

COLORADO KIDS RANCH

SPECIAL USE TRAFFIC IMPACT STUDY

El Paso County, Colorado

April 2023

Revised July 2023

Completed By:

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Engineer's Statement

The attached traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.

Brett Louk, PE #0055474

Date:

Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

Colorado Pumpkin Patch LLC
18065 Saddlewood Road
Monument, CO 80132

Date:

EXECUTIVE SUMMARY

SMH Consultants, P.A. completed a traffic impact study, to support the special use application, for the Colorado Kids Ranch located at 18065 Saddlewood Road in El Paso County, Colorado. The Colorado Kids Ranch holds two main events annually: (i) the Fall Festival is held during the last two weeks of September through November 7; and (ii) the Tulip Festival is held during two weekends in May (collectively, the "Events").

Attendance information, from last year's events, was utilized to determine the number of trips generated by the Fall Festival and Tulip Festival. Trip generation for uses that fall within the Agritainment use were not included in the analysis presented in this report. These generated trips, along with the peak hour counts, were then used to perform a level of service (LOS) analysis for the following intersections: Saddlewood Rd./Canterbury Dr.; Canterbury Dr./Hwy. 105; Cherry Springs Ranch/Hwy. 105; and Appaloosa Rd./Hwy. 105. Additional offsite major intersections such as Hwy. 105/Hwy. 83 and Roller Coaster Rd./Hwy. 105 were not included in the analysis, because the site generated trips did not contribute a 10 percent impact during the A.M. or P.M. peak hour to any approach leg of the intersection that is operating at LOS C or better; or a 5 percent impact during the A.M. or P.M. peak hour to any approach leg of the intersection that is operating at LOS D or worse. Additional offsite minor intersections such as Sahara Rd./Roller Coaster Rd. were not included in the analysis, because the site generated trips did not contribute a 30 percent increase in volume during the A.M. or P.M. peak hour to any approach leg of the intersection that is operating at LOS E or worse. The LOS analysis for all intersections indicated that the LOS for all approaches to the intersection would continue to operate at LOS C or better, for the A.M. and P.M. peak hours of the events, with the lone exception being the NB approach at the intersection of Canterbury Dr./Hwy. 105 which will operate at LOS D in the weekend P.M. peak hour under the long-range horizon scenario. This remains true for the existing plus development, short-range horizon, and long-range horizon scenarios. It should be noted that the intersection LOS analysis, for each intersection, was completed with the existing lane configuration and no auxiliary lanes were accounted for.

Auxiliary lane analyses showed that a westbound left turn lane and eastbound right turn lane are warranted at the intersection of Canterbury Dr. and Highway 105 during the weekday A.M. and P.M. peak hours. A southbound left turn lane is warranted at the intersection of Canterbury Dr. and Saddlewood Rd. during the weekday and weekend A.M. and P.M. peak hours. No right turn acceleration lanes are warranted at any of the study intersections.

Based on the analysis presented in this report, the Colorado Kids Ranch generated traffic will require some roadway improvements to negate the impacts to the surrounding roadway network.

INTRODUCTION

The ownership of the Colorado Kids Ranch has requested that SMH Consultants, P.A. conduct a Traffic Impact Study (TIS) to support a special use application for the Colorado Kids Ranch. The tulip festival is planned to take place over two weekends in May and will operate from 9 A.M. to 5 P.M. on Friday, Saturday, and Sunday. The fall festival is planned to take place the last two weeks of September through November 7th and will be open Tuesdays from 9 A.M. to 1 P.M. and Wednesday through Sunday from 9 A.M. to 5 P.M. The purpose of this study is to determine the traffic impacts of the Colorado Kids Ranch on the surrounding transportation network. A vicinity map has been included in the appendix of this report.

This TIS will determine the trips generated by the Colorado Kids Ranch, perform a level of service (LOS) analysis for the following intersections: Saddlewood Rd./Canterbury Dr.; Canterbury Dr./Hwy. 105; Cherry Springs Ranch/Hwy 105; and Appaloosa Rd./Hwy. 105, perform auxiliary lane analyses at each intersection, and identify any improvements that may be required to the surrounding transportation network.

METHODOLOGY

On December 17th and 21st 2022, SMH Consultants conducted weekday and weekend A.M. and P.M. peak hour turning movement counts at the intersections of Saddlewood Rd./Canterbury Dr. and Canterbury Dr./Hwy. 105. Upon further discussion with El Paso County staff, further intersections were identified that would need analyzed. On March 14th and 18th 2023, SMH Consultants conducted weekday and weekend A.M. and P.M. peak hour turning movement counts at the intersections of Appaloosa Rd./Hwy. 105 and Cherry Springs Ranch/Hwy. 105. All turning movement count information has been included in the appendix of this report.

McTrans HCS7 Software was used to analyze the existing, existing plus development, short-range horizon, and long-range horizon scenarios for all aforementioned intersections.

Intersection Level of Service (LOS) is a concept defined by the *Highway Capacity Manual* (HCM) to qualitatively describe operating conditions within a traffic stream. LOS is typically stratified into six categories (A through F). These range from LOS A indicating free-flow, low density, or nearly negligible delay conditions to LOS F where demand exceeds capacity and large queues are experienced.

For unsignalized intersections, the HCM uses control delay, measured in average seconds of delay per vehicle, as the basis for determining LOS. Control delay at an intersection is the average stopped time per vehicle traveling through the intersection plus the movements at slower speeds due to the vehicles moving

up in the queue or slowing upstream of the approach. For two-way stop-controlled intersections, individual approach delays as well as an overall average delay are calculated for each intersection. Table 1 below shows the LOS criteria for an unsignalized intersection.

Level of Service	Control Delay Range (s/veh)
	Unsignalized
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

Table 1: LOS Criteria

EXISTING CONDITIONS

The existing site is located at 18065 Saddlewood Road in El Paso County, Colorado. The existing site consists of a single-family home, outbuildings, and agricultural ground. The site is bordered by Saddlewood Rd. to the south, residential properties to the east and west, and Highway 105 to the north. Canterbury Dr. is located west of the site and Appaloosa Rd. is located east of the site.

Saddlewood Rd. is a two-lane gravel road that is approximately 28-feet wide, with roadside ditches on both sides, and is classified as a rural local road. At the intersection with Canterbury Dr., westbound Saddlewood Rd. consists of a shared right/left lane. There is no eastbound approach to the intersection of Saddlewood Rd. and Canterbury Dr. Saddlewood Rd. does not have a posted speed limit, however, based on the posted speed limit for Canterbury Dr. and Appaloosa Rd., the speed limit is assumed to be 25 mph. In the southbound direction along Canterbury Dr., there is a measured intersection sight distance of 378', compared to the ECM minimum intersection sight distance of 165' and minimum stopping sight distance of 280'. In the northbound direction along Canterbury Dr., there is a measured intersection sight distance of 406', compared to the ECM minimum intersection sight distance of 165' and minimum stopping sight distance of 280'. Intersection sight distance at this intersection is adequate in both directions. An intersection sight distance exhibit has been included in the appendix of this report.

Canterbury Dr. is a two-lane paved road that is approximately 28-feet wide, with roadside ditches on both sides, and is classified as a rural local road. At the intersection with Saddlewood Rd., northbound Canterbury Dr. consists of a shared thru/right lane and southbound consists of a shared thru/left lane. At the intersection with Highway 105, northbound Canterbury Dr. consists of a shared

right/left lane. There is no southbound approach to the intersection of Canterbury Dr. and Highway 105. Canterbury Dr. has a posted speed limit of 25 mph. In the eastbound direction along Highway 105, there is a measured intersection sight distance of 1100', compared to the ECM minimum intersection sight distance of 555' and minimum stopping sight distance of 638'. In the westbound direction along Highway 105, there is a measured intersection sight distance of 980', compared to the ECM minimum intersection sight distance of 555' and minimum stopping sight distance of 515'. Intersection sight distance at this intersection is adequate in both directions. An intersection sight distance exhibit has been included in the appendix of this report.

Cherry Springs Ranch Dr. is a two-lane paved road that is approximately 28-feet wide, with roadside ditches on both sides, and is classified as a rural local road. At the intersection with Highway 105, southbound Cherry Springs Ranch Dr. consists of a shared left/right lane. There is no northbound approach to the intersection of Cherry Springs Ranch Dr. and Highway 105. Cherry Springs Ranch Dr. has a posted speed limit of 30 mph. In the eastbound direction along Highway 105, there is a measured intersection sight distance of 1026', compared to the ECM minimum intersection sight distance of 555' and minimum stopping sight distance of 570'. In the westbound direction along Highway 105, there is a measured intersection sight distance of 1140', compared to the ECM minimum intersection sight distance of 555' and minimum stopping sight distance of 570'. Intersection sight distance at this intersection is adequate in both directions. An intersection sight distance exhibit has been included in the appendix of this report.

Appaloosa Rd. is a two-lane gravel road that is approximately 28-feet wide, with roadside ditches on both sides, and is classified as a rural local road. At the intersection with Highway 105, northbound Appaloosa Rd. consists of a shared left/right lane. There is no southbound approach to the intersection of Appaloosa Rd. and Highway 105. Appaloosa Rd. has a posted speed limit of 25 mph. In the eastbound direction along Highway 105, there is a measured intersection sight distance of 4000', compared to the ECM minimum intersection sight distance of 555' and minimum stopping sight distance of 515'. In the westbound direction along Highway 105, there is a measured intersection sight distance of 843', compared to the ECM minimum intersection sight distance of 555' and minimum stopping sight distance of 638'. Intersection sight distance at this intersection is adequate in both directions. An intersection sight distance exhibit has been included in the appendix of this report.

