

Craftsman Village of the Crossroads At Mountain View Meadows Phases 8-10 Traffic Impact Study Update

Helena, Montana



Prepared For:

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Craftsman Village of the Crossroads At Mountain View Meadows Phases 8-10 Traffic Impact Study Helena, Montana

A. EXECUTIVE SUMMARY

The Craftsman Village of the Crossroads at Mountain View Meadows Phases 8-10 is a 40-acre residential development located south of US Highway 12/287 in Helena, Montana. The project would consist of 230 single family residential units and would be accessed from Alpine View Drive and Jeannette Rankin Drive. As proposed Craftsman Village of the Crossroads would produce 2,169 new daily trips in the area at full build-out. Craftsman Village of the Crossroads Phases 8-10 will not affect roadway operations in the area. All nearby intersections will continue to function at acceptable levels of service with the proposed development. No roadway modifications are currently recommended with this project.

B. PROJECT DESCRIPTION

This document studies the possible effects on the surrounding road system from a proposed 40acre residential development located south of US Highway 12/287 within the City of Helena between Helena and East Helena. The document identifies any traffic mitigation efforts that the development may require. The site is located north of Jeannette Rankin Drive and east of Alice Street.

C. EXISTING CONDITIONS

The proposed development property currently consists of a 40-acre parcel of undeveloped land located south of US Highway 12/287 and north of Jeannette Rankin Drive adjacent to Mountain View Park and the previous phases of the Craftsman Village of the Crossroads which are nearing completion. The topography in this area consists of rolling hills which slope downward to the east. See **Figure 1** for a location map of the proposed development.

Adjacent Roadways

US Highway 12/287 is a four-lane, two-way east/west highway which extends east from Helena. US Highway 12/287 has a five-lane cross-section and the posted speed limit near Crossroads Parkway is 55 MPH which decreases to 45 MPH approximately 0.5 miles west of Crossroads Parkway and at the East. The Highway intersects with Crossroads Parkway at a signalized intersection. Crossroads Parkway has a separated eastbound lane from

Highway 287 at the traffic signal. Traffic counts collected in 2021 by Montana Department of Transportation (MDT) indicate that this section of roadway carries an Average Daily Traffic (ADT) volume of 17,200 vehicles per day (VPD) west of Crossroads Parkway.

Highway 282 is a two-way north/south highway which extends south from Highway 12/287 in East Helena to an overpass at I-15. Highway 282 has a two-lane rural cross-section with a paved width of 28 feet. Near Runkle Parkway the highway has an extended width accommodating a northbound left-turn lane at the intersection. The posted speed limit near Runkle Parkway is 45 MPH and increases to 60 MPH south of Runkle Parkway. Traffic counts collected in 2021 by MDT indicate that this section of roadway carries an Average Daily Traffic (ADT) volume of 1,900 vehicles per day (VPD) south of Manlove Street.

Crossroads Parkway is a north/south, four-lane roadway that extends south from US Highway 12/287 providing residential and commercial access in the area. The road has an urban cross-section with a paved width of 65 feet, which includes left-turn bays at each intersection. The roadway features a central median and has a posted speed limit of 35 MPH. Crossroads Parkway is signal controlled at the intersection with US Highway 12/287.

Alice Street is a two-lane road which provides access to developments south of US Highway 12/287. Alice Street starts in an east/west direction at its intersection with Crossroads Parkway and changes to north/south approximately 0.25 miles east of Crossroads Parkway. The street has variable widths (24, 30, 36 and 40 feet) due to bulb outs along its north/south direction. The posted speed limit on Alice Street is 35 MPH. Data collected by Abelin Transportation Services (ATS) in 2022 indicates that the roadway currently carries 2,100 VPD.

Jeannette Rankin Drive is an east/west, two-lane residential collector street which intersects Alice Street to provide access to homes and the Mountain View Park. Jeannette Rankin Drive has a paved width of 33 feet and is a thru-street with STOP signs at each intersection. Jeannette Rankin Drive has a STOP sign at its intersection with Alice Street. Data collected by ATS in 2022 indicates that the roadway currently carries say 500 VPD.

Runkle Parkway is an east/west, two-lane roadway that extends west from Highway 282 providing residential access in the area. The road has an urban cross-section with a paved width of 42 feet and a posted speed limit of 35 MPH. Runkle Parkway has a central median with designated left-turn lanes at all cross-streets. Runkle Parkway is STOP controlled at the tee-intersection with Highway 282.

Alpine View Drive is a north/south, two-lane road which intersects Runkle Parkway to provide access to the developments in the area. The roadway is currently under construction to City of Helena local road standards.



Figure 1- Proposed Development Site

Traffic Counts

In July 2022 ATS collected traffic data to evaluate current operational characteristics. The data collected includes a peak-hour turning movement count performed at the intersection of Jeannette Rankin Drive and Alice Street and 48-hour traffic counts along Alice Street and Jeannette Ranking Drive. Additional data used for this project was obtained from a February 2021 traffic counting effort by ATS at the intersections of Highway 282 with Runkle Parkway and Alpine View Drive. The raw traffic data is included in Appendix A of this report.

Raw traffic data is typically adjusted for seasonal variation in accordance with the data collected from MDT's permanent traffic data located on Custer Avenue east of York Road (Station A-079). This count station data indicated that data collected in July 2022 is approximately 116% of the Average Annual Daily Traffic (AADT) in this area. For a conservative result no factorization applied was to the raw data for the analysis of this project.

ATS obtained historic traffic data for US Highway 12 and MT Highway 282 from the MDT. This data is presented in **Table 1**. Based on the available traffic data for these two roadways, traffic volumes in this area have not increased significantly over the past ten years.

Location	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Hwy 282 S of Manlove St										
#25-7B-044					1,596	1,583	1,917	1,929	1794	1795
Hwy 12/287 W of Wylie Dr										
#25-7B-019	18,660	17,520	17,920	17,000	16,540	17,099	17,338	17,251	15,733	17,196

 Table 1 - Historic Average Daily Traffic Data (Source: MDT)

Vehicle speed and volume data was also collected along Alice Street during the July count period. This information suggested that the average vehicle speed on Alice Street north of Jeannette Rankin Drive was 30 MPH with an 85th percentile speed of 37 MPH for all recorded vehicles. In general, vehicle travel speeds on this section are near or slightly above the posted 35 MPH speed limit.

Additional Projects

Aspen View Condominiums Phase 1 & 2 are currently under construction just north of Runkle Parkway along Alpine View Drive. The projects will include 58 condominium units and would produce 424 VPD from both phases. The projected future traffic from this project is included with the overall analysis for the Craftsman Village development.

Level of Service

Using the data collected for this project, ATS conducted a Level of Service (LOS) analysis at area intersections. This evaluation was conducted in accordance with the procedures outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)* - *Special Report 209* and the Highway Capacity Software (HCS) version 7.9. Intersections are graded from A to F representing the average delay that a vehicle entering an intersection can expect. Typically, a LOS of C or better is considered acceptable for peak-hour conditions.

Table 2 shows the existing 2022 LOS for the AM and PM peak hours without the traffic from the proposed Craftsman Village of the Crossroads Phases 8-10. The LOS calculations

are included in **Appendix C**. The table shows that the existing intersections along Alice Street and Runkle Parkway are currently operating within acceptable limits. No intersection modifications are currently needed in this area to improve capacity.

	AM Pea	ak Hour	PM Peak Hour				
Intersection	Delay (Sec.)	LOS	Delay (Sec.)	LOS			
Highway 282 & Runkle Parkway*	10.8	В	9.0	А			
Runkle Parkway & Alpine View*	9.0	А	8.7	А			
Alice Street & Jeannette Rankin*	9.2	А	9.0	А			

Table 2 – 2021 Level of Service Summary (Source: ATS)

*Northbound/Southbound LOS and Delay or Eastbound/Westbound Side Street LOS and Delay.

D. PROPOSED DEVELOPMENT

The development currently under consideration for this site includes 40 acres of land located west of the previous phases of the Craftsman Village of the Crossroads development and bordered by Jeannette Rankin Drive and Alpine View Drive. Phases 8-10 of the development would include up to 230 single-family residential properties. The project is planned for the development of 70 lots in phases 8 and 9 and 90 lots in Phase 10. Access to the site would be provided through existing approaches from Jeannette Rankin Drive to the west and Alpine View Drive and a new connection to Alice Street at Alpine View Drive would be constructed with Phase 10. These phases of the project are expected to reach full development by 2025. All roads within the development would be constructed to City the Helena standards and will include boulevard sidewalks. The Craftsman Village of the Crossroads phases 8-10 is shown in **Figure 2**.

