	1222	-	-	720
HCM Lane V/C Ratio	0.085	-	-	-	0.031	-	-	0.004
HCM Control Delay (s)	9.3	0	-	-	8	-	-	10
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0

Intersection

Int Delay, s/veh 5.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	12	0	187	0	76	9
Future Vol, veh/h	12	0	187	0	76	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	87	87	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	0	215	0	92	11

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	528	98	103
Stage 1	98	-	-
Stage 2	430	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	511	958	1489
Stage 1	926	-	-
Stage 2	656	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	437	958	1489
Mov Cap-2 Maneuver	437	-	-
Stage 1	793	-	-
Stage 2	656	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.5	7.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1489	-	437	-	-
HCM Lane V/C Ratio	0.144	-	0.035	-	-
HCM Control Delay (s)	7.8	0	13.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	16	0	0	171	65	11
Future Vol, veh/h	16	0	0	171	65	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	87	87	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	0	0	197	78	13

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	282	85	91
Stage 1	85	-	-
Stage 2	197	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	708	974	1504
Stage 1	938	-	-
Stage 2	836	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	708	974	1504
Mov Cap-2 Maneuver	708	-	-
Stage 1	938	-	-
Stage 2	836	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1504	-	708	-	-
HCM Lane V/C Ratio	-	-	0.029	-	-
HCM Control Delay (s)	0	-	10.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	0	0	142	44	6
Future Vol, veh/h	9	0	0	142	44	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	87	87	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	0	0	163	53	7

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	220	57	60	0	-	0
Stage 1	57	-	-	-	-	-
Stage 2	163	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	768	1009	1544	-	-	-
Stage 1	966	-	-	-	-	-
Stage 2	866	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	768	1009	1544	-	-	-
Mov Cap-2 Maneuver	768	-	-	-	-	-
Stage 1	966	-	-	-	-	-
Stage 2	866	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1544	-	768	-	-
HCM Lane V/C Ratio	-	-	0.015	-	-
HCM Control Delay (s)	0	-	9.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1			1	2	
Traffic Vol, veh/h	38	6	0	134	8	0
Future Vol, veh/h	38	6	0	134	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	87	87	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	8	0	154	10	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	57	0	207 53
Stage 1	-	-	-	-	53 -
Stage 2	-	-	-	-	154 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1547	-	781 1014
Stage 1	-	-	-	-	970 -
Stage 2	-	-	-	-	874 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1547	-	781 1014
Mov Cap-2 Maneuver	-	-	-	-	781 -
Stage 1	-	-	-	-	970 -
Stage 2	-	-	-	-	874 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	781	-	-	1547	-
HCM Lane V/C Ratio	0.013	-	-	-	-
HCM Control Delay (s)	9.7	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Vol, veh/h	35	3	0	130	4	0
Future Vol, veh/h	35	3	0	130	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	87	87	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	4	0	149	5	0

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	49	0	196	47
Stage 1	-	-	-	-	47	-
Stage 2	-	-	-	-	149	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1558	-	793	1022
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	879	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1558	-	793	1022
Mov Cap-2 Maneuver	-	-	-	-	793	-
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	879	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLr1	EBT	EBR	WBL	WBT
Capacity (veh/h)	793	-	-	1558	-
HCM Lane V/C Ratio	0.006	-	-	-	-
HCM Control Delay (s)	9.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘		↕			↕	
Traffic Vol, veh/h	2	285	12	65	255	1	11	1	28	1	0	0
Future Vol, veh/h	2	285	12	65	255	1	11	1	28	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Yield	-	-	Stop
Storage Length	545	-	165	365	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	310	13	71	277	1	14	1	36	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	278	0	0	310	0	0	734	734	310	734	733	277
Stage 1	-	-	-	-	-	-	314	314	-	419	419	-
Stage 2	-	-	-	-	-	-	420	420	-	315	314	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1285	-	-	1250	-	-	336	347	730	336	348	762
Stage 1	-	-	-	-	-	-	697	656	-	612	590	-
Stage 2	-	-	-	-	-	-	611	589	-	696	656	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1285	-	-	1250	-	-	321	327	730	304	327	762
Mov Cap-2 Maneuver	-	-	-	-	-	-	321	327	-	304	327	-
Stage 1	-	-	-	-	-	-	696	655	-	611	556	-
Stage 2	-	-	-	-	-	-	576	555	-	659	655	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.6	8.6	16.9
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1043	1285	-	-	1250	-	-	304
HCM Lane V/C Ratio	0.049	0.002	-	-	0.057	-	-	0.004
HCM Control Delay (s)	8.6	7.8	-	-	8.1	-	-	16.9
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0	-	-	0.2	-	-	0