Highway 105 is a two-lane paved road that is approximately 24-feet wide, with roadside ditches on both sides, and is classified as a principal arterial. Currently, Highway 105 is undergoing a corridor analysis, from Interstate 25 to Highway 83, to determine improvements that may be necessary along this stretch of Highway 105. At this time, the section of Highway 105, adjacent to the Colorado Kids Ranch, is recommended to be a three-lane section with one thru lane in each

direction and center left turn lanes at major intersections. It should be noted that the intersections studied in this report for the Colorado Kids Ranch were not studied as part of the El Paso County Highway 105 Traffic Study Update, performed by HDR, as they were considered side roads with insignificant traffic volumes. At the intersection with Canterbury Dr., eastbound Highway 105 consists of a shared thru/right lane and westbound consists of a shared thru/left lane. At the intersection with Cherry Springs Ranch Dr., eastbound Highway 105 consists of a shared thru/left lane and westbound consists of a shared thru/right lane. At the intersection with Appaloosa Rd., eastbound Highway 105 consists of a shared thru/right lane and westbound consists of a shared thru/left lane. Highway 105 has a posted speed limit of 50 mph.

Per the MTCP, Highway 105 from Knollwood Boulevard to Highway 83 is identified as a 2040 roadway improvement project. This project would expand Highway 105 from a two-lane principal arterial to a four-lane principal arterial. In addition, there is a current corridor analysis being completed for Highway 105, from Interstate 25 to Highway 83. However, this corridor analysis for the section of Highway 105 adjacent to the Colorado Kids Ranch has not been completed, and thus, has not recommended any roadway improvements for Highway 105 in this area.

Based on information provided in the El Paso County Highway 105 Traffic Study Update, performed by HDR, Highway 105 has peak hours of 7 A.M. to 8 A.M. and 5 P.M. to 6 P.M. However, these peak hours are different than the A.M. and P.M. peak hours for the Colorado Kids Ranch. Based on information provided by the owner, from last year's festivals, the A.M. peak hour is 9 A.M. to 10 A.M. and the P.M. peak hour is 1 P.M. to 2 P.M. Therefore, SMH Consultants performed existing turning movement counts for the timeframes coinciding with the peak hours of the Colorado Kids Ranch festivals. Existing peak hour counts and turning movements can be seen in the appendix of this report.

Table 2 shows the existing weekday level of service for each intersection. Detailed intersection level of service calculations for each intersection are provided in the appendix.

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Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		Delay (s)	LOS	95% Queue	Delay (s)	LOS	95% Queue
Canterbury & Saddlewood	WB RT/LT	8.4	A	0'	8.5	A	0'
	NB Thru/RT	7.2	A	0'	7.2	A	0'
	SB Thru/RT	7.2	A	0'	7.2	A	0'
Canterbury & Hwy 105	EB Thru/RT	7.6	A	0'	7.5	A	0'
	WB Thru/LT	7.5	A	0'	7.7	A	0'
	NB RT/LT	9.9	A	0'	11	B	0'
Appaloosa & Hwy 105	EB Thru/RT	7.6	A	0'	7.5	A	0'
	WB Thru/LT	7.5	A	0'	7.5	A	0'
	NB RT/LT	9.9	A	0'	9.8	A	0'
Cherry Springs & Hwy 105	EB Thru/LT	7.6	A	0'	7.5	A	0'
	WB Thru/RT	7.5	A	0'	7.5	A	0'
	SB RT/LT	9.9	A	0'	10.3	B	0'

Table 2: Existing Intersection Weekday LOS

Table 3 shows the existing weekend level of service for each intersection.

Intersection	Movement	Weekend A.M. Peak Hour			Weekend P.M. Peak Hour		
		Delay (s)	LOS	95% Queue	Delay (s)	LOS	95% Queue
Canterbury & Saddlewood	WB RT/LT	8.3	A	0'	8.4	A	0'
	NB Thru/RT	7.2	A	0'	7.2	A	0'
	SB Thru/RT	7.2	A	0'	7.2	A	0'
Canterbury & Hwy 105	EB Thru/RT	7.5	A	0'	7.6	A	0'
	WB Thru/LT	7.5	A	0'	7.6	A	0'
	NB RT/LT	10.4	B	0'	10.6	B	2.5'
Appaloosa & Hwy 105	EB Thru/RT	7.6	A	0'	7.5	A	0'
	WB Thru/LT	7.5	A	0'	7.6	A	0'
	NB RT/LT	10.3	B	0'	9.2	A	0'
Cherry Springs & Hwy 105	EB Thru/LT	7.6	A	0'	7.5	A	0'
	WB Thru/RT	7.4	A	0'	7.6	A	0'
	SB RT/LT	9.8	A	0'	9.5	A	0'

Table 3: Existing Intersection Weekend LOS

PROJECT DESCRIPTION

The tulip festival event will be held two weekends in May and will operate from 9 A.M. to 5 P.M. Friday, Saturday, and Sunday. The fall festival will be held the last two weeks of September through November 7th and will be open Tuesdays from 9 A.M. to 1 P.M. and Wednesday through Sunday from 9 A.M. to 5 P.M. Weekday and Weekend access to the Colorado Kids Ranch will be via

Saddlewood Rd. Vehicles will access Saddlewood Rd., from Highway 105, via Canterbury Dr. and Appaloosa Rd.

TRIP GENERATION

The Institute of Transportation Engineers (ITE), *Trip Generation Report, 11th Edition*, does not provide trip generation data for events due to the intermittent use of event venues and wide variability in event attendance. The owner provided SMH Consultants attendance information from last year’s festivals. SMH then used this information to determine the A.M. and P.M. peak hour trips for the Colorado Kids Ranch. A ratio of one vehicle for every two persons was assumed. The A.M. peak hour was broken into 90% entering and 10% exiting, the P.M. peak hour was broken into 70% entering and 30% exiting, and the daily trips were broken into 50% entering and 50% exiting. Table 4 shows the weekday daily, A.M. peak hour, and P.M. peak hour trips for the Colorado Kids Ranch.

	Attendance (ppl)	Daily			A.M. PH			P.M. PH		
		Total	In	Out	Total	In	Out	Total	In	Out
Max. Weekday	908	454	227	227						
A.M. Peak Hr	298				149	134	15			
P.M. Peak Hr	124							62	43	19

Table 4: Weekday Generated Trips

Table 5 shows the weekend daily, A.M. peak hour, and P.M. peak hour trips for the Colorado Kids Ranch. The same entering and exiting percentages, as stated above for the weekday trips, were applied for the weekend trips.

	Attendance (ppl)	Daily			A.M. PH			P.M. PH		
		Total	In	Out	Total	In	Out	Total	In	Out
Max. Weekend	3356	1678	839	839						
A.M. Peak Hr	346				173	156	17			
P.M. Peak Hr	472							236	165	71

Table 5: Weekend Generated Trips

TRIP DISTRIBUTION

There are many ways to distribute trips that are entering or exiting a proposed development. For the purposes of this study, SMH assumed that 60% of the site generated traffic would be coming from, or going to, the west and 40% would be coming from, or going to, the east. This directional distribution was largely based on Interstate 25 being located west of the site and Highway 83 being located east of the site.

From this initial directional distribution, the peak hour trips were further distributed amongst the intersections of Canterbury Dr./Hwy. 105 and Appaloosa Rd./Hwy. 105. For the trips coming from, or going to, the west, it was assumed that 95% of those trips would utilize the Canterbury Dr. and Highway 105 intersection and 5% would utilize the Appaloosa Rd. and Highway 105 intersection. For the trips coming from, or going to, the east, it was assumed that 95% of those trips would utilize the Canterbury Dr. and Highway 105 intersection and 5% would utilize the Appaloosa Rd. and Highway 105 intersection. Canterbury Dr. is a paved road, whereas Appaloosa Rd. is not, and the preferred route for mobile map services that visitors might use to get to the festival. Thus, the intersection of Canterbury Dr. and Highway 105 received a larger distribution of the festival generated trips.

An exhibit has been included in the appendix of this report showing the distribution of the site generated trips.

EXISTING PLUS DEVELOPMENT

Existing plus development conditions combine the existing A.M. and P.M. peak hour turning movements with the A.M. and P.M. peak hour traffic generated by the site. The existing plus development peak hour turning movements can be seen in the appendix of this report. Detailed intersection level of service calculations for each intersection are provided in the appendix. Table 6 shows the existing plus development weekday level of service for all the study intersections.

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		Delay (s)	LOS	95% Queue	Delay (s)	LOS	95% Queue
Canterbury & Saddlewood	WB RT/LT	8.6	A	2.5'	8.5	A	2.5'
	NB Thru/RT	7.2	A	0'	7.2	A	0'
	SB Thru/RT	7.4	A	7.5'	7.3	A	2.5'
Canterbury & Hwy 105	EB Thru/RT	7.6	A	0'	7.5	A	0'
	WB Thru/LT	7.8	A	2.5'	7.8	A	0'
	NB RT/LT	11.4	B	2.5'	11.4	B	5'
Appaloosa & Hwy 105	EB Thru/RT	7.8	A	0'	7.6	A	0'
	WB Thru/LT	7.5	A	0'	7.5	A	0'
	NB RT/LT	10.3	B	0'	9.9	A	0'
Cherry Springs & Hwy 105	EB Thru/LT	7.8	A	0'	7.6	A	0'
	WB Thru/RT	7.5	A	0'	7.5	A	0'
	SB RT/LT	10.4	B	0'	10.4	B	0'

Table 6: Existing + Development Weekday Intersection LOS

Table 7 shows the existing plus development weekend level of service for all the study intersections.

Intersection	Movement	Weekend A.M. Peak Hour			Weekend P.M. Peak Hour		
		Delay (s)	LOS	95% Queue	Delay (s)	LOS	95% Queue
Canterbury & Saddlewood	WB RT/LT	8.4	A	2.5'	8.6	A	5'
	NB Thru/RT	7.2	A	0'	7.2	A	0'
	SB Thru/RT	7.5	A	10'	7.5	A	10'
Canterbury & Hwy 105	EB Thru/RT	7.5	A	0'	7.6	A	0'
	WB Thru/LT	7.9	A	5'	8.1	A	5'
	NB RT/LT	11.9	B	2.5'	13.8	B	17.5'
Appaloosa & Hwy 105	EB Thru/RT	7.7	A	0'	7.7	A	0'
	WB Thru/LT	7.5	A	0'	7.7	A	0'
	NB RT/LT	10.7	B	0'	10.7	B	0'
Cherry Springs & Hwy 105	EB Thru/LT	7.8	A	0'	7.6	A	0'
	WB Thru/RT	7.5	A	0'	7.7	A	0'
	SB RT/LT	10.3	B	0'	10.1	B	0'

Table 7: Existing + Development Weekend Intersection LOS

SHORT-RANGE HORIZON ANALYSIS

El Paso County requires a short-range horizon analysis as part of the traffic impact study for projects. The short-range horizon analysis is intended to analyze the immediate impacts of the proposed project on the existing and committed roadway network. The short-range horizon year is defined as one year after the full occupancy of the project. To determine the projected peak hour trips for the short-range horizon year, a 2% annual growth rate was applied to the existing peak hour turning movement counts. This growth rate is consistent with the growth rate utilized in the Highway 105 study. The short-range peak hour turning movements can be seen in the appendix of this report. Detailed intersection level of service calculations for each intersection are provided in the appendix.