E. TRIP GENERATION AND ASSIGNMENT

ATS performed a trip generation analysis to determine the anticipated future traffic volumes from the proposed development using the trip generation rates contained in *Trip Generation* (Institute of Transportation Engineers, Eleventh Edition). These rates are the national standard and are based on the most current information available to planners. A vehicle "trip" is defined as any trip that either begins or ends at the development site. ATS determined that the critical traffic impacts on the intersections and roadways would occur during the weekday morning and evening peak hours. According to the ITE trip generation rates, the Craftsman Village of the Crossroads would produce 161 AM peak hour trips, 216 PM peak hour trips, and 2,169 daily trips. See **Table 3** for detailed trip generation information.

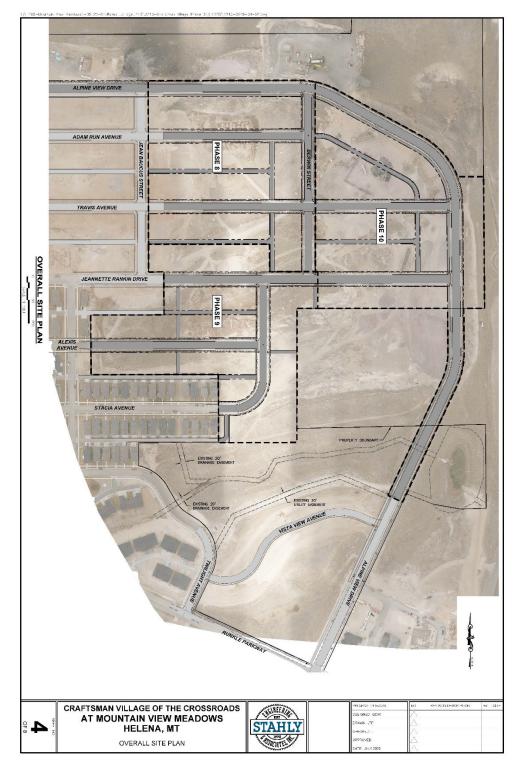


Figure 2 – Proposed Development

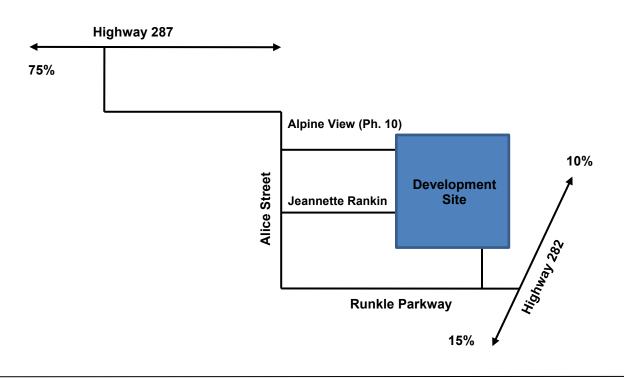
	I G						
Units	Units	AM Peak Hour Trip Ends per Unit	Total AM Peak Hour Trip Ends	PM Peak Hour Trip Ends per Unit	Total PM Peak Hour Trip Ends	Weekday Trip Ends per Unit	Total Weekday Trip Ends
Single-Family Res. ITE #210	230	0.70	161	0.94	216	9.43	2,169

Table 3 - Trip Generation Rates (Source: ATS)

F. TRIP DISTRIBUTION

The traffic distribution and assignment for the proposed subdivision was based upon the existing ADT volumes along the adjacent roadways and the peak-hour turning volumes. It is expected that 75% of the traffic from the proposed development site would use Jeannette Rankin Drive and Alpine View Drive to reach Alice Street and Highway 287 to the west into Helena, 15% would distribute to the south onto Runkle Parkway and Highway 282 to the south, and 10% would distribute north onto Highway 282 towards East Helena. All traffic directing towards Helena from Phases 8 and 9 of the development would use Jeanette Rankin Drive. This traffic will decrease significantly in Phase 10 with the direction connection of Alpine View Drive to Alice Street. Traffic is expected to distribute onto the surrounding road network as shown on **Figure 3**.





G. TRAFFIC IMPACTS OUTSIDE OF THE DEVELOPMENT

Using the trip generation and trip distribution numbers, ATS determined the future Level of Service for the area intersections. The anticipated intersection LOS with the Craftsman Village of the Crossroads Phases 8-10 is shown in **Tables 4**. These calculations are based on the projected model volumes included in **Appendix B** of this report and includes the projected traffic from the 58 units from the Aspen View Condominiums Phases 1&2 currently under construction.

Table 4 indicates that the construction of the Craftsman Village of the Crossroads Phases 8-10 will have little effect on the traffic conditions within the area. All area intersections will continue to function at LOS B or better at full build-out and no additional mitigation measures will be needed to improve intersection capacity. Both the intersections of Twilight Avenue and Alpine View Drive with Runkle Parkway have existing center left-turn lanes which will provide reserve operational capacity for these intersections well into the future. Based on the existing and projected traffic volumes along Alice Street, no additional turning lanes would be required at the intersections with Alpine View Drive or Jeannette Rankin Drive.

Total traffic volumes on Alice Street and Crossroads Parkway will increase by 1,600 VPD to a total of 3,700 VPD which is well within the capacity of a collector roadway. Traffic volume along the southern portion of Alpine View Drive will increase by approximately 500 VPD. The project will initially increase traffic volumes along Jeannette Rankin Drive (collector roadway) by approximately 1,000 VPD with Phases 8 & 9 which will increase the total traffic along Jeannette Rankin Drive to 1,500 VPD. With the connection of Alpine View Drive to Alice Street with Phase 10 of the project, traffic volumes along Jeannette Rankin Drive will decrease to approximately 800 VPD.

				1			
	AM Pea	ak Hour	PM Peak Hour				
Intersection	Delay (Sec.)	LOS	Delay (Sec.)	LOS			
Highway 282 & Runkle Parkway	11.3	В	9.7	А			
Runkle Parkway & Alpine View*	9.0/9.7	A/A	8.8/8.8	A/A			
Alice Street & Alpine View	9.7	A	9.6	А			
Alice Street & Jeannette Rankin	9.4	A	9.3	А			

Table 4 –Level of Service Summary With the Craftsman Village of the Crossroads Phases 8-10 (Source: ATS)

*Northbound/Southbound LOS and Delay.

H. IMPACT SUMMARY & RECOMMENDATIONS

As proposed Craftsman Village of the Crossroads would produce 2,169 new daily trips in the area at full build-out. Craftsman Village of the Crossroads Phases 8-10 will not affect roadway operations in the area. All nearby intersections will continue to function at acceptable levels of service with the proposed development. No roadway modifications are currently recommended with this project.