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	2	0	0	36	69	3
Future Vol, veh/h	2	0	0	36	69	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	0	0	46	83	4
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	131	85	87	0	-	0
Stage 1	85	-	-	-	-	-
Stage 2	46	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	863	974	1509	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	976	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	863	974	1509	-	-	-
Mov Cap-2 Maneuver	863	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	976	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.2	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1509	-	863	-	-	
HCM Lane V/C Ratio	-	-	0.003	-	-	
HCM Control Delay (s)	0	-	9.2	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	3	0	0	33	65	4
Future Vol, veh/h	3	0	0	33	65	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	0	42	78	5

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	123	81	83	0	-	0
Stage 1	81	-	-	-	-	-
Stage 2	42	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	872	979	1514	-	-	-
Stage 1	942	-	-	-	-	-
Stage 2	980	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	872	979	1514	-	-	-
Mov Cap-2 Maneuver	872	-	-	-	-	-
Stage 1	942	-	-	-	-	-
Stage 2	980	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1514	-	872	-	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	0	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	✕			✕	✕	
Traffic Vol, veh/h	5	0	0	28	59	6
Future Vol, veh/h	5	0	0	28	59	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	0	0	36	71	7

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	111	75	78	0	-	0
Stage 1	75	-	-	-	-	-
Stage 2	36	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	886	986	1520	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	986	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	886	986	1520	-	-	-
Mov Cap-2 Maneuver	886	-	-	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	986	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1520	-	886	-	-
HCM Lane V/C Ratio	-	-	0.007	-	-
HCM Control Delay (s)	0	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	56	2	0	26	2	0
Future Vol, veh/h	56	2	0	26	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	2	0	33	3	0
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	69	0	101	68
Stage 1	-	-	-	-	68	-
Stage 2	-	-	-	-	33	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1532	-	898	995
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	989	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1532	-	898	995
Mov Cap-2 Maneuver	-	-	-	-	898	-
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	989	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		9		
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	898	-	-	1532	-	
HCM Lane V/C Ratio	0.003	-	-	-	-	
HCM Control Delay (s)	9	-	-	0	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0	-	-	0	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	55	1	0	25	1	0
Future Vol, veh/h	55	1	0	25	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	1	0	32	1	0
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	67	0	99	67
Stage 1	-	-	-	-	67	-
Stage 2	-	-	-	-	32	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1535	-	900	997
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	991	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1535	-	900	997
Mov Cap-2 Maneuver	-	-	-	-	900	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	991	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		9		
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	900	-	-	1535	-	
HCM Lane V/C Ratio	0.001	-	-	-	-	
HCM Control Delay (s)	9	-	-	0	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0	-	-	0	-	