Table 8 shows the short-range horizon weekday level of service for all the study intersections.

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Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		Delay (s)	LOS	95% Queue	Delay (s)	LOS	95% Queue
Canterbury & Saddlewood	WB RT/LT	8.6	A	2.5'	8.5	A	2.5'
	NB Thru/RT	7.2	A	0'	7.2	A	0'
	SB Thru/RT	7.4	A	7.5'	7.3	A	2.5'
Canterbury & Hwy 105	EB Thru/RT	7.6	A	0'	7.5	A	0'
	WB Thru/LT	7.8	A	2.5'	7.8	A	0'
	NB RT/LT	11.4	B	2.5'	11.5	B	5'
Appaloosa & Hwy 105	EB Thru/RT	7.8	A	0'	7.6	A	0'
	WB Thru/LT	7.5	A	0'	7.6	A	0'
	NB RT/LT	10.3	B	0'	10.0	A	0'
Cherry Springs & Hwy 105	EB Thru/LT	7.8	A	0'	7.6	A	0'
	WB Thru/RT	7.5	A	0'	7.5	A	0'
	SB RT/LT	10.4	B	0'	10.5	B	0'

Table 8: Short-Range Horizon Weekday Intersection LOS

Table 9 shows the short-range horizon weekend level of service for all the study intersections.

Intersection	Movement	Weekend A.M. Peak Hour			Weekend P.M. Peak Hour		
		Delay (s)	LOS	95% Queue	Delay (s)	LOS	95% Queue
Canterbury & Saddlewood	WB RT/LT	8.4	A	2.5'	8.6	A	5'
	NB Thru/RT	7.2	A	0'	7.2	A	0'
	SB Thru/RT	7.5	A	10'	7.5	A	10'
Canterbury & Hwy 105	EB Thru/RT	7.5	A	0'	7.6	A	0'
	WB Thru/LT	7.9	A	5'	8.1	A	5'
	NB RT/LT	12.0	B	5'	14.0	B	17.5'
Appaloosa & Hwy 105	EB Thru/RT	7.8	A	0'	7.7	A	0'
	WB Thru/LT	7.5	A	0'	7.7	A	0'
	NB RT/LT	10.8	B	0'	10.7	B	0'
Cherry Springs & Hwy 105	EB Thru/LT	7.8	A	0'	7.7	A	0'
	WB Thru/RT	7.5	A	0'	7.7	A	0'
	SB RT/LT	10.4	B	0'	10.2	B	0'

Table 9: Short-Range Horizon Weekend Intersection LOS

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LONG-RANGE HORIZON ANALYSIS

El Paso County requires a long-range horizon analysis as part of the traffic impact study for projects. The long-range horizon analysis is intended to analyze the impacts of the proposed project on the long-range traffic condition and is based on the current Master Transportation Corridor Plan planning horizon and related modeling. The long-range peak hour turning movements can be seen in the appendix of this report. Detailed intersection level of service calculations for each intersection are provided in the appendix.

Per the ECM, long-range volume projection may be found by using a straight-line projection from the build-out year between existing traffic volumes and the MTCP Model forecast. Map 9 of the 2016 MTCP update was used to find the 2016 and 2040 traffic volumes and a yearly constant growth rate of 4.4% was calculated and utilized for the long-range horizon analysis.

Table 10 shows the long-range horizon weekday level of service for all the study intersections.

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		Delay (s)	LOS	95% Queue	Delay (s)	LOS	95% Queue
Canterbury & Saddlewood	WB RT/LT	9.1	A	2.5'	8.7	A	2.5'
	NB Thru/RT	7.2	A	0'	7.2	A	0'
	SB Thru/RT	7.5	A	7.5'	7.3	A	2.5'
Canterbury & Hwy 105	EB Thru/RT	8.0	A	0'	8.0	A	0'
	WB Thru/LT	8.3	A	5'	8.5	A	2.5'
	NB RT/LT	15.2	C	5'	17.8	C	10'
Appaloosa & Hwy 105	EB Thru/RT	8.4	A	0'	8.0	A	0'
	WB Thru/LT	7.8	A	0'	7.9	A	0'
	NB RT/LT	13.4	B	2.5'	12.6	B	2.5'
Cherry Springs & Hwy 105	EB Thru/LT	8.4	A	0'	8.0	A	0'
	WB Thru/RT	7.8	A	0'	7.9	A	0'
	SB RT/LT	13.5	B	2.5'	14.0	B	2.5'

Table 10: Long-Range Horizon Weekday Intersection LOS

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Table 11 shows the long-range horizon weekend level of service for all the study intersections.

Intersection	Movement	Weekend A.M. Peak Hour			Weekend P.M. Peak Hour		
		Delay (s)	LOS	95% Queue	Delay (s)	LOS	95% Queue
Canterbury & Saddlewood	WB RT/LT	8.4	A	2.5'	8.7	A	7.5'
	NB Thru/RT	7.2	A	0'	7.2	A	0'
	SB Thru/RT	7.5	A	10'	7.6	A	10'
Canterbury & Hwy 105	EB Thru/RT	7.8	A	0'	8.0	A	0'
	WB Thru/LT	8.3	A	5'	8.7	A	5'
	NB RT/LT	17.1	C	10'	25.7	D	42.5'
Appaloosa & Hwy 105	EB Thru/RT	8.3	A	0'	8.0	A	0'
	WB Thru/LT	7.8	A	0'	8.2	A	0'
	NB RT/LT	14.6	B	2.5'	13.4	B	0'
Cherry Springs & Hwy 105	EB Thru/LT	8.3	A	0'	8.0	A	0'
	WB Thru/RT	7.7	A	0'	8.2	A	0'
	SB RT/LT	13.2	B	5'	12.5	B	0'

Table 11: Long-Range Horizon Weekend Intersection LOS

AUXILIARY LANE ANALYSIS

Per the Engineering Criteria Manual (ECM), an exclusive left turn lane is required on a principal arterial, at an access, when the projected peak hour left ingress turning volume is 10 vph or greater. Table 12 shows the project generated left turn movements at each intersection versus the ECM criteria.

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Intersection	Turn Movement	Peak Hour	Projected Left Turns (vph)	ECM Criteria (vph)	Warranted
Canterbury & Hwy 105	WB LT	Weekday AM	51	10	Yes
		Weekday PM	18	10	Yes
		Weekend AM	60	10	Yes
		Weekend PM	63	10	Yes
Appaloosa & Hwy 105	WB LT	Weekday AM	4	10	No
		Weekday PM	6	10	No
		Weekend AM	4	10	No
		Weekend PM	6	10	No
Canterbury & Saddlewood	SB LT	Weekday AM	129	25	Yes
		Weekday PM	43	25	Yes
		Weekend AM	150	25	Yes
		Weekend PM	157	25	Yes
Canterbury & Hwy 105	NB LT	Weekday AM	11	25	No
		Weekday PM	17	25	No
		Weekend AM	16	25	No
		Weekend PM	48	25	Yes
Appaloosa & Hwy 105	NB LT	Weekday AM	4	25	No
		Weekday PM	4	25	No
		Weekend AM	5	25	No
		Weekend PM	2	25	No
Canterbury & Saddlewood	WB LT	Weekday AM	1	25	No
		Weekday PM	3	25	No
		Weekend AM	0	25	No
		Weekend PM	0	25	No

Table 12: Left Turn Lane Analysis

per ECM, design speed (60 mph) shall be used for the lengths of the turn lanes along hwy 105. Revise all turn lanes (right and left) accordingly. Refer to AASHTO as necessary.

As can be seen from Table 12, an exclusive left turn lane is warranted at the intersection of Canterbury Dr. and Highway 105 on westbound Highway 105 for the weekday and weekend A.M. and P.M. peak hours and at the intersection of Canterbury Dr. and Saddlewood Rd. on southbound Canterbury Dr. for the weekday and weekend A.M. and P.M. peak hours. An additional exclusive left turn lane is warranted at the intersection of Canterbury Dr. and Highway 105 on northbound Canterbury Dr. for the weekend PM peak hour.

Per the ECM, the left turn auxiliary lane on westbound Highway 105 at Highway 105 and Canterbury Dr. is recommended to have a 540' redirect taper, 160' bay taper, 188' deceleration lane (lane length) and 100' of storage. In the current condition, Highway 105 would not be wide enough to meet the auxiliary lane criteria and will need to be widened. Calculations for the auxiliary lane were made using a 6% upgrade and assuming 12' widening on the north side of the highway.

Per the ECM, the left turn auxiliary lane on southbound Canterbury Dr. at Canterbury Dr. and Saddlewood Rd. is recommended to have a 90' redirect taper, 144' bay taper, 138' deceleration lane (lane length), and 150' of storage. In the current condition, Canterbury Dr. would not be wide enough to meet the auxiliary lane criteria and will need to be widened. Calculations for the auxiliary lane were made using a 4% downgrade and assuming 6' widening on each side of the road.

Per the ECM, the left turn auxiliary lane on northbound Canterbury Dr. at Canterbury Dr. and Highway 105 is recommended to have a 90' redirect taper, 108' bay taper, 104' deceleration lane (lane length), and 50' of storage. In the current condition, Canterbury Dr. would not be wide enough to meet the auxiliary lane criteria and will need to be widened. Calculations for the auxiliary lane were made using a 4% upgrade and assuming 6' widening on each side of the road.

Per the ECM, an exclusive right turn lane is required on a principal arterial, at an access, when the projected peak hour right ingress turning volume is 25 vph or greater. Table 13 shows the project generated right turn movements at each intersection versus the ECM criteria.