APPENDIX A

Traffic Data

Turning Movement Count All Vehicles

Location MountainView Date 7-19 PM and 7-20 AM

Date	7-19 PM	and /																
			Northb				Southb				Eastb				Westb			
		Left	Thr	0	Peds			-	Peds		Thr	-	Peds		Thr	Right		TOTAL
7:00 -		0			0	0	0	0	0	0		-	-	0	0	0	0	0
7:15 -	7:30	0	13	0	0	5	4	0	0	0	0	0	0	0	0	7	0	29
7:30 -	7:45	0	18	0	0	5	6	0	0	0	0	0	0	1	0	6	0	36
7:45 -	8:00	0	20	4	0	9	7	0	0	0	0	0	0	2	0	8	0	50
8:00 -	8:15	0	15	0	0	5	6	0	0	0	0	0	0	1	0	3	0	30
8:15 -	8:30	0	13	1	0	9	3	0	0	0	0	0	0	0	0	8	0	34
8:30 -		0	15	1	0	9	11	0	0	0	0	0	0	0	0	3	0	39
8:45 -		0			0	0	0	0	0	0			-	0	0	0	0	0
9:00 -		0			0	0	0	0	0	0			-	0	0	0	0 0	0
9:15 -		0			0	Ő	Ő	Ő	0	0			-	Ő	Ő	0	0	0
9:30 -		0	Ű	-	0	Ő	0	0	0	0	-	-	-	0	Ő	0	0 0	0
9:45 -		0			0	0	0	0	0	0			-	0	0	0	0	0
10:00 -		0			0	0	0	0	0	0			-	0	0	0	0	0
10:00 -		0			0	0	0	0	0	0			-	0	0	0	0	0
10:13 -		0			0	0	0	0	0	0			-	0	0	0	0	0
		-	-		0	0			0	0			-	-	0	0	-	0
10:45 -		0	-	-	0	0	0	0	0	0	-	-	-	0	0	0	0	0
11:00 - 11:15 -		0	-	-	0	0	0 0	0 0	0	0	-			0	0	0	0 0	0
					0	0	0	0	0					-	0		0	-
11:30 -		0			-				-	0			-	0		0	-	0
11:45 -		0	-	-	0	0	0	0	0	0	-		-	0	0	0	0	0
12:00 -		0			0	0	0	0	0	0			-	0	0	0	0	0
12:15 -		0			0	0	0	0	0	0			-	0	0	0	0	0
12:30 -		0	-		0	0	0	0	0	0			-	0	0	0	0	0
12:45 -		0	-	-	0	0	0	0	0	0	-		-	0	0	0	0	0
1:00 -		0			0	0	0	0	0	0			-	0	0	0	0	0
1:15 -		0			0	0	0	0	0	0			-	0	0	0	0	0
1:30 -		0			0	0	0	0	0	0			-	0	0	0	0	0
1:45 -		0	-		0	0	0	0	0	0			-	0	0	0	0	0
2:00 -		0	-	-	0	0	0	0	0	0	-	-	-	0	0	0	0	0
2:15 -		0	-		0	0	0	0	0	0			-	0	0	0	0	0
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2:45 -	3:00	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
3:00 -	3:15	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0
3:15 -	3:30	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0
3:30 -	3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 -	4:00	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0
4:00 -	4:15	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0
4:15 -	4:30	0	11	0	0	2	18	0	0	0	0	0	0	0	0	5	0	36
4:30 -	4:45	0	14	2	0	2	16	0	0	0	0	0	0	0	0	9	0	43
4:45 -	5:00	0	11	0	0	1	11	0	0	0	0	0	0	0	0	5	0	28
5:00 -	5:15	0	17	1	0	9	13	0	0	0	0	0	0	0	0	8	0	48
5:15 -	5:30	0	13	0	0	9	14	0	0	0	0	0	0	2	0	14	0	52
5:30 -	5:45	0	10	0	0	7	21	0	0	0	0	0	0	0	0	3	0	41
5:45 -	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 -	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 -		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 -		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 -		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
		0	170	9	0	72	130	0	0	0	0	0	0	6	0	79	0	466

Abelin Traffic Services 130 S. Howie Street

Helena, MT 59601

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: 00000000
: 2/23/2021
: 1

							Grou	ups Pr	inted-	Unshift	ed - B	ank 1	- Banl	< 2							
		282					RUNK	ĹE			282					RUNKLE					
		So	uthbo	und			W	estbou	und		Northbound				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
07:30 AM	1	41	0	0	42	0	0	0	0	0	0	7	1	0	8	6	0	5	0	11	61
07:45 AM	3	46	0	0	49	0	0	0	0	0	0	23	0	0	23	14	0	10	0	24	96
Total	4	87	0	0	91	0	0	0	0	0	0	30	1	0	31	20	0	15	0	35	157
08:00 AM	4	45	0	0	49	0	0	0	0	0	0	7	5	0	12	9	0	7	0	16	77
08:15 AM	0	16	0	0	16	0	0	0	0	0	0	7	4	0	11	8	0	1	0	9	36
DREAN	**					-				-	-										
Total	4	61	0	0	65	0	0	0	0	0	0	14	9	0	23	17	0	8	0	25	113
*** BREAK *	**																				
04:30 PM	3	13	0	0	16	0	0	0	0	0	0	36	3	0	39	8	0	2	0	10	65
04:45 PM	7	12	0	0	19	0	0	0	0	0	0	25	6	0	31	4	0	5	0	9	59
Total	10	25	0	0	35	0	0	0	0	0	0	61	9	0	70	12	0	7	0	19	124
	1																				
05:00 PM	3	7	0	0	10	0	0	0	0	0	0	42	15	0	57	7	0	1	0	8	75
05:15 PM	3	10	0	0	13	0	0	0	0	0	0	35	15	0	50	1	0	2	0	3	66
*** BREAK *		47	0	0	00	0				0	0	77		0	407	0				44	4.4.4
Total	6	17	0	0	23	0	0	0	0	0	0	77	30	0	107	8	0	3	0	11	141
*** BREAK *	**																				
Grand Total	24	190	0	0	214	0	0	0	0	0	0	182	49	0	231	57	0	33	0	90	535
Apprch %	11.2	88.8	0	0		0	0	0	0		0	78.8	21.2	0		63.3	0	36.7	0		
Total %	4.5	35.5	0	0	40	0	0	0	0	0	0	34	9.2	0	43.2	10.7	0	6.2	0	16.8	
Unshifted	24	190	0	0	214	0	0	0	0	0	0	182	49	0	231	57	0	33	0	90	535
% Unshifted																					
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>% Bank 1</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Abelin Traffic Services

Helena, MT 59601

File Name : RunkleAlpineTMC Site Code : 00000000 Start Date : 2/24/2021 Page No : 1

	Groups Printed- Unshifted - Bank 1 - Bank 2																				
	A	LPINE	VEIV	V			RUNK	LE			A	LPINE	E VEIV	V		RUNKLE					
		So	uthbo	und			W	estbou	und		Northbound				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
*** BREAK *	**																				
07:30 AM	0	0	0	0	0	0	1	1	0	2	1	1	1	0	3	0	10	0	0	10	15
07:45 AM	0	0	0	0	0	0	4	0	0	4	3	0	1	0	4	0	21	0	0	21	29
Total	0	0	0	0	0	0	5	1	0	6	4	1	2	0	7	0	31	0	0	31	44
08:00 AM	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	15	0	0	15	24
08:15 AM	•* **	0	0	0	0	0	4	1	0	5	1	0	1	0	2	6	8	0	0	14	21
Total	0	0	0	0	0	0	12	1	0	13	2	0	1	0	3	6	23	0	0	29	45
*** BREAK *	**																				
04:30 PM	0	0	0	0	0	0	5	1	0	6	2	0	1	2	5	0	6	0	0	6	17
04:45 PM	0	0	0	0	0	0	13	2	1	16	1	0	0	0	1	1	9	0	1	11	28
Total	0	0	0	0	0	0	18	3	1	22	3	0	1	2	6	1	15	0	1	17	45
05:00 PM	0	0	0	0	0	0	15	3	0	18	2	0	1	0	3	0	3	2	0	5	26
05:15 PM	0	0	0	0	0	0	12	2	0	14	0	0	0	0	0	0	4	0	0	4	18
*** BREAK *	**																				
Grand Total	0	0	0	0	0	0	62	10	1	73	11	1	5	2	19	7	76	2	1	86	178
Apprch %	0	0	0	0		0	84.9	13.7	1.4		57.9	5.3	26.3	10.5		8.1	88.4	2.3	1.2		
Total %	0	0	0	0	0	0	34.8	5.6	0.6	41	6.2	0.6	2.8	1.1	10.7	3.9	42.7	1.1	0.6	48.3	
Unshifted	0	0	0	0	0	0	62	10	1	73	11	1	5	2	19	7	76	2	1	86	178
% Unshifted	0	0	0	0	0	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

For Project:	AliceStreet Helena					
Project Notes:						
Location/Name:	Merged					
Report Generated:	8/3/2022	09:06				
Speed Intervals	1 MPH					
Time Intervals	Instant					
Traffic Report From	7/19/2022	10:00:00	through	7/21/2022	11:59:59	
85th Percentile Speed	37 MPH					
85th Percentile Vehicles	3703					
Max Speed	67 MPH	on	7/19/2022	17:26:37		
Total Vehicles	4357					
AADT:	2091					
Volumes -						
weekly counts						
-	Time	5 Day	7 Day			
Average Daily		1452	1452			
AM Peak	07:00	186	186			
PM Peak	12:00	196	196			
Speed						
Speed Limit:	35					
85th Percentile Speed:	37					
50th Percentile Speed:	31					
10 MPH Pace Interval:	28.0 MPH	to				
		to	38.0 MPH			
Average Speed:	29.54	Tuesday	Wednesday	Thursdov	Friday	Coturdou
Count over limit	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Count over limit % over limit	N/A	324	502	174	N/A	N/A
	N/A	22.7	23.2	22.7	N/A	N/A
Avg Speeder	N/A	38.5	38.6	38.6	N/A	N/A
Class Counts						
	Number		%			
VEH_SM	101		2.3			
VEH_MED	4107		94.3			
VEH_LG	149		3.4			
[VEH_SM=motorcycle,	VEH_MED = sedan,		VEH_LG = truck]			