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱	↰	↑	↱		↕			↕	
Traffic Vol, veh/h	0	310	12	52	295	2	17	0	70	0	0	2
Future Vol, veh/h	0	310	12	52	295	2	17	0	70	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Yield	-	-	Stop
Storage Length	545	-	165	365	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	83	83	83	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	337	13	57	321	2	20	0	84	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	323	0	0	337	0	0	773	774	337	772	772	321
Stage 1	-	-	-	-	-	-	337	337	-	435	435	-
Stage 2	-	-	-	-	-	-	436	437	-	337	337	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1237	-	-	1222	-	-	316	329	705	317	330	720
Stage 1	-	-	-	-	-	-	677	641	-	600	580	-
Stage 2	-	-	-	-	-	-	599	579	-	677	641	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1237	-	-	1222	-	-	304	314	705	269	314	720
Mov Cap-2 Maneuver	-	-	-	-	-	-	304	314	-	269	314	-
Stage 1	-	-	-	-	-	-	677	641	-	600	553	-
Stage 2	-	-	-	-	-	-	569	552	-	596	641	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.2	9.7	10
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	876	1237	-	-	1222	-	-	720
HCM Lane V/C Ratio	0.12	-	-	-	0.046	-	-	0.004
HCM Control Delay (s)	9.7	0	-	-	8.1	-	-	10
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	4	0	0	78	60	3
Future Vol, veh/h	4	0	0	78	60	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	0	0	94	77	4

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	173	79	81	0	-	0
Stage 1	79	-	-	-	-	-
Stage 2	94	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	817	981	1517	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	817	981	1517	-	-	-
Mov Cap-2 Maneuver	817	-	-	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	930	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1517	-	817	-	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s)	0	-	9.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	73	56	4
Future Vol, veh/h	5	0	0	73	56	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	0	0	88	72	5

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	163	75	77	0	-	0
Stage 1	75	-	-	-	-	-
Stage 2	88	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	828	986	1522	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	828	986	1522	-	-	-
Mov Cap-2 Maneuver	828	-	-	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	935	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1522	-	828	-	-
HCM Lane V/C Ratio	-	-	0.008	-	-
HCM Control Delay (s)	0	-	9.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	8	0	0	65	49	7
Future Vol, veh/h	8	0	0	65	49	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	0	0	78	59	8

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	141	63	67	0	-	0
Stage 1	63	-	-	-	-	-
Stage 2	78	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	852	1002	1535	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	852	1002	1535	-	-	-
Mov Cap-2 Maneuver	852	-	-	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	945	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1535	-	852	-	-
HCM Lane V/C Ratio	-	-	0.012	-	-
HCM Control Delay (s)	0	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1			1	1	
Traffic Vol, veh/h	46	3	0	62	3	0
Future Vol, veh/h	46	3	0	62	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	4	0	75	4	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	63
Stage 1	-	-	61
Stage 2	-	-	75
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1540	857
Stage 1	-	-	962
Stage 2	-	-	948
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1540	857
Mov Cap-2 Maneuver	-	-	857
Stage 1	-	-	962
Stage 2	-	-	948

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	857	-	-	1540	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	9.2	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱			↱	↱	↱
Traffic Vol, veh/h	45	1	0	60	2	0
Future Vol, veh/h	45	1	0	60	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	1	0	72	3	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	59
Stage 1	-	-	59
Stage 2	-	-	72
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1545	863
Stage 1	-	-	964
Stage 2	-	-	951
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1545	863
Mov Cap-2 Maneuver	-	-	863
Stage 1	-	-	964
Stage 2	-	-	951

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	863	-	-	1545	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	9.2	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Appendix III – “Buckskin Crag Climbing Area Proposal”

[See “Buckskin Crag Climbing Area Proposal” next 21 pages]

THE BUCKSKIN CRAGS

Climbing Area – The Idea

Ben Black

The Buckskin Craggs
Ben Black

The Buckskin Craggs Proposal

Overall Plan(s):

Beta Photos: Climbing/Slackline/Tyrolean

- Key: Yellow Lines = Climbs
Yellow X's = Anchors
Green Line = Highline/Slackline
Purple Line = Tyrolean Traverse
- **The Buckskin Craggs!**