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Intersection	Turn Movement	Peak Hour	Projected Right Turns (vph)	ECM Criteria (vph)	Warranted
Canterbury & Hwy 105	EB RT	Weekday AM	78	25	Yes
		Weekday PM	32	25	Yes
		Weekend AM	90	25	Yes
		Weekend PM	97	25	Yes
Appaloosa & Hwy 105	EB RT	Weekday AM	6	25	No
		Weekday PM	3	25	No
		Weekend AM	5	25	No
		Weekend PM	9	25	No
Canterbury & Saddlewood	NB RT	Weekday AM	0	50	No
		Weekday PM	3	50	No
		Weekend AM	1	50	No
		Weekend PM	1	50	No
Canterbury & Hwy 105	NB RT	Weekday AM	8	50	No
		Weekday PM	9	50	No
		Weekend AM	6	50	No
		Weekend PM	30	50	No
Appaloosa & Hwy 105	NB RT	Weekday AM	4	50	No
		Weekday PM	5	50	No
		Weekend AM	2	50	No
		Weekend PM	2	50	No
Canterbury & Saddlewood	WB RT	Weekday AM	14	50	No
		Weekday PM	22	50	No
		Weekend AM	18	50	No
		Weekend PM	69	50	Yes

Table 13: Right Turn Lane Analysis

see comment above

As can be seen from Table 13, an exclusive right turn lane is warranted at the intersection of Canterbury Dr. and Highway 105 on eastbound Highway 105 for the weekday and weekend A.M. and P.M. peak hours. An exclusive right turn lane is also warranted at the intersection of Canterbury Dr. and Saddlewood Rd. on westbound Saddlewood Rd. for the weekend PM peak hour.

Per the ECM, the right turn auxiliary lane on eastbound Highway 105 at Highway 105 and Canterbury Dr. is recommended to have a 270' approach taper, 318' deceleration lane (lane length), and 100' of storage. In the current condition, Highway 105 would not be wide enough to meet the auxiliary lane criteria and will need to be widened. Calculations for the auxiliary lane were made using a 6% downgrade and assuming 12' widening on the south side of the highway.

Per the ECM, the right turn auxiliary lane on westbound Saddlewood at Canterbury Dr. and Saddlewood Rd. is recommended to have a 108' approach taper, 104' deceleration lane (lane length), and 100' of storage. In the current condition, Saddlewood Rd. would not be wide enough to meet the auxiliary lane criteria and will need to be widened. Calculations for the auxiliary lane were made using a 3% upgrade and assuming 12' widening on the north side of the road.

Per the ECM, a right turn acceleration lane is required on a principal arterial when the projected right turning movement volume is 50 vph or greater and the posted speed limit is greater than 40 mph. Table 14 shows the project generated right turn movements at each intersection versus the ECM criteria.

Intersection	Turn Movement	Peak Hour	Projected Right Turns (vph)	ECM Criteria (vph)	Warranted
Canterbury & Hwy 105	NB RT	Weekday AM	8	50	No
		Weekday PM	9	50	No
		Weekend AM	6	50	No
		Weekend PM	30	50	No
Appaloosa & Hwy 105	NB RT	Weekday AM	4	50	No
		Weekday PM	5	50	No
		Weekend AM	2	50	No
		Weekend PM	2	50	No

Table 14: Right Turn Acceleration Lane Analysis

As can be seen from Table 14, a right turn acceleration lane is not warranted at any of the study intersections.

see comment
regarding typo in the
calculation in the
appendix.

ROAD IMPACT FEE

The following is the method for computing the fees which factors in the length of time the event is open per year and will exclude the first 50 parking spaces which are already allowed with the standard agritainment use.

1. Event average daily trips for the period it's open = ADT
2. Convert to Annual ADT = $(ADT) \times (\# \text{ of weeks open}) / (52 \text{ weeks/year}) = AADT$
3. Reduction Factor = $1 - (50 \text{ initial spaces}) / (\text{Total Parking spaces proposed})$
4. Road Impact Fee = $AADT \times (\$398.55 \text{ per AADT}) \times (\text{Reduction Factor})$

Following this methodology, the combined road impact fee for both the fall festival and tulip festival is \$28,097. Calculations and assumptions for the road impact fee can be seen in the appendix.

The Farm camp was not considered in road impact fees as the event will not exceed 50 cars, and is covered under the current zoning of the Colorado Kids ranch.

CONCLUSIONS

Please update conclusions per
comments above.

This traffic impact study analyzed the traffic impacts of the proposed Colorado Kids Ranch on the adjacent roadway network.

The LOS analysis for all intersections indicated that the LOS for all approaches to the intersection would continue to operate at LOS D or better, for the A.M. and P.M. peak hours of the events. This remains true for the existing plus development, short-range horizon, and long-range horizon scenarios.

An auxiliary left turn lane is warranted in the westbound direction at the intersection of Canterbury Dr. and Highway 105 for weekday and weekend A.M. and P.M. peak hours. This left turn lane would require a 540' redirect taper (assuming 12' widening on the north side of Highway 105), a 160' bay taper, lane length of 188', and 100' of storage.

An auxiliary left turn lane is warranted in the southbound direction at the intersection of Canterbury Dr. and Saddlewood Rd. for the weekday and weekend A.M. and P.M. peak hours. This left turn lane would require 90' of redirect taper (assuming 6' of widening on each side of the road), a bay taper of 144', a 138' lane length, and 200' of storage.

An auxiliary left turn lane is warranted in the northbound direction at the intersection of Canterbury Dr. and Highway 105 for the weekend P.M. peak hour. This left turn lane would require a redirect taper of 90' (assuming 6' lane

widening on each side of the road), a bay taper of 72', a lane length of 104', and a storage length of 50'.

An auxiliary right turn lane is warranted in the eastbound direction at the intersection of Highway 105 and Canterbury Dr. for the weekday and weekend A.M. and P.M. peak hours. This right turn lane would require an approach taper of 200', a lane length of 318', and 150' of storage.

An auxiliary right turn lane is warranted in the westbound direction at the intersection of Canterbury Dr. and Saddlewood Rd. for the weekend P.M. peak hour. This right turn lane would require an approach taper of 108', a lane length of 104', and a storage length of 100'.

Based on the analysis presented in this report, the Colorado Kids Ranch generated traffic will require some roadway improvements to negate the impacts to the surrounding roadway network.

Per the MTCP, Highway 105 from Knollwood Boulevard to Highway 83 is identified as a 2040 roadway improvement project. This project would expand Highway 105 from a two-lane principal arterial to a four-lane principal arterial. In addition, there is a current corridor analysis being completed for Highway 105, from Interstate 25 to Highway 83. However, this corridor analysis for the section of Highway 105 adjacent to the Colorado Kids Ranch has not been completed, and thus, has not recommended any roadway improvements for Highway 105 in this area.

Please also identify that pavement is required along Saddlewood from Canterbury to the site access as traffic meets the threshold in ECM 2.2.7

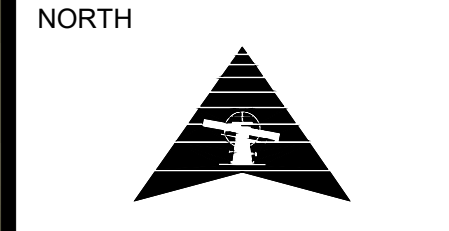
APPENDIX

VICINITY MAP



COLORADO PUMPKIN PATCH
TULIP FESTIVAL TEMPORARY USE APPLICATION
EL PASO COUNTY, COLORADO

REVISION DATE	REVISION DESCRIPTION (DESCRIPTION)
00/00/00



NOT TO SCALE

PROJECT #: 2211-0442
CHECKED BY: BML
DRAWN BY: JAM

DATE: 4/7/2023

SHEET # **FIG. 1**

TOTAL SHEETS

FIGURE 1 - VICINITY MAP

EXISTING TURNING MOVEMENT COUNTS

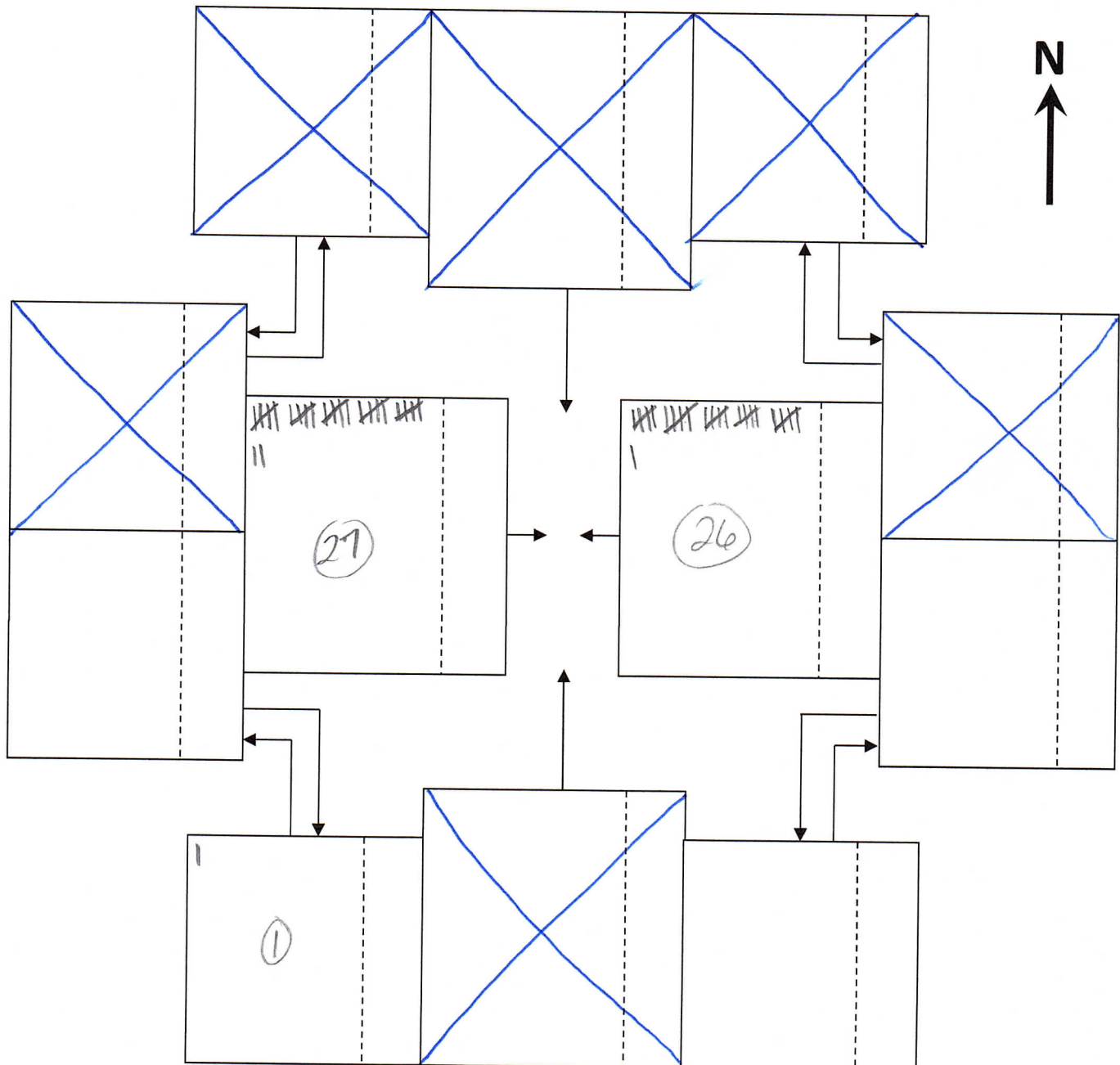
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 9:00 to 9:15
Date: 12/17/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