Sunday
N/A
N/A
N/A

Merged Weekly Counts AliceStreet Helena

from Tue-Jul-19-2022-10-00-AM to Thu-Jul-21-2022-11-59-AM

	7/18/2022	to	7/24/2022							
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Week	Weekend	Week Day 85%
Hour	7/18/2022	7/19/2022	7/20/2022	7/21/2022	7/22/2022	7/23/2022	7/24/2022	Day Avg	Avg	Avg Speed
0 - 1	*	*	4	3	*	*	*	3.5	0	33.5
1 - 2	*	*	2	1	*	*	*	1.5	0	31.5
2 - 3	*	*	1	2	*	*	*	1.5	0	32
3 - 4	*	*	5	4	*	*	*	4.5	0	36
4 - 5	*	*	4	4	*	*	*	4	0	30
5 - 6	*	*	36	38	*	*	*	37	0	35.9
6 - 7	*	*	71	51	*	*	*	61	0	37.25
7 - 8	*	*	191	182	*	*	*	186.5	0	36.3
8 - 9	*	*	164	137	*	*	*	150.5	0	36.2
9 - 10	*	*	116	113	*	*	*	114.5	0	36.65
10 - 11	*	18	151	109	*	*	*	92.67	0	35.13
11 - 12	*	165	149	122	*	*	*	145.33	0	36.37
12 - 13	*	177	215	*	*	*	*	196	0	36.35
13 - 14	*	127	160	*	*	*	*	143.5	0	36.7
14 - 15	*	112	122	*	*	*	*	117	0	36.7
15 - 16	*	148	115	*	*	*	*	131.5	0	35.75
16 - 17	*	158	189	*	*	*	*	173.5	0	36.75
17 - 18	*	221	166	*	*	*	*	193.5	0	36.95
18 - 19	*	90	91	*	*	*	*	90.5	0	37.3
19 - 20	*	81	65	*	*	*	*	73	0	37.65
20 - 21	*	72	45	*	*	*	*	58.5	0	36.5
21 - 22	*	39	61	*	*	*	*	50	0	35.5
22 - 23	*	21	29	*	*	*	*	25	0	35
23 - 24	*	1	9	*	*	*	*	5	0	32.5
Totals	0	1430	2161	766	0	0	0			
% of Total	0%	32.82%	49.6%	17.58%	0%	0%	0%			

For Project:	Jeannette Rankin Helena					
Project Notes:						
Location/Name:	Merged					
Report Generated:	8/3/2022	09:12				
Speed Intervals	1 MPH					
Time Intervals	Instant					
Traffic Report From	7/19/2022	10:00:00	through	7/21/2022	11:59:59	
85th Percentile Speed	28 MPH					
85th Percentile Vehicles	839					
Max Speed	43 MPH	on	7/20/2022	11:29:54		
Total Vehicles	987					
AADT:	473					
Volumes -						
weekly counts						
	Time	5 Day	7 Day			
Average Daily		329	329			
AM Peak	08:00	48	48			
PM Peak	12:00	51	51			
Speed						
- Speed Limit:	35					
85th Percentile Speed:	28					
50th Percentile Speed:	23					
10 MPH Pace Interval:	18.0 MPH	to	28.0 MPH			
Average Speed:	23.04					
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Count over limit	N/A	3	10	5	N/A	N/A
% over limit	N/A	0.9	2.1	2.7	N/A	N/A
Avg Speeder	N/A	38.0	38.4	40.6	N/A	N/A
Class Counts						
	Number		%			
VEH_SM	70		7.1			
VEH_MED	883		89.5			
VEH_LG	34		3.4			
	51		5.4			

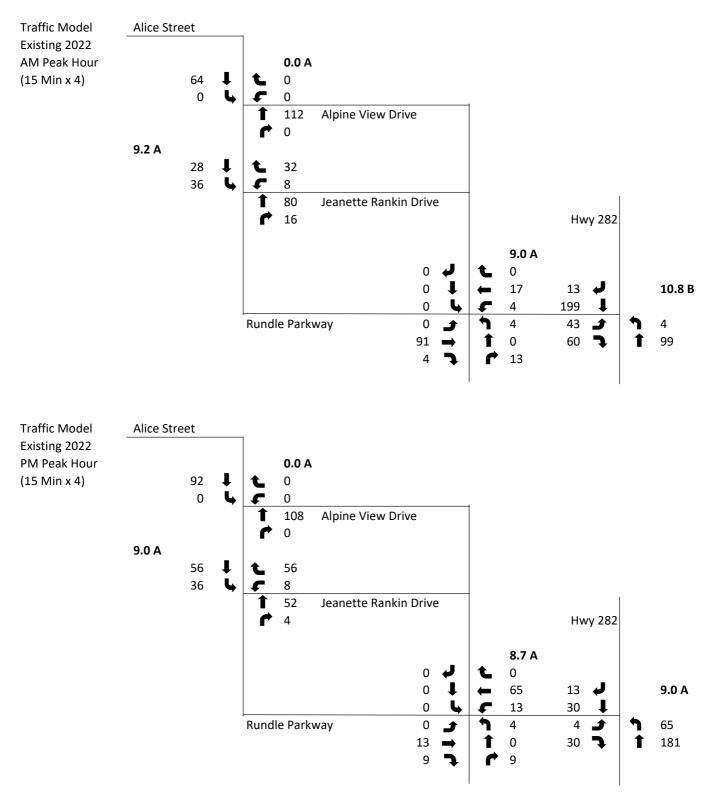
Sunday
N/A
N/A
N/A

Merged Weekly Counts Jeannette Rankin Helena

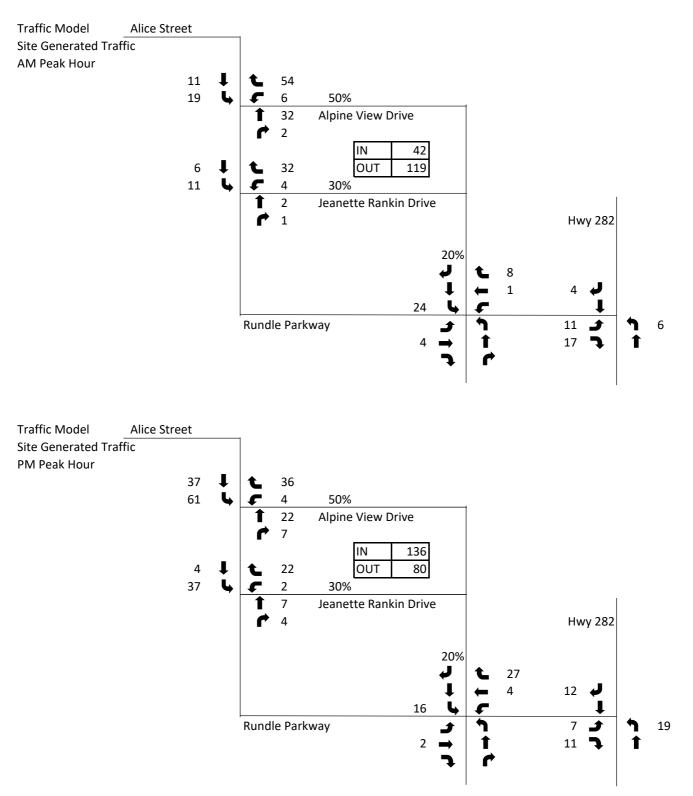
	7/18/2022	to	7/24/2022							
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Week	Weekend	Week Day 85%
Hour	7/18/2022	7/19/2022	7/20/2022	7/21/2022	7/22/2022	7/23/2022	7/24/2022	Day Avg	Avg	Avg Speed
0 - 1	*	*	1	0	*	*	*	0.5	0	21
1 - 2	*	*	0	0	*	*	*	0	0	0
2 - 3	*	*	0	0	*	*	*	0	0	0
3 - 4	*	*	0	1	*	*	*	0.5	0	23
4 - 5	*	*	1	1	*	*	*	1	0	20.5
5 - 6	*	*	8	8	*	*	*	8	0	30
6 - 7	*	*	15	12	*	*	*	13.5	0	27.5
7 - 8	*	*	45	47	*	*	*	46	0	28.6
8 - 9	*	*	51	45	*	*	*	48	0	28.5
9 - 10	*	*	21	24	*	*	*	22.5	0	27
10 - 11	*	9	27	24	*	*	*	20	0	26.33
11 - 12	*	51	38	21	*	*	*	36.67	0	25.93
12 - 13	*	48	54	*	*	*	*	51	0	27.1
13 - 14	*	32	42	*	*	*	*	37	0	26.75
14 - 15	*	18	25	*	*	*	*	21.5	0	25.75
15 - 16	*	31	28	*	*	*	*	29.5	0	28.75
16 - 17	*	31	40	*	*	*	*	35.5	0	28.5
17 - 18	*	48	24	*	*	*	*	36	0	27.1
18 - 19	*	11	20	*	*	*	*	15.5	0	29.75
19 - 20	*	15	10	*	*	*	*	12.5	0	29
20 - 21	*	13	10	*	*	*	*	11.5	0	27
21 - 22	*	10	14	*	*	*	*	12	0	28
22 - 23	*	4	7	*	*	*	*	5.5	0	25.75
23 - 24	*	0	2	*	*	*	*	1	0	24
Totals	0	321	483	183	0	0	0			
% of Total	0%	32.52%	48.94%	18.54%	0%	0%	0%			