The Buckskin Crags
Ben Black

- **Rock 1/Buddha Wall**



The Buckskin Crag
Ben Black

- **The SWEET SPOT!**



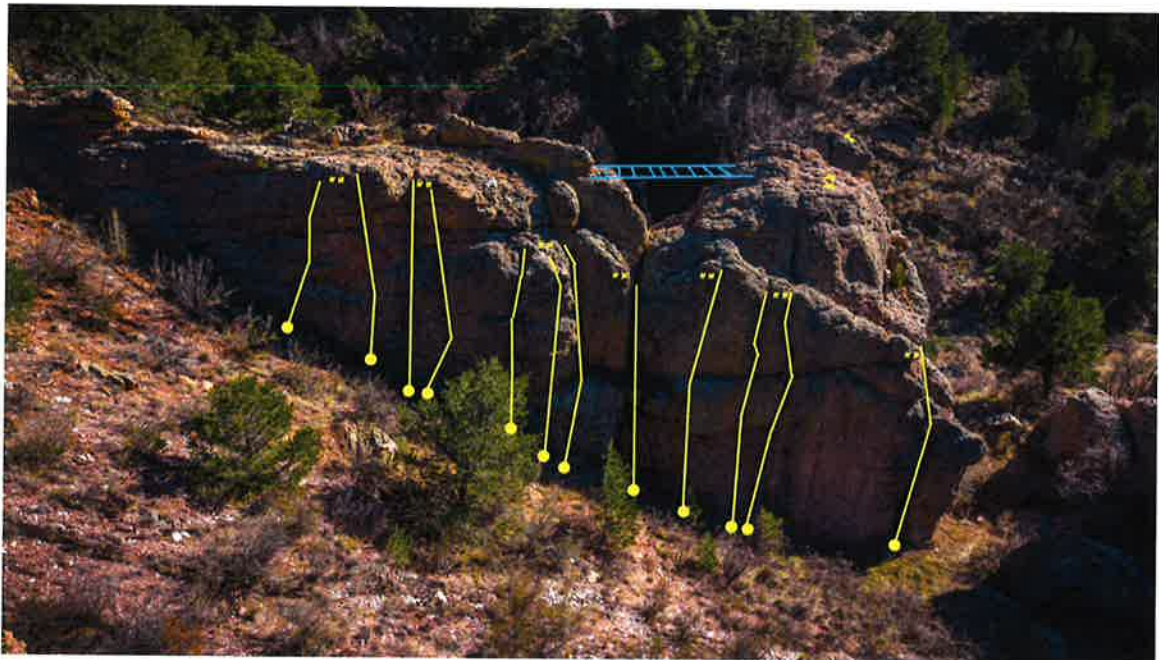
The Buckskin Craggs
Ben Black

- **Rock 2**

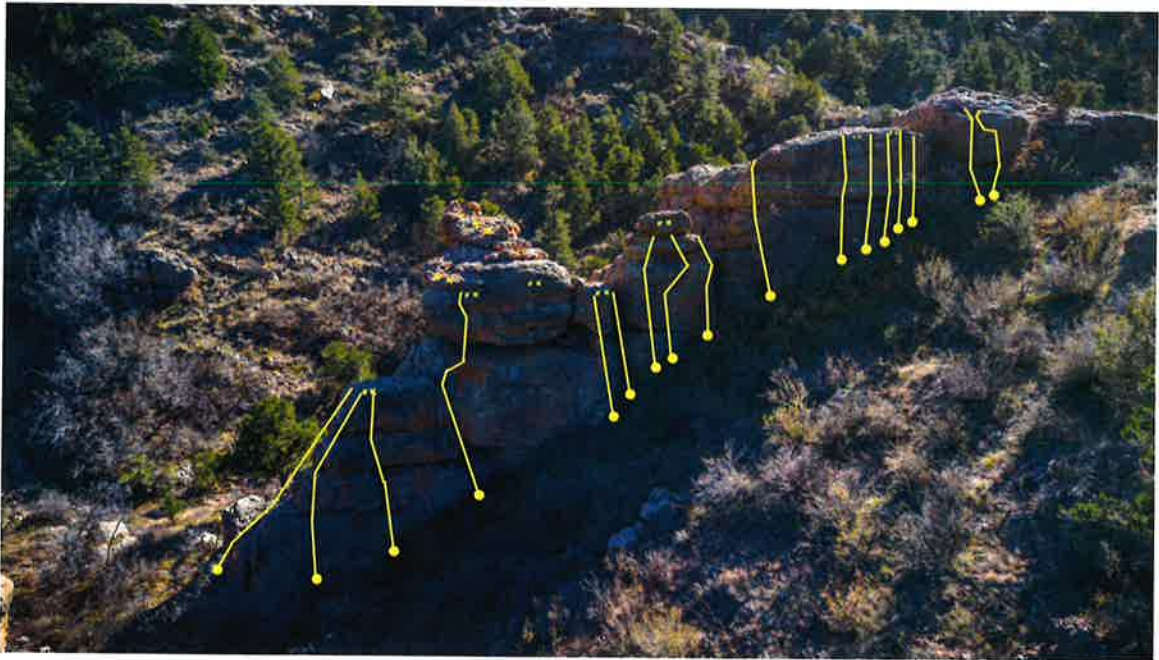


The Buckskin Craggs
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- **Rock 3**

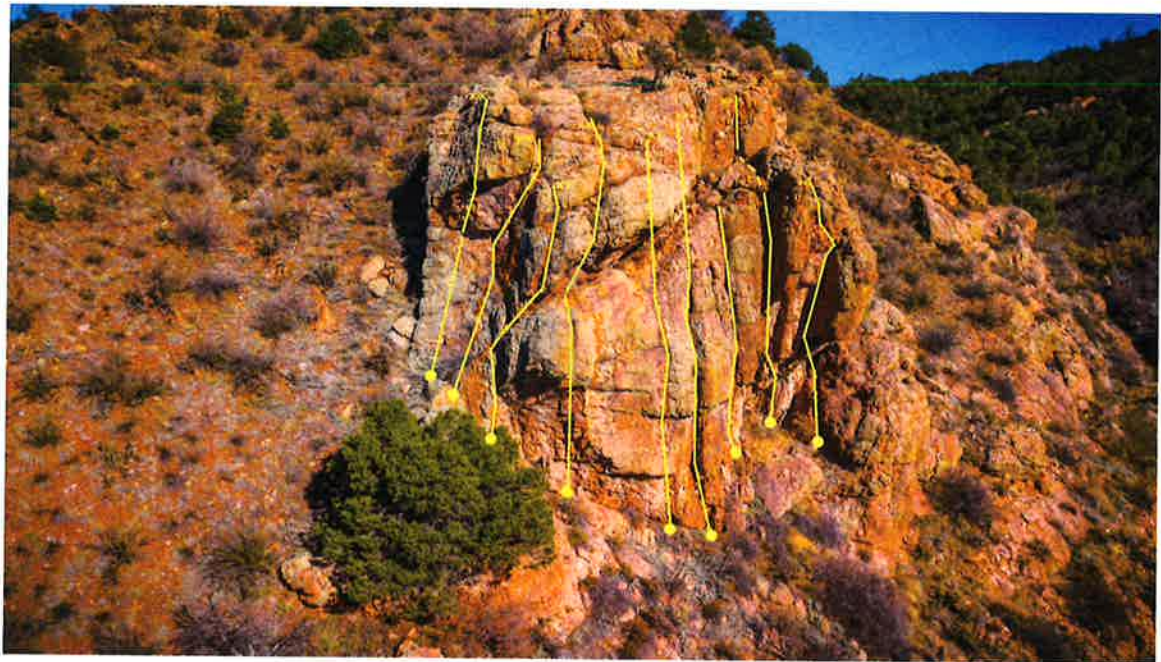


The Buckskin Crags
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The Buckskin Craggs
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- **Rock 4**



The Buckskin Crags
Ben Black



The Buckskin Crags
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- **Rock 5**



- **Bouldering Area 1**



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- **Bouldering Area 2**



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- **Beta Photos: Via Ferrate:**