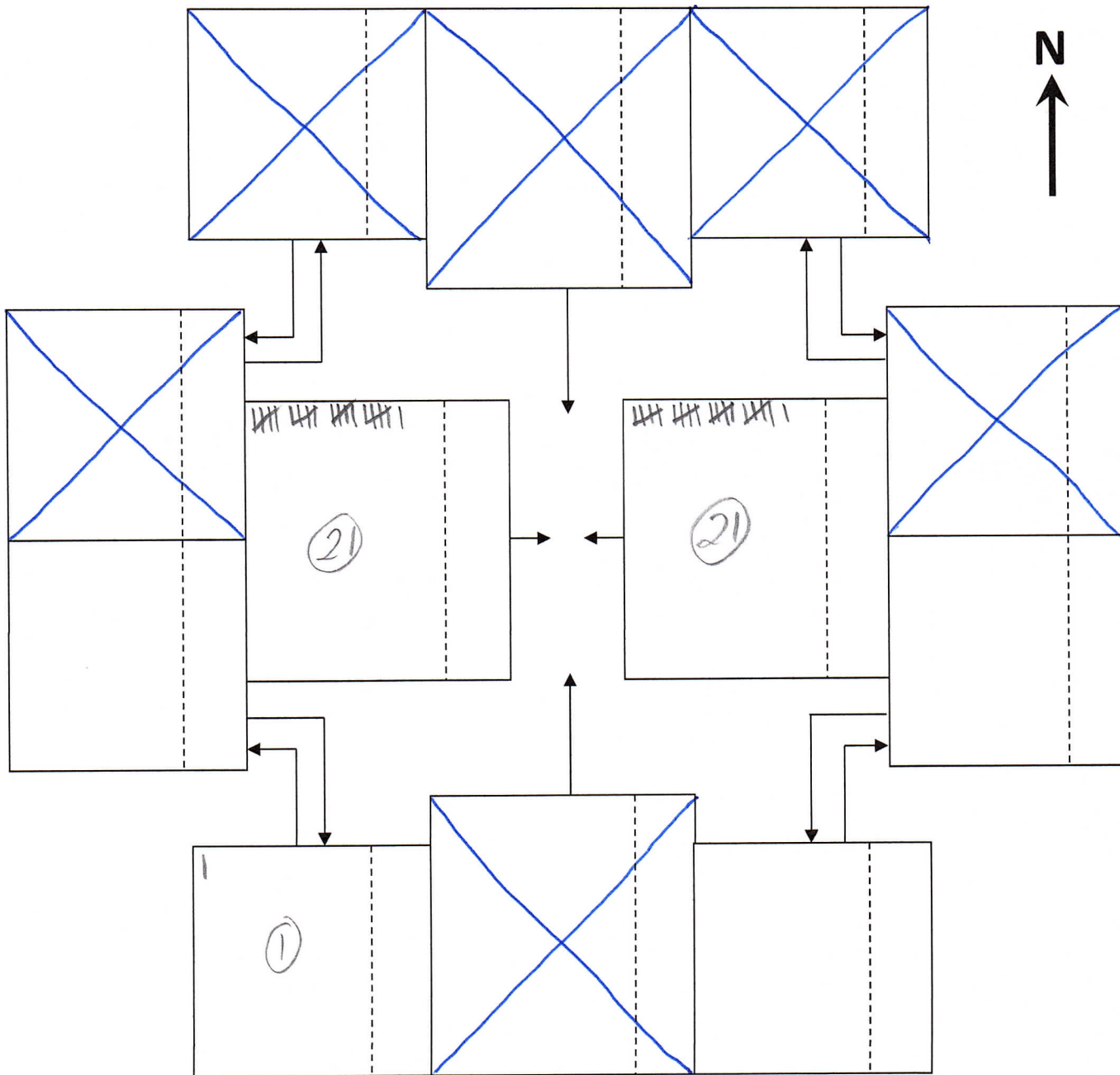
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 9:15 to 9:30
Date: 12/17/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



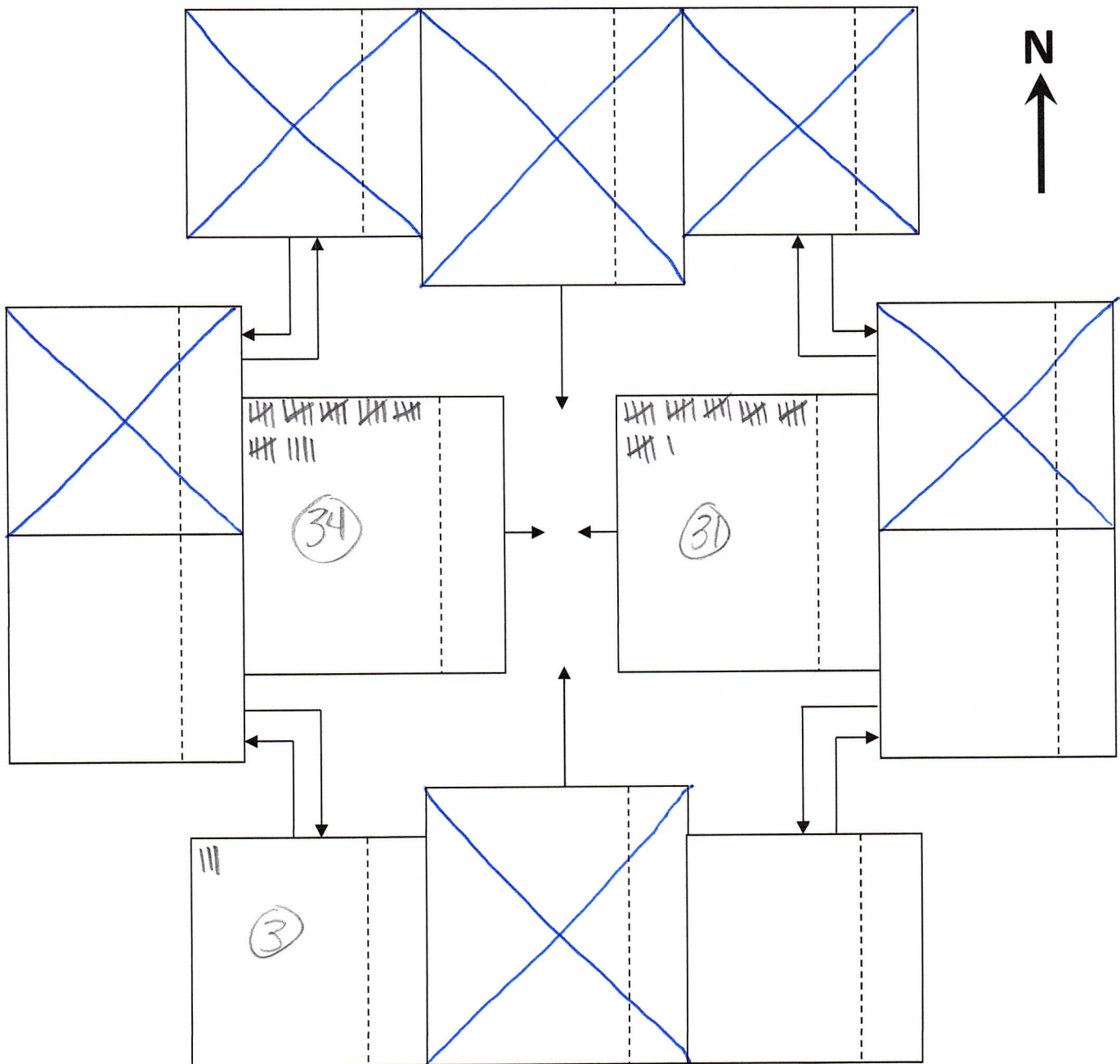
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 9:30 to 9:45
Date: 12/17/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