APPENDIX B

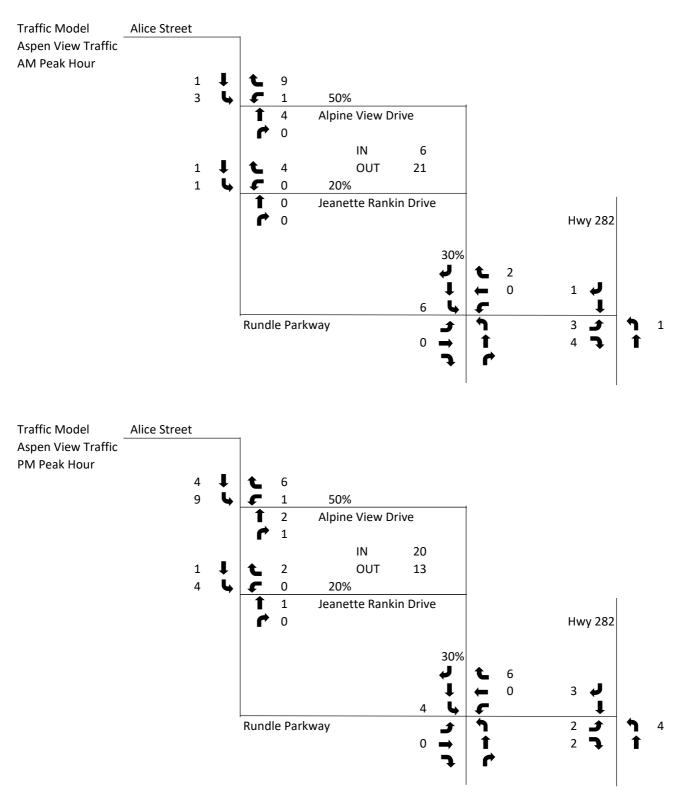
Traffic Model



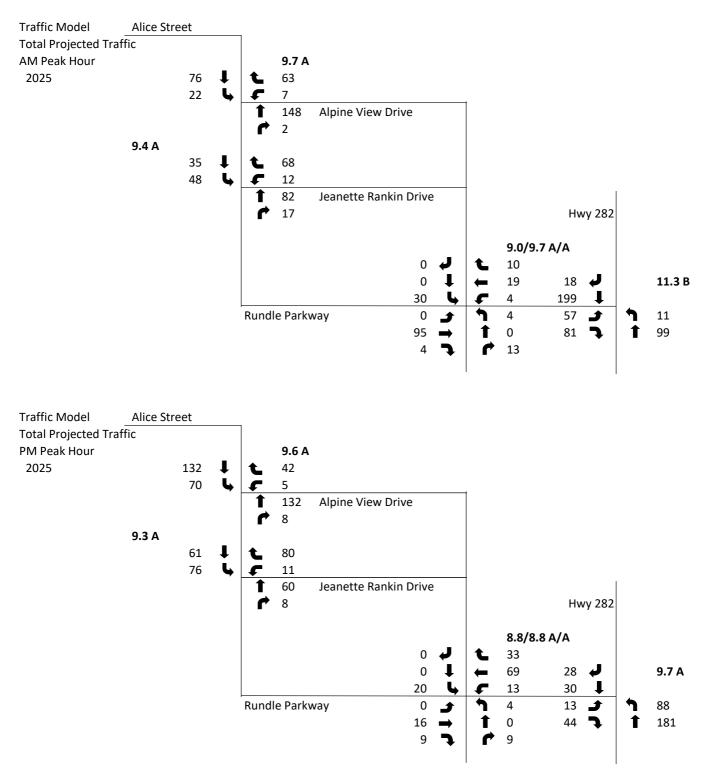
Craftsman Village Phases 8-10



Craftsman Village Phases 8-10



1



APPENDIX C

LOS Calculations

		Н	CS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						
Analyst	RLA						Inters	ection			Alice	and Ran	kin			
Agency/Co.	ATS						Jurisc	liction			Lewis	and Cla	rk			
Date Performed	8/2/2	022					East/	West Stre	eet		Jeanr	ette Rar	nkin			
Analysis Year	2022						North	n/South S	Street		Alice					
Time Analyzed	AM p	eak exist	ing				Peak	Hour Fac	ctor		0.92					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	0.25					
Project Description	Mour	ntain Vie	w								1					
Lanes																
	A A A A A A A A A A A A A A A A A A A															
Vehicle Volumes and A	ajustme						ha ad			Nextle	ha ad		1	<u> </u>		
Approach Movement	U		ound T	R	U		bound T	R	U	L	bound T	R	U	L	bound T	R
	0	L 10	11	к 12	0	L 7	8	я 9	1U	L 1	2	R 3	4U	4	5	к 6
Priority Number of Lanes	_	0	0	0		0	0	0	0	0	1	0	40	4	1	0
Configuration	_	0	0	0		0	LR	0	0	0		TR	0	LT		0
Volume (veh/h)						8	LN	32			80	16		36	28	
Percent Heavy Vehicles (%)						3		3			00	10		3	20	
Proportion Time Blocked						5								5		
Percent Grade (%)							0									
Right Turn Channelized							~									
raght runn chaimeilzeu																

Median Type | Storage

Critical and Follow-up Headways																
Base Critical Headway (sec)	Τ					7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)							43							39		
Capacity, c (veh/h)							911							1481		
v/c Ratio							0.05							0.03		
95% Queue Length, Q ₉₅ (veh)							0.2							0.1		
Control Delay (s/veh)							9.2							7.5		
Level of Service (LOS)							А							А		
Approach Delay (s/veh)						9	.2							4	.3	
Approach LOS							4									

Undivided

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		Н	CS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						
Analyst	RLA						Inters	ection			Alice	and Ran	kin			
Agency/Co.	ATS						Jurisd	liction			Lewis	and Cla	rk			
Date Performed	8/2/2	022					East/\	Nest Stre	eet		Jeann	ette Rar	nkin			
Analysis Year	2022						North	/South S	Street		Alice					
Time Analyzed	PM p	eak exist	ing				Peak	Hour Fac	tor		0.92					
Intersection Orientation	North	-South					Analy	sis Time	Period (hrs)	0.25					
Project Description	Mour	ntain Vie	N													
Lanes																
	Alles															
Vehicle Volumes and Adju	istme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6