- Key: Orange = Hand/Feet Holds
Red = Wire Cable
Yellow = Anchors
White = Climbs

- **Rock 1**



- **Rock 2**



The Buckskin Crags
Ben Black

Pre-Production:

1. Go Over Overall Plan/Design
2. Budget for Climbing Area
3. Estimated Time Frame/Deadline (estimated)
4. Full Time?
5. Personally Trusted Employee(s)?
6. Route Totals (for sure/possibly)
7. Supplies Needed
8. Price of Climbing Hardware
9. Insurance
10. The Access Fund
11. Phases of Development

The Buckskin Crags
Ben Black

Production:

Phase 1 – Rock Climbing Area

1. Clear/Clean Tops of Rock
2. Crag Trail Maintenance
3. Ticks for Anchors
4. Anchors
5. Route Cleaning
6. Ticks for Bolts
7. Bolts for Sport/Mix/Aid
8. Crag Trail Maintenance
9. FA's
10. Clean up Area

Phase 2 – Via Ferrate

1. Ticks for Cable
2. Ticks for Rebar
3. Prefabricated Holds for Via Ferrate
4. Anchors for Cable
5. Install Cable
6. Drill for Rebar
7. Install Rebar
8. Clean up area

Phase 3 – Skywalk?

1. Measurements/Ticks
2. Fabrication Iron/Steel
3. Anchor in Skywalk
4. Clean up Area

Phase 4 – Post Signage with legal exclaimers

Phase 5 – Clean Up Area!

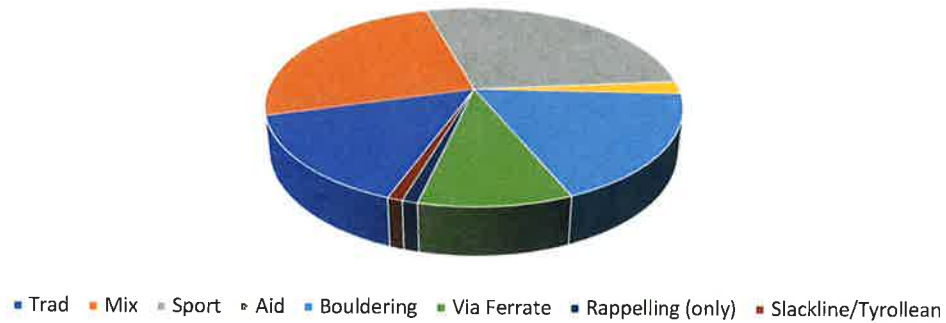
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Post Production (Opening Day):

1. Get People
2. Get Mountain Bikers of All Levels
3. Get Climbers of all levels
4. Videography/Photography
5. Edit Photos (Beta, Climbing, Landscape, Nature)
6. Guide Book Design
7. Guide Book Review
8. Guide Book Published
9. Documented Footage/Photos
10. Edit Video