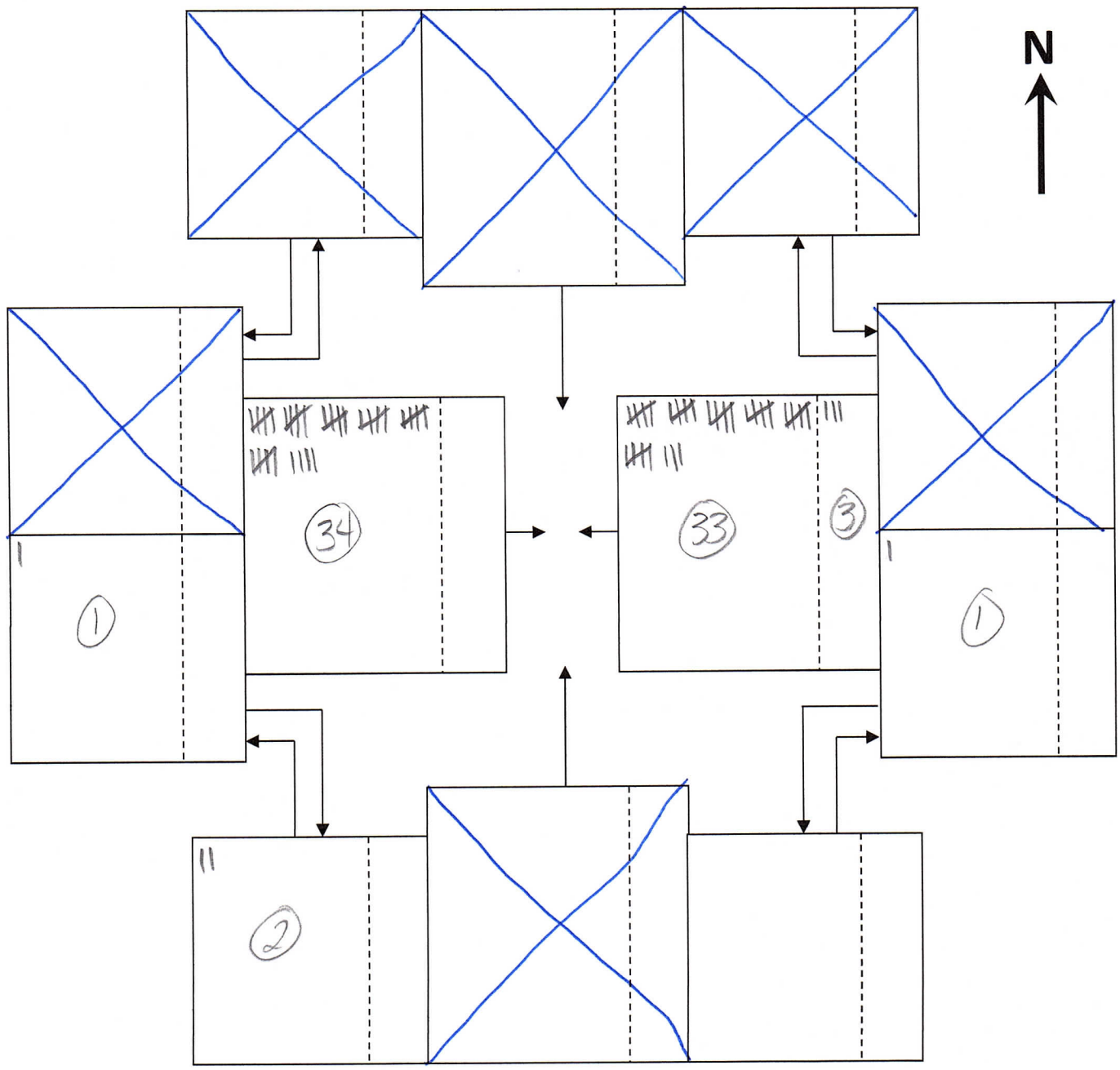
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 9:45 to 10:00
Date: 12/17/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



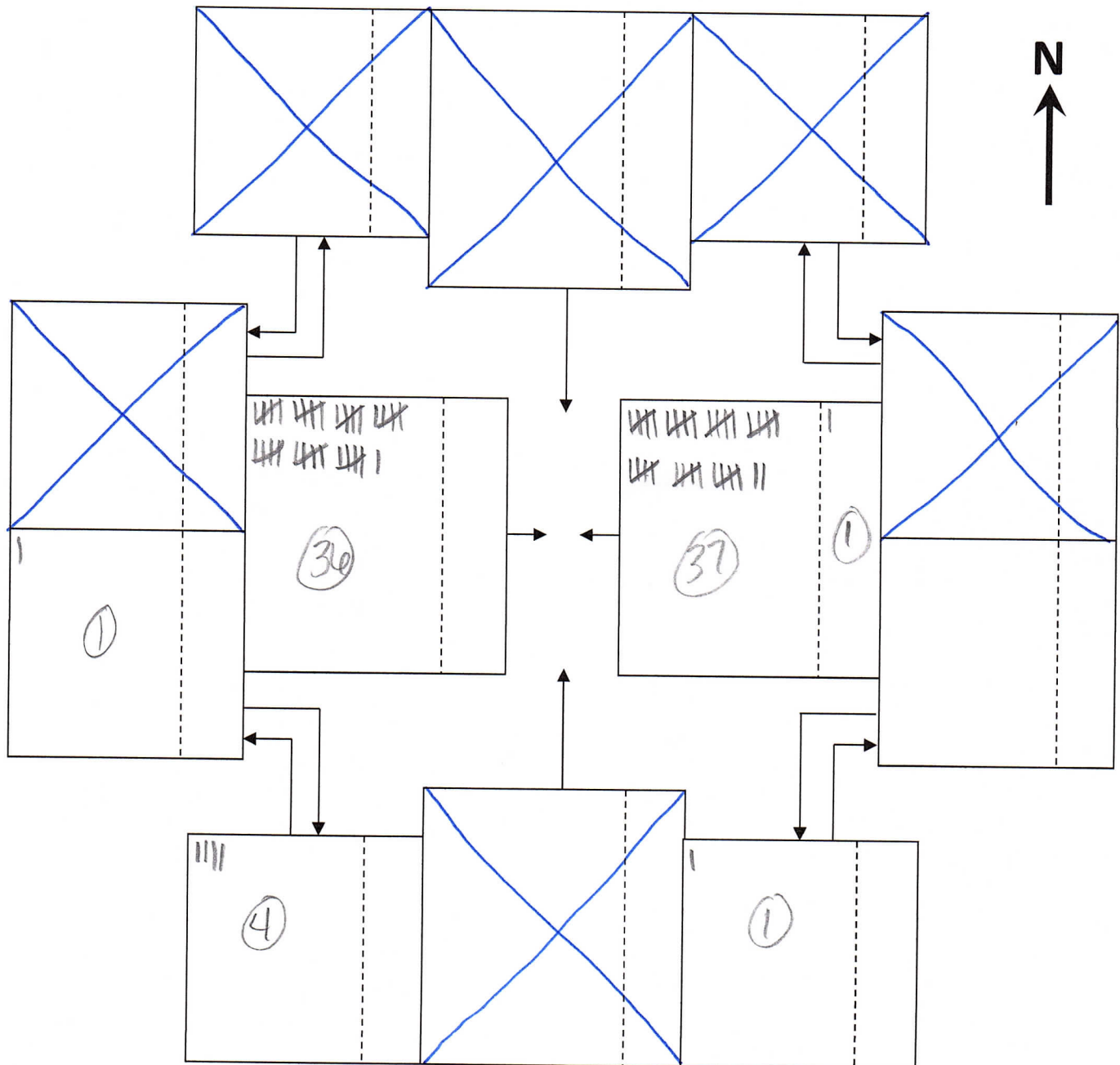
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 1:00 to 1:15
Date: 12/17/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



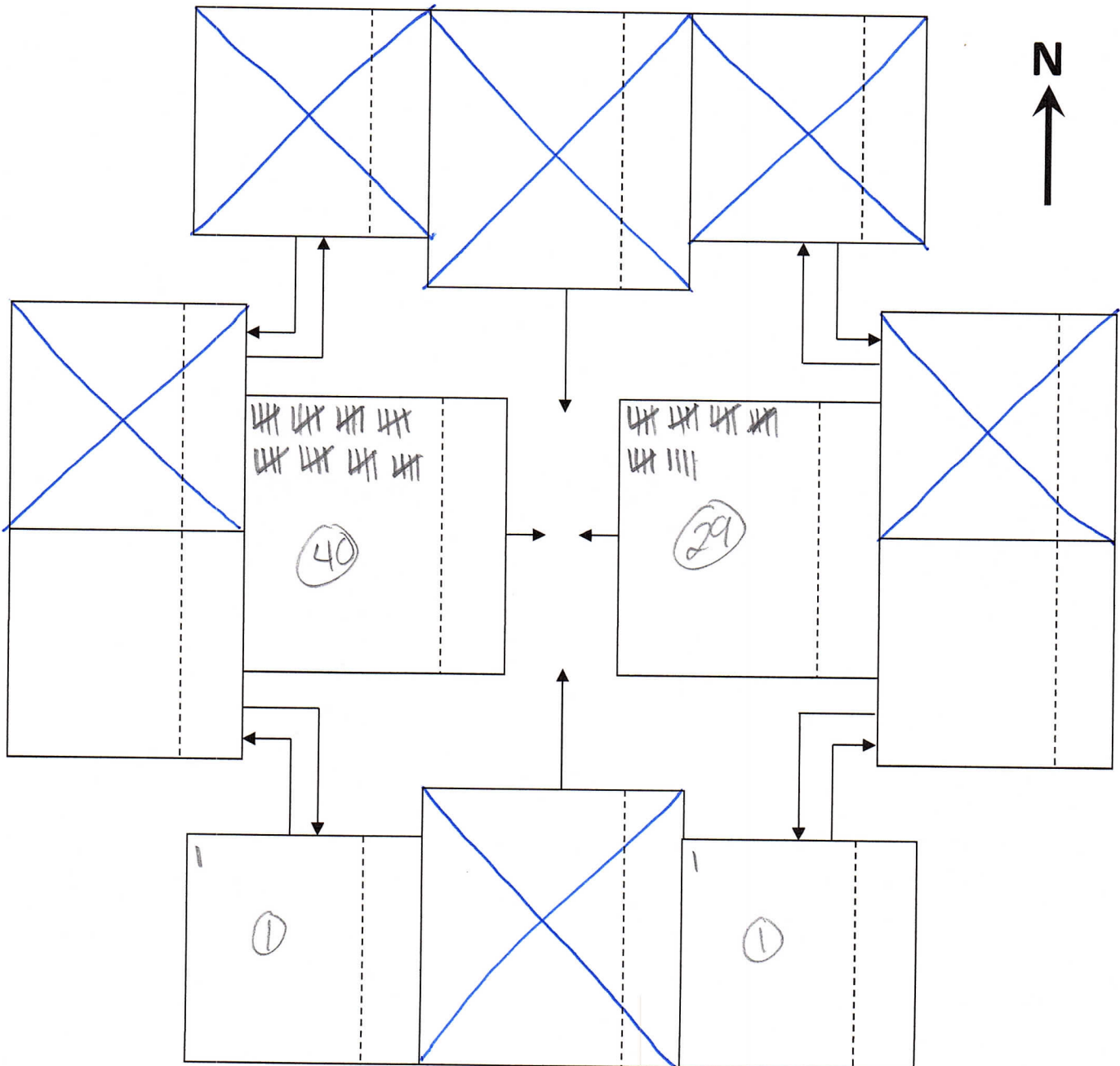
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 1:15 to 1:30
Date: 12/17/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