Number of Lanes 0 0 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 1 1 0 0 1 1 0 0 0 1 1 1 1 0 0 1 1 1 0 0 1 1 0 0 1 1 1 1 0	,																
Volume (veh/h) Image: Marcine	Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Percent Heavy Vehicles (%) Image: Second	Configuration							LR					TR		LT		
Proportion Time Blocked I <thi< th=""> I I <thi< th=""></thi<></thi<>	Volume (veh/h)						8		56			52	4		36	56	
Percent Grade (%) I <thi< th=""> I <thi< th=""></thi<></thi<>	Percent Heavy Vehicles (%)						3		3						3		
Right Turn Channelized I I I I I Median Type Storage Undize I I I I I Critical and Follow-up Headway (sec) Image: Critical Headway (sec) Image: Cri	Proportion Time Blocked																
Median Type Storage Undivided Undivided <thundivided< th=""> Undivided <thundiv< td=""><td>Percent Grade (%)</td><td></td><td></td><td></td><td></td><td></td><td></td><td>C</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thundiv<></thundivided<>	Percent Grade (%)							C									
Critical and Follow-up Headways Base Critical Headway (sec) 7.1 6.2 4.1 Critical Headway (sec) 6.43 6.23 4.13 Base Follow-Up Headway (sec) 6.43 6.23 2.2 Follow-Up Headway (sec) 3.55 3.3 2.23 Delay, Queue Length, and Level of Service 70 39 Flow Rate, v (veh/h) 967 39 V/c Ratio 0.07 0.03 95% Queue Length, Q ₉₅ (veh) 9.0 0.1 <td>Right Turn Channelized</td> <td></td>	Right Turn Channelized																
Base Critical Headway (sec) Image: Critical Headway (sec)	Median Type Storage				Undi	vided											
Critical Headway (sec) Image: Sec (sec)	Critical and Follow-up He	adwa	ys														
Base Follow-Up Headway (sec) Image: Constraint of the adway (sec)	Base Critical Headway (sec)						7.1		6.2						4.1		
Follow-Up Headway (sec)Image: Second Sec	Critical Headway (sec)						6.43		6.23						4.13		
Delay, Queue Length, and Level of Service 70 0 0 39 0 Flow Rate, v (veh/h) Image: Service Service 70 Image: Service Service Service 39 Image: Service Service Service Capacity, c (veh/h) Image: Service Servi	Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Flow Rate, v (veh/h) Image: Second Secon	Follow-Up Headway (sec)						3.53		3.33						2.23		
Capacity, c (veh/h) Image: constraint of the symbol o	Delay, Queue Length, and	l Leve	l of Se	ervice													
v/c Ratio Image: Second se	Flow Rate, v (veh/h)							70							39		
Provide registry Qpp (veh) Image: Control Delay (s/veh)	Capacity, c (veh/h)							967							1536		
Control Delay (s/veh) Image: Second seco	v/c Ratio							0.07							0.03		
Level of Service (LOS) Image: Constraint of the service (LOS) Image: Constraint of the service (Constraint of the service (Con	95% Queue Length, Q ₉₅ (veh)							0.2							0.1		
Approach Delay (s/veh) 9.0 3.0	Control Delay (s/veh)							9.0							7.4		
	Level of Service (LOS)							А							А		
Approach LOS A	Approach Delay (s/veh)						9	.0							3	.0	
	Approach LOS							4									

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		Н	CS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	RLA							ection			Rund	le and A	lpine Vie	w		
Agency/Co.	ATS						Jurisd	liction				and Cla	·			
Date Performed	8/2/2	022					East/\	Nest Stre	eet		Rund	le				
Analysis Year	2022						North	/South S	Street		Alpin	e				
Time Analyzed	PM p	eak exist	ting				Peak	Hour Fac	ctor		0.92					
Intersection Orientation	East-	West					Analy	sis Time	Period (hrs)	0.25					
Project Description	Mour	ntain Vie	w													
Lanes																
Vehicle Volumes and Adjustments																
Vehicle Volumes and Adj																
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	13	9		13	65	0		4	0	9		0	0	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33
Delay, Queue Length, an	d Leve	l of Se	ervice													
Flow Rate, v (veh/h)	T	0				14					14				0	
Capacity, c (veh/h)		1523				1584					983					
v/c Ratio		0.00				0.01					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.4				7.3					8.7					
Level of Service (LOS)		A				A					A					
Approach Delay (s/veh)		0	.0			1	.3			8	.7					
Approach LOS											Ą					

		Н	CS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						_
Analyst	RLA						Inters	ection			Rund	le and A	lpine Vie	ew		_
Agency/Co.	ATS						Jurisd	liction				and Cla	-			
Date Performed	8/2/2	022					East/\	West Str	eet		Rund	le				_
Analysis Year	2022						North	n/South :	Street		Alpin	e				
Time Analyzed	AM p	eak exis	ting				Peak	Hour Fac	ctor		0.92					
Intersection Orientation	East-	West					Analy	sis Time	Period (hrs)	0.25					
Project Description	Mour	ntain Vie	w				1									
Lanes																
						ېنې مې ۲۷ م or Street: Ea	st-West	1 1 1 1 4 4 4 7								
ehicle Volumes and Adjustments																
Approach	<u> </u>	1								1				1		
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	10	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	91	4		4	17	0		4	0	13		0	0	0
Percent Heavy Vehicles (%)	<u> </u>	3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									<u> </u>		0			()	
Right Turn Channelized					·											
Median Type Storage	<u> </u>			Undi	vided											
Critical and Follow-up Ho	eadwa	1														
Base Critical Headway (sec)	<u> </u>	4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33
Delay, Queue Length, and	d Leve	l of Se	ervice													
Flow Rate, v (veh/h)		0				4					18				0	
Capacity, c (veh/h)		1592				1482					923					
v/c Ratio		0.00				0.00					0.02					
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1					
Control Delay (s/veh)		7.3				7.4					9.0					
Level of Service (LOS)		A				A					A					
Approach Delay (s/veh)		0	.0			1	.4				.0					
Approach LOS											д					

		H	CS7	Two	Way	Sto	o-Co	ntrol	Rep	ort_						
General Information	_	_	_	_			Site	Inform	natio	n	_	_	_	_	_	_
Analyst	RLA							ection			Rund	le and H	MAY 282			
Agency/Co.	ATS							liction				and Cla	-			
Date Performed	8/2/2	022						West Str	eet		Rund					
Analysis Year	2022							/South :			Hwy					
Time Analyzed		eak exis	tina					Hour Fac			0.92	LOL				
Intersection Orientation		n-South	ung						Period ((hrs)	0.25					
Project Description		ntain Vie							in chioù ((1113)	0.23					
Lanes	mou															
Lanes							<u>ل</u> ل ل									
				14 4 7 4 4 7 7		۲ ۲ Street: Nor	↑↑↑ th-South	4 4 4 4 4 4								
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastk	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		43		60						4	99				199	13
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)			0													
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up Ho	eadwa	ys														
Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)			112							4						
Capacity, c (veh/h)			737							1332						
v/c Ratio			0.15							0.00						
95% Queue Length, Q ₉₅ (veh)			0.5							0.0						
Control Delay (s/veh)			10.8							7.7						
Level of Service (LOS)			В							A						
Approach Delay (s/veh)		1).8							0	.3					
									<u> </u>							

В

Approach LOS

		H	CS7		-)				nep							
General Information							Site	Inforr	natio	n						
Analyst	RLA						Inters	ection			Rundl	le and H	wy 282			
Agency/Co.	ATS						Jurisd	liction				and Cla				
Date Performed	8/2/2	022					East/\	Nest Stre	eet		Rundl	e				
Analysis Year	2022						North	/South S	Street		Hwy 2	282				
Time Analyzed	PM p	eak exist	ing				Peak	Hour Fac	tor		0.92					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	0.25					
Project Description	Mour	ntain Vie	w													
Lanes																
				1417481 / 7485		↑ ↑ ↑ ↑ Street: No	th-South	4 4 4 4 4 4								
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	40	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		4		30						65	181				30	13
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)			0													
Right Turn Channelized																
	-															
Median Type Storage				Undi	vided	_				_						
Median Type Storage Critical and Follow-up He	eadwa	ys		Undi	vided											
	eadwa	ys 7.1		Undi 6.2	vided					4.1						
Critical and Follow-up He	eadwa	-			vided					4.1 4.13						
Critical and Follow-up He Base Critical Headway (sec)	eadwa	7.1		6.2	vided											
Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec)	eadwa	7.1 6.43		6.2 6.23	vided					4.13						
Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec)		7.1 6.43 3.5 3.53	ervice	6.2 6.23 3.3 3.33	vided					4.13 2.2						
Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec)		7.1 6.43 3.5 3.53	ervice 37	6.2 6.23 3.3 3.33	vided					4.13 2.2						
Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and		7.1 6.43 3.5 3.53		6.2 6.23 3.3 3.33	vided					4.13 2.2 2.23						
Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h)		7.1 6.43 3.5 3.53	37	6.2 6.23 3.3 3.33	vided					4.13 2.2 2.23 71						
Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h) Capacity, c (veh/h)		7.1 6.43 3.5 3.53	37 946	6.2 6.23 3.3 3.33	vided					4.13 2.2 2.23 71 1554						
Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h) Capacity, c (veh/h) v/c Ratio		7.1 6.43 3.5 3.53	37 946 0.04	6.2 6.23 3.3 3.33	vided					4.13 2.2 2.23 71 1554 0.05						

9.0

А

Approach Delay (s/veh)