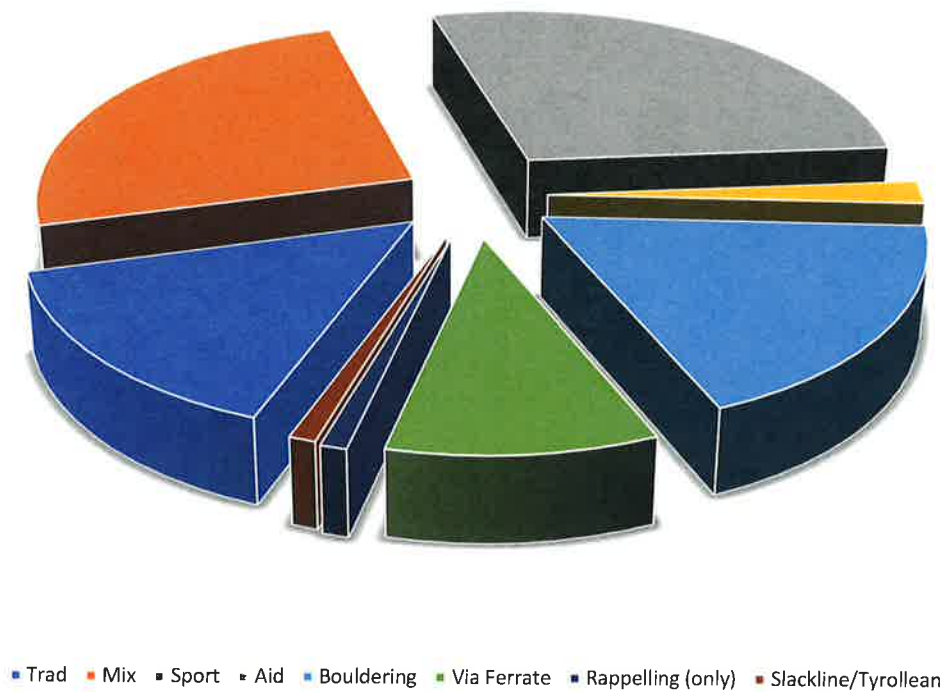
BUCKSKIN CLIMBING AREA CHARTS

Climbing Area



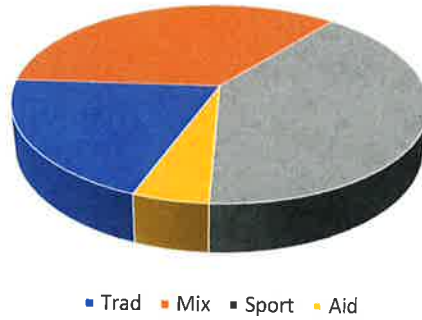
*Trad = 15%, Mix = 25%, Sport = 28%, Aid = 2%, Bouldering = 18%, Via Ferrate = 10%, Rappelling = 1%,
Slack-Line/Tyrollean = 1%.*

Climbing Area (Spead Apart)



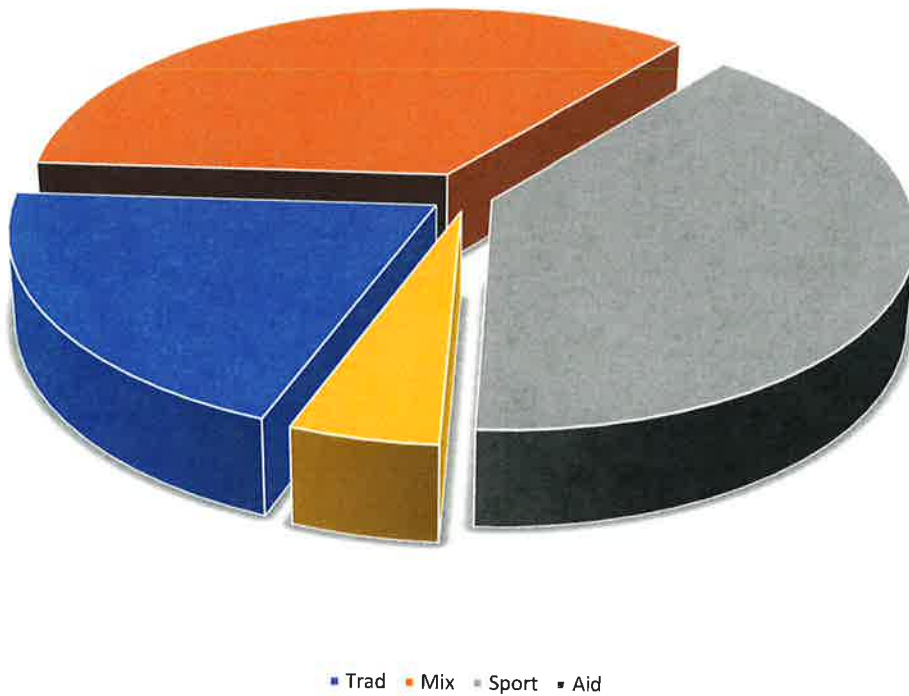
BUCKSKIN CLIMBING AREA (Bolted ONLY) CHARTS