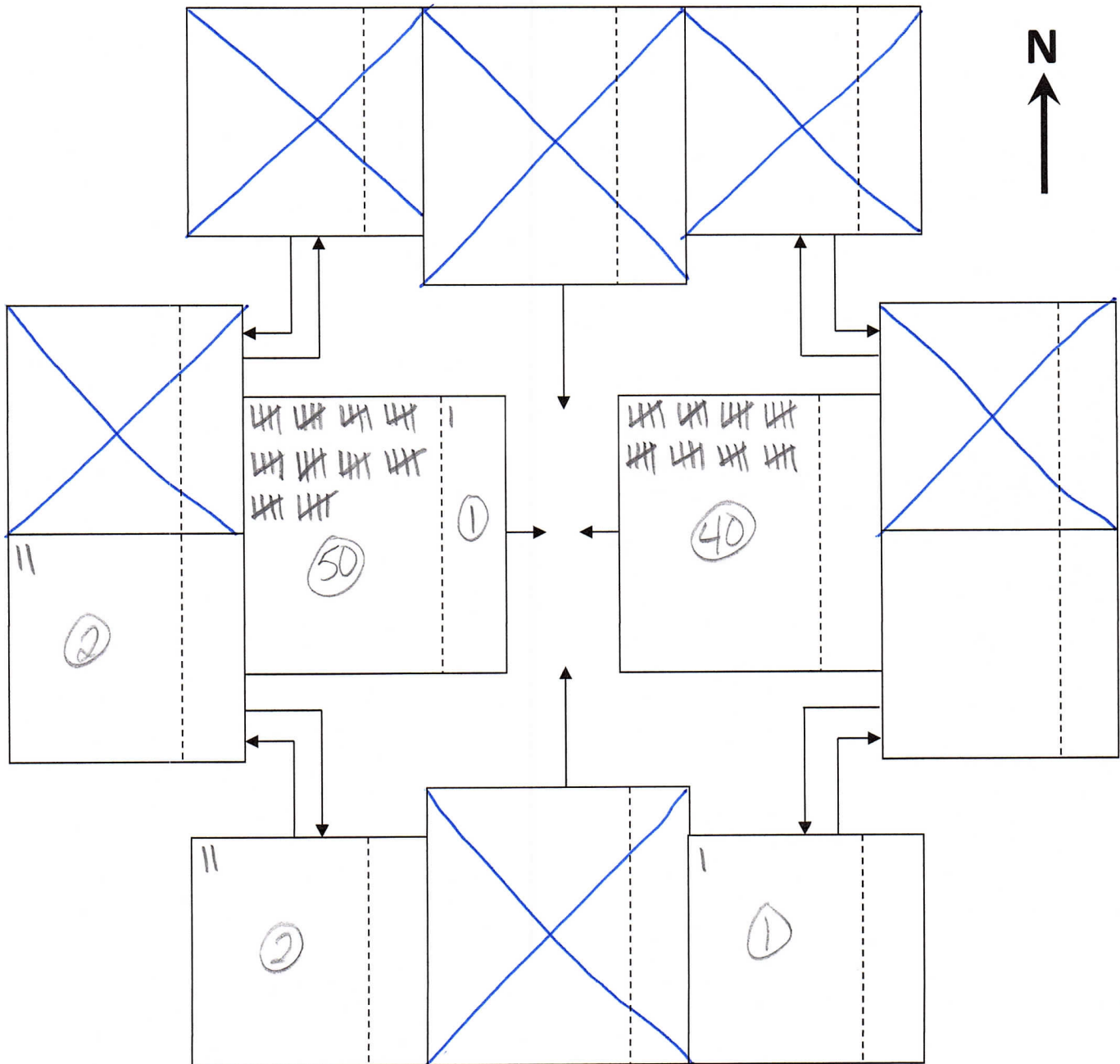
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
 E/W Street: 105

Time: 1:30 to 1:45
 Date: 12/17/22
 Weather: _____
 Observer: Brett

Counts are Conducted From the Direction of Travel
 (e.g. how many vehicles are turning left from the northbound direction)



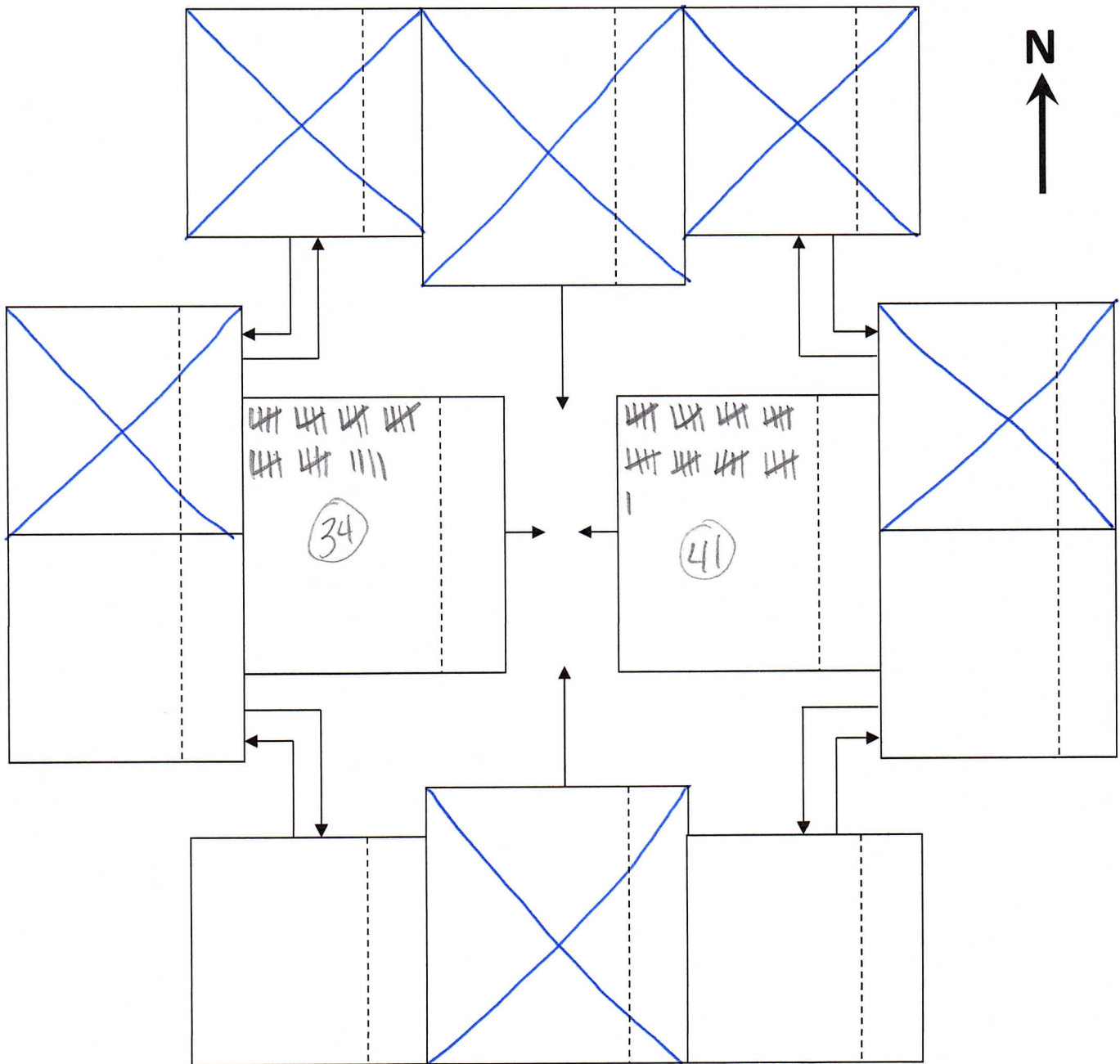
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 1:45 to 2:00
Date: 12/17/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