Approach LOS

2.2

		Н	CS7	Two-	·vvay	Stop		ntrol	кер	ort						
General Information		_	_	_	_	_	Site	Inform	natior	n	_	_	_	_	_	_
Analyst	RLA						Inters	ection			Alice	and Alpi	ne View			_
Agency/Co.	ATS						Jurisd	iction			Lewis	and Cla	ſk			
Date Performed	8/2/2	022					East/\	Vest Stre	et		Alpine	e View				
Analysis Year	2025						North	/South S	Street		Alice					
Time Analyzed	AM p	eak proj	ected				Peak I	Hour Fac	tor		0.92					
Intersection Orientation	North	-South					Analy	sis Time	Period (ł	nrs)	0.25					
Project Description	Moun	itain Vie	w													
Lanes																
				J 4 1 7 4 P 7	A A Major	۲ ۲ ۲ Street: Nor	<mark>↑ २</mark> ८ th-South	1 1 7 4 4 1 1 Y								
Vehicle Volumes and Adju	ustme	nts														
Approach	<u> </u>		ound				ound			North					bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	T	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	40	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration	┢──┤					-	LR	67			450	TR		LT		
Volume (veh/h)	┢──┤					7		67			150	2		22	77	
Percent Heavy Vehicles (%) Proportion Time Blocked	┢──┤					3		3						3		
Percent Grade (%)	┢──┘)									
	1															
Right Turn Channelized)									
Right Turn Channelized				Undiv	vided		J									
Median Type Storage	adway	ys		Undiv	vided)									
Median Type Storage Critical and Follow-up He	adway	ys		Undiv	vided)	6.2						4.1		
Median Type Storage Critical and Follow-up He Base Critical Headway (sec)	adway	ys		Undiv	vided	7.1		6.2						4.1		
Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec)	adwa	ys		Undiv	vided	7.1										
Median Type Storage Critical and Follow-up He Base Critical Headway (sec)	adwa	ys		Undiv	vided	7.1 6.43		6.23						4.13		
Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec)			ervice		vided	7.1 6.43 3.5		6.23 3.3						4.13 2.2		
Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec)			ervice		vided	7.1 6.43 3.5	80	6.23 3.3						4.13 2.2		
Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and			ervice		vided	7.1 6.43 3.5		6.23 3.3						4.13 2.2 2.23		
Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h)			ervice		vided	7.1 6.43 3.5	80	6.23 3.3						4.13 2.2 2.23 2.23		
Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h) Capacity, c (veh/h)			ervice		vided	7.1 6.43 3.5	80 854	6.23 3.3						4.13 2.2 2.23 2.23 24 1407		

Level of Service (LOS)

Approach Delay (s/veh)

Approach LOS

А

9.7

А

1.8

А

								ntrol	. ep							
General Information							Site	Inform	natior	ı			_			_
Analyst	RLA						Inters	ection			Alice	and Alpi	ne View			_
Agency/Co.	ATS						Jurisd	liction			Lewis	and Cla	rk			
Date Performed	8/2/2	022					East/\	Nest Stre	eet		Alpine	e View				
Analysis Year	2025						North	/South S	Street		Alice					
Time Analyzed	PM p	eak proj	ected				Peak	Hour Fac	ctor		0.92					
Intersection Orientation	North	n-South					Analy	sis Time	Period (I	nrs)	0.25					
Project Description	Mour	ntain Vie	w													
Lanes																
				141441		۲ ۲ ۲ Street: Nor		74 b f								
Vehicle Volumes and Ad	justme															
Approach		Eastb	ound			West	bound			North				South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	40	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR				100	TR		LT	101	
Volume (veh/h)						5		44			133	8		74	134	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Dercent Crade (9/)																
Percent Grade (%)						()									
Right Turn Channelized				Undi	vided	()									
Right Turn Channelized Median Type Storage	eadwa	vs		Undir	vided	()									
Right Turn Channelized Median Type Storage Critical and Follow-up H	eadwa	ys		Undi	vided)	6.2						4.1		
Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec)	eadwa	ys		Undi	vided	7.1		6.2						4.1		
Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec)	eadwa	ys		Undi	vided	7.1										
Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec)	eadwa	ys		Undi	vided	7.1 6.43		6.23						4.13		
Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec)					vided	7.1 6.43 3.5		6.23 3.3						4.13 2.2		
Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, an			ervice		vided	7.1 6.43 3.5	53	6.23 3.3						4.13 2.2		
Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, an Flow Rate, v (veh/h)			ervice		vided	7.1 6.43 3.5		6.23 3.3						4.13 2.2 2.23		
Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, an			ervice		vided	7.1 6.43 3.5	53	6.23 3.3						4.13 2.2 2.23 80		
Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, an Flow Rate, v (veh/h) Capacity, c (veh/h)			ervice		vided	7.1 6.43 3.5	53 835	6.23 3.3						4.13 2.2 2.23 80 1421		

Level of Service (LOS)

Approach LOS

Approach Delay (s/veh)

А

9.6

А

3.0

А

									Rep	010						
General Information							Site	Inforr	natior	า						
Analyst	RLA						Inters	ection			Alice	and Ran	kin			
Agency/Co.	ATS						Jurisd	liction			Lewis	and Cla	rk			
Date Performed	8/2/2	022					East/\	West Stre	eet		Jeann	ette Rar	nkin			
Analysis Year	2025						North	n/South S	Street		Alice					
Time Analyzed	AM p	eak proj	ected				Peak	Hour Fac	tor		0.92					
Intersection Orientation	North	-South					Analy	sis Time	Period (hrs)	0.25					
Project Description	Mour	ntain Viev	N													
Lanes																
				1				7447177								
Vehicle Volumes and Ad	ljustme	nts				↑ ↑ ↓ ↑ Street: Nor	↑ ↑ ↑	¢ ¢	_	_	_	_	_	_	_	
	djustme		ound			イ 中 Y Street: Nor		F C		North	bound			South	bound	
Vehicle Volumes and Ac Approach Movement	djustme	nts Eastb	ound	R		イ 中 Y Street: Nor	↑ ↑ ↑ th-South Dound		U	North		R	U	South	bound	R
Approach	_	Eastb			Major	t t Y Street: Nor Westl	oound	R 9	U 1U		bound T 2	R 3	U 4U		bound T 5	R
Approach Movement	_	Eastb L	Т	R	Major	イ 中 Y Street: Nor Westl	oound T	R		L	Т		-	L	T	6
Approach Movement Priority	_	Eastb L 10	T 11	R 12	Major	Vestl	oound T 8	R 9	1U	L 1	T 2	3	4U	L 4	T 5	
Approach Movement Priority Number of Lanes	_	Eastb L 10	T 11	R 12	Major	Vestl	Dound T 8 1	R 9	1U	L 1	T 2	3 0	4U	L 4 0	T 5	6
Approach Movement Priority Number of Lanes Configuration	_	Eastb L 10	T 11	R 12	Major	Westl	Dound T 8 1	R 9 0	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT	T 5 1	6
Approach Movement Priority Number of Lanes Configuration Volume (veh/h)	_	Eastb L 10	T 11	R 12	Major	Westl C C C C C C C C C C C C C C C C C C C	Dound T 8 1	R 9 0 70	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT 49	T 5 1	6
Approach Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%)	_	Eastb L 10	T 11	R 12	Major	Westl L 7 0 12 3	Dound T 8 1	R 9 0 70	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT 49	T 5 1	6
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked	_	Eastb L 10	T 11	R 12	Major	Westl L 7 0 12 3	T 8 1 LR	R 9 0 70	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT 49	T 5 1	6

Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		
Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)							89							53		
Capacity, c (veh/h)							910							1477		
v/c Ratio							0.10							0.04		
95% Queue Length, Q ₉₅ (veh)							0.3							0.1		
Control Delay (s/veh)							9.4							7.5		
Level of Service (LOS)							А							А		
Approach Delay (s/veh)						9	.4							4	.5	
Approach LOS						ļ	4									