Climbing Area (BOLTED ONLY)



Trad = 20%, Mix = 35%, Sport = 40%, Aid = 5%

Climbing Area (BOLTED ONLY - Spread Apart)



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- **Type of Equipment:**

- **Cleaning Equipment:**

1. 36V - 18V Cordless Drill – Hilti TE 6-A36 (bigger/better drill meant for drilling concrete and rock) which is \$450, or Makita XRH04Z 18V LXT 3.0 Ah Lithium-Ion 7/8 inch Rotary Hammer Bare Tool (good enough for drilling rock) which is \$239.
2. Extra Batteries/Charger
3. ½ Inch SDS Plus Drill Bit - \$100 lasting 10-30 holes/bit (1/2 X 4)
4. Hammer (BD Alpine or standard) - \$25 - \$100
5. Wire Brushes/Nylon Brushes/Boars Hair Brushes
6. Wrecking Bar
7. Pry Bars
8. Rake
9. Shovel

- **Climbing Equipment/Tools:**

1. Hanging Chair (Bosun Chair)
2. 60ft Static Rope
3. 2 Screw-Gate Carabiners
4. Stopper Set
5. Accessory Cord
6. Fifi Hooks
7. Talon Hook
8. Climbing Gloves
9. Climbing Helmet

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- Type of Hardware:

- Route Setting Hardware:

1. ½ Inch Stainless-Steel Fixe Bolt Hangers from FixeHardware.com - \$3 each, 100 for \$2.25 each (saving 25%), or 500 for \$2.10 each (saving 30%).
2. Fixe Stainless-Steel Chain + 199 Ring - \$19 each
3. Power Stainless Steel ½ Inch x 3 ¾, 5 Piece Bolt - \$2.80 each
4. Screw Links - \$7 - \$10 each

Or

1. Fixe Stainless-Steel ½ Chain Anchor (1, 2, and 4 listed above) - \$21.25 each
2. Power Stainless-Steel ½ Inch x 3 ¾, 5 Piece Bolt - \$2.80 each

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- **Total Expenses:**

Home Depot (TOOLS) Totals:

- *Wrecking Bar, Pry Bars, Climbing Drill, 2 Batteries, Dual Battery Charger, Drill Bit, Rake, Shovel, and Shears*

Total for 9 items = **\$630.54**

Black Diamond Equipment (TOOLS) Totals:

- *2 Brush Sets, Hanging Chair, Static Rope, 2 Screw-gate Carabiners, Stopper Set, Accessory Cord, Fifi Hooks, Talon Hook, and Climbing Gloves*

Total for 12 items = **\$638.40**

HARDWARE Totals:

- *Anchor Systems/Bolts*

1. *With Standard Individual Pieced Anchor System (Including Sport Bolts)*

- 100 Individual Piece Anchor Systems = **\$18,350**
- 200+ (Possible) Individual Anchor Systems = **\$36,700**

2. *With Pre-Assembled Anchors (Not Including Sport Bolts)*

- 100 Pre-Assembled Anchor Systems = **\$7,050**
- 200+ (Possible) Individual Anchor Systems = **\$14,100+**

Totals for Tools/Equipment (roughly) = \$1,268.94

Totals for Hardware (roughly) = (above).

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Random Notes/Research:

- Number of Climbs: There are 82 "For Sure" Bolted Routes, with a possibility for over 200 Bolted Routes in the area, with heights ranging from 10 feet, all the way 50/60 feet. The bouldering could be 25 to 75 routes, give or take, with heights up to 20ish feet.
- Type of Rock: Red Granite, Quartz, Bentonite (I Think), and Mica, with solid anchor spots.
- Quality Hardware: ½ Inch Stainless Steel Hangers with 3 and ¾ Inch Stainless Steel Bolts. Stainless Steel Chains as well. This will make for safer/ longer lasting hardware. FixeHardware.com has some of the best climbing hardware.