Comoral Information							Cite -									
General Information							Site	Inforr	natio	า						
Analyst	RLA						Inters	ection			Alice	and Ran	kin			
Agency/Co.	ATS						Jurisd	liction			Lewis	and Cla	rk			
Date Performed	8/2/2	022					East/\	Nest Stre	eet		Jeann	ette Rar	ikin			
Analysis Year	2025						North	/South S	Street		Alice					
Time Analyzed	PM p	eak proj	ected				Peak	Hour Fac	tor		0.92					
Intersection Orientation	North	-South					Analy	sis Time	Period (hrs)	0.25					
Project Description	Mour	ntain Vie	w													
Lanes																
				r r		4		744717								
Vehicle Volumes and Ac	ljustme	nts				T T T Street: Nor	<mark>↑ ↑ ↑</mark> ↑ th-South									
Vehicle Volumes and Ac	ljustme		bound			イ 中 Y r Street: Nor	th-South			North	bound			South	bound	
Vehicle Volumes and Ac Approach Movement	ljustme		pound	R		イ 中 Y r Street: Nor		R	U	North	bound T	R	U	South	bound	R
Approach		Eastb	-		Majo	r Street: Nor Westl	oound		U 1U			R 3	U 4U		1	-
Approach Movement		Eastb L	Т	R	Majo	r Street: Nor Westl	oound T	R		L	Т			L	Т	6
Approach Movement Priority		Eastb L 10	T 11	R 12	Majo	Vesti	oound T 8	R 9	1U	L 1	T 2	3	4U	L 4	Т 5	6
Approach Movement Priority Number of Lanes		Eastb L 10	T 11	R 12	Majo	Vesti	Dound T 8 1	R 9	1U	L 1	T 2	3 0	4U	L 4 0	Т 5	R 6 C
Approach Movement Priority Number of Lanes Configuration		Eastb L 10	T 11	R 12	Majo	Vestl 7 0	Dound T 8 1	R 9 0	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT	T 5 1	6
Approach Movement Priority Number of Lanes Configuration Volume (veh/h)		Eastb L 10	T 11	R 12	Majo	Westl C C C C C C C C C C C C C C C C C C C	Dound T 8 1	R 9 0 81	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT 78	T 5 1	6
Approach Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%)		Eastb L 10	T 11	R 12	Majo	Westl U 11 3	Dound T 8 1	R 9 0 81	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT 78	T 5 1	6
Approach Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked		Eastb L 10	T 11	R 12	Majo	Westl U 11 3	T 8 1 LR	R 9 0 81	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT 78	T 5 1	6
Approach Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%)		Eastb L 10	T 11	R 12 0	Majo	Westl U 11 3	T 8 1 LR	R 9 0 81	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT 78	T 5 1	6
Approach Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage		Eastb L 10 0	T 11	R 12 0		Westl U 11 3	T 8 1 LR	R 9 0 81	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT 78	T 5 1	6
Approach Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage		Eastb L 10 0	T 11	R 12 0		Westl U 11 3	T 8 1 LR	R 9 0 81	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT 78	T 5 1	6
Approach Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage		Eastb L 10 0	T 11	R 12 0		Vesti U 11 3	T 8 1 LR	R 9 0 81 3	1U	L 1	T 2 1	3 0 TR	4U	L 4 0 LT 78 3	T 5 1	-

Dabe Follow op Houdinay (See)					0.0		0.0					
Follow-Up Headway (sec)					3.53		3.33			2.23		
Delay, Queue Length, and	l Leve	l of Se	ervice									
Flow Rate, v (veh/h)						100				85		
Capacity, c (veh/h)						930				1518		
v/c Ratio						0.11				0.06		
95% Queue Length, Q ₉₅ (veh)						0.4				0.2		
Control Delay (s/veh)						9.3				7.5		
Level of Service (LOS)						А				А		
Approach Delay (s/veh)					9	.3				4.	.4	
Approach LOS					ļ	4						

		Η	CS7	Two-	Way	Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						_
Analyst	RLA						Inters	ection			Rund	le and A	lpine Vie	ew		
Agency/Co.	ATS						Jurisd	liction				and Cla				
Date Performed	8/2/2	022					East/	Nest Stre	eet		Rund	le				
Analysis Year	2025						North	/South S	Street		Alpin	e				
Time Analyzed	AM p	eak proj	ected				Peak	Hour Fac	tor		0.92					
Intersection Orientation	East-	West					Analy	sis Time	Period (hrs)	0.25					
Project Description	Mour	ntain Vie	w													
Lanes																
						ېنې مې کې مې pr Street: Ea	st-West	,								
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	10	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	95	4		4	19	10		4	0	13		32	0	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		0				4					18				35	
Capacity, c (veh/h)		1574				1477					915				805	
v/c Ratio		0.00				0.00					0.02				0.04	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.1				0.1	
Control Delay (s/veh)		7.3				7.4					9.0				9.7	
Level of Service (LOS)		A				Α					A				А	
Approach Delay (s/veh)		C	.0			0	.9			9	.0			9	.7	
Approach LOS											A				۹.	

HCSTM TWSC Version 7.9.5 RundleAlpineAMprojected.xtw

General Information Analyst Agency/Co. Date Performed Analysis Year	RLA															
Agency/Co. Date Performed Analysis Year							Site	Inform	natio	า						
Date Performed Analysis Year	ATS						Inters	ection			Rund	le and Al	lpine Vie	w		
Analysis Year							Jurisd	iction			Lewis	and Cla	rk			
-	8/2/2	022					East/\	Nest Stre	et		Rund	le				
	2025						North	/South S	Street		Alpin	e				
Time Analyzed	PM p	eak proje	ected				Peak	Hour Fac	tor		0.92					
Intersection Orientation	East-\	West					Analy	sis Time	Period (hrs)	0.25					
Project Description	Mour	ntain Vie	w													
Lanes																
Vahiala Valumaa aud Aut						م م Pr Street: Ea	t-West	ት በ ነ ተ								
Vehicle Volumes and Adjus	stme								-				1			
Approach			ound			West				North				South		
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	T	R
Priority Number of Lanes	1U 0	1	2	3 0	4U 0	4	5	6 0		7 0	8	9 0		10 0	11	12 0
Configuration	0	0	LTR	0	0	0	LTR	0		0	LTR	0		0	LTR	0
Volume (veh/h)		0	16	9		13	70	35		4	0	9		0	0	21
Percent Heavy Vehicles (%)		3	10	9		3	70	55		3	3	3		3	3	3
Proportion Time Blocked		5				5				5	5	5		5	5	
Percent Grade (%)))	
Right Turn Channelized										`						
Median Type Storage				Undiv	vided											
Critical and Follow-up Hea	adwa	vs														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33
Delay, Queue Length, and			prvice													
	Leve					14					14				22	
Flow Rate, v (veh/h)		0 1469				14					14				23 959	
Capacity, c (veh/h) v/c Ratio		0.00				1580 0.01					951 0.01				959 0.02	
v/c Ratio 95% Queue Length, Q ₉₅ (veh)		0.00				0.01					0.01				0.02	
-		7.5				0.0 7.3					0.0 8.8				0.1 8.8	
Control Delay (s/veh) Level of Service (LOS)		7.5 A				7.3 A					8.8 A				8.8 A	
Approach Delay (s/veh)		0	0				.9		_	0	.8			0	.8	
Approach LOS		0	.0			0					.o 4				.o A	

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		Η	ICS7	Two-	-Way	Sto	o-Co	ntrol	Rep	ort_						
General Information	_	_	_	_			Site	Inform	natio	n	_	_	_	_	_	_
Analyst	RLA							ection			Rund	le and H	MAY 282			
Agency/Co.	ATS							liction				and Cla	-			
Date Performed	8/2/2	022						West Str	eet		Rund					
Analysis Year	2025	.022						Nest Str			Hwy					
Time Analyzed	-	eak proj	ected					Hour Fac			0.92	LOL				
Intersection Orientation		n-South	celea						Period ((hrs)	0.25					
Project Description		ntain Vie	\A/							(1113)	0.23					
	Widdi															
Lanes																
				J 4 4 7 4 4 7 7		₹ ₹ Street: Nor	th-South	4 4 4 4 4								
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		58		82						11	99				199	18
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked	<u> </u>															
Percent Grade (%)			0													
Right Turn Channelized	<u> </u>															
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)			152							12						
Capacity, c (veh/h)			726							1325						
v/c Ratio			0.21							0.01						
95% Queue Length, Q ₉₅ (veh)			0.8							0.0						
Control Delay (s/veh)			11.3							7.7						
Level of Service (LOS)			В							A						
Approach Delay (s/veh)		1	1.3							0	.8					
		· · ·							<u> </u>							

В

Approach LOS

		H	ICS7	Two-	-Way	Sto	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_		_		_	natio	_	_	_	_	_	_	_
	RLA							ection	natio		Dund	le and H				
Analyst Agency/Co.	ATS							liction				and Cla	-			
Date Performed	8/2/2	022						West Stre	oot		Rund		IK			
Analysis Year	2025	.022					<u> </u>	Nest Stre			Hwy					
		ool proi	acted					Hour Fac			0.92	202				
Time Analyzed Intersection Orientation		eak proj n-South	ected							(he star)						
Project Description		ntain Vie					Analy	sis nine	Period (nrs)	0.25					
	Mour		w													
Lanes																
				J 4 4 7 4 4 7 J		۲ ۲ Street: Nor		1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4								
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes	<u> </u>	0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		14		44						89	181				30	29
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)			0													
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	T		63							97						
Capacity, c (veh/h)			834							1532						
v/c Ratio			0.08							0.06						
95% Queue Length, Q ₉₅ (veh)			0.2							0.2						
Control Delay (s/veh)			9.7							7.5						
Level of Service (LOS)			A							A						
Approach Delay (s/veh)		9	.7							2	2.8					

А

Approach LOS