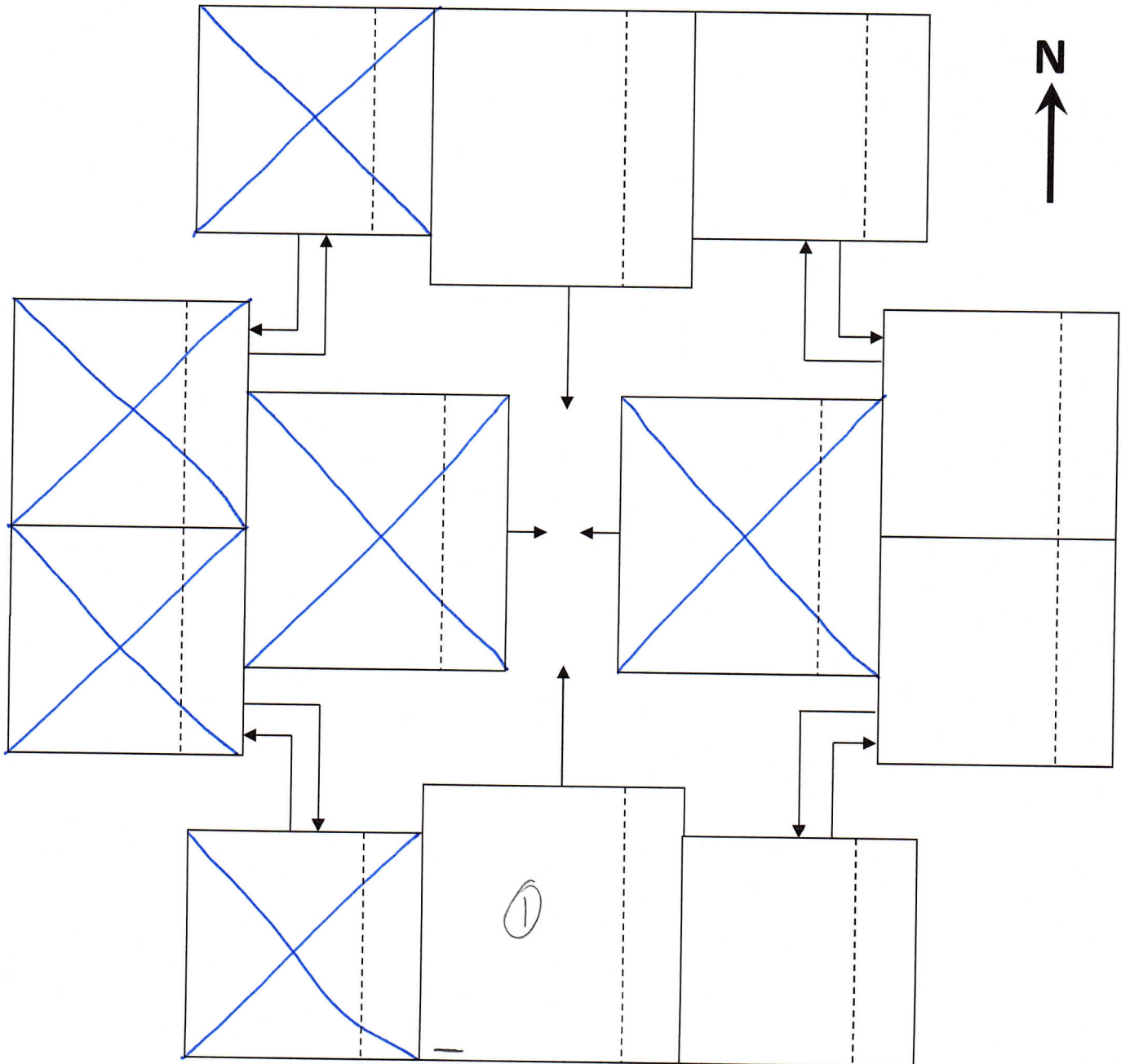
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

Time: 9:00 to 9:15
Date: 12/17/22
Weather: 7° Sunny
Observer: Jerrifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



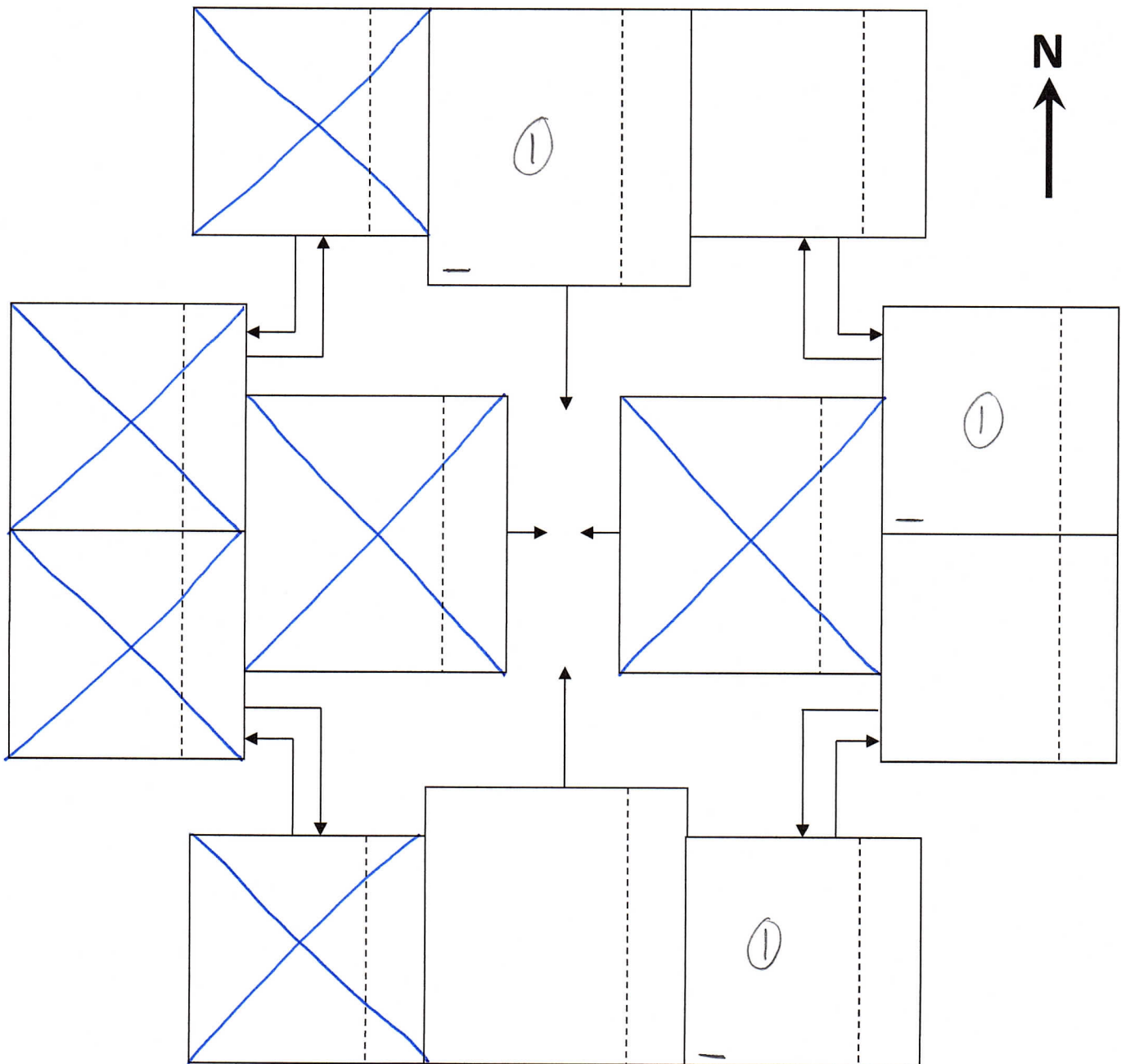
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

Time: 9:15 to 9:30
Date: 12/17/22
Weather: 7° Sunny
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



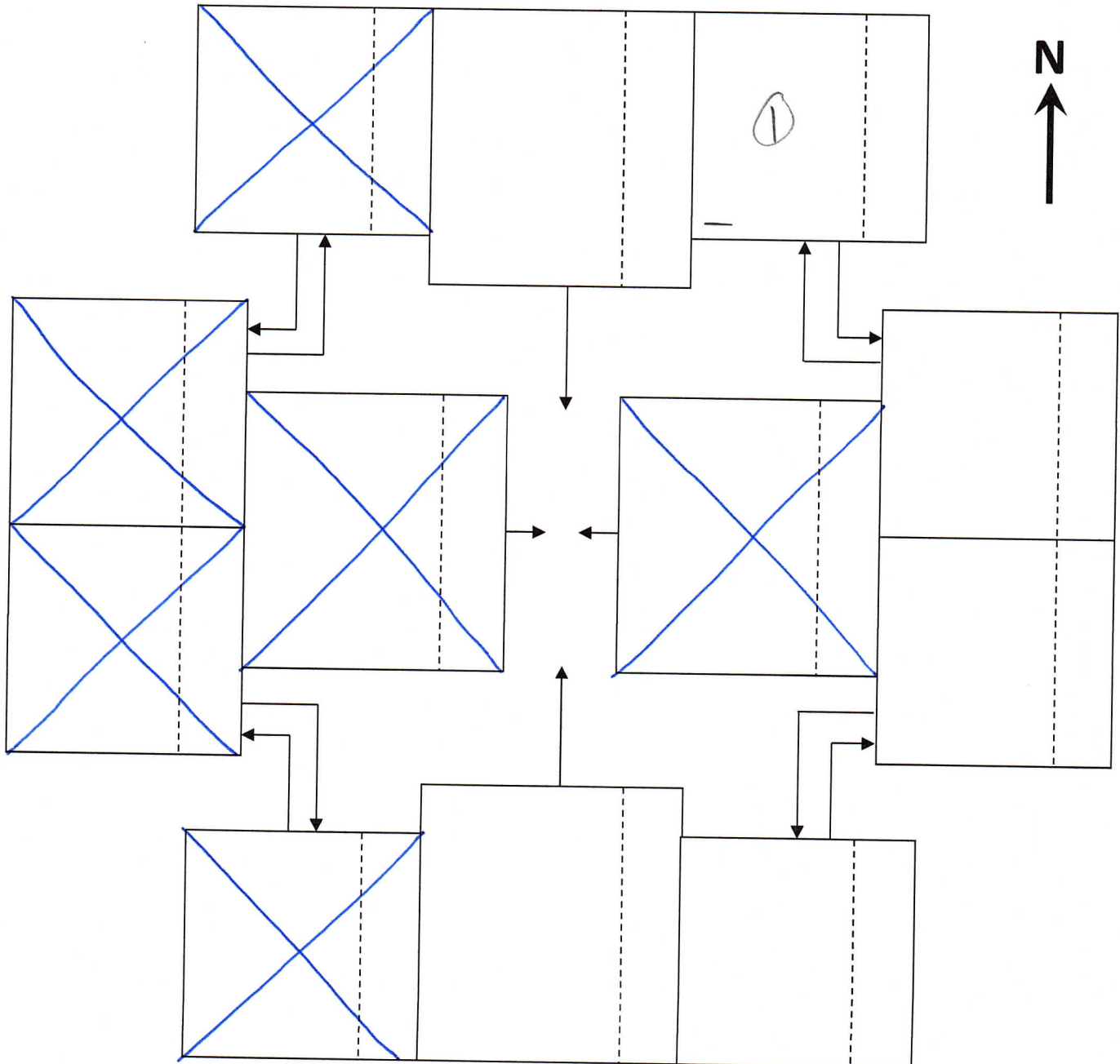
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

Time: 9:30 to 9:45
Date: 12/17/22
Weather: 7° Sunny
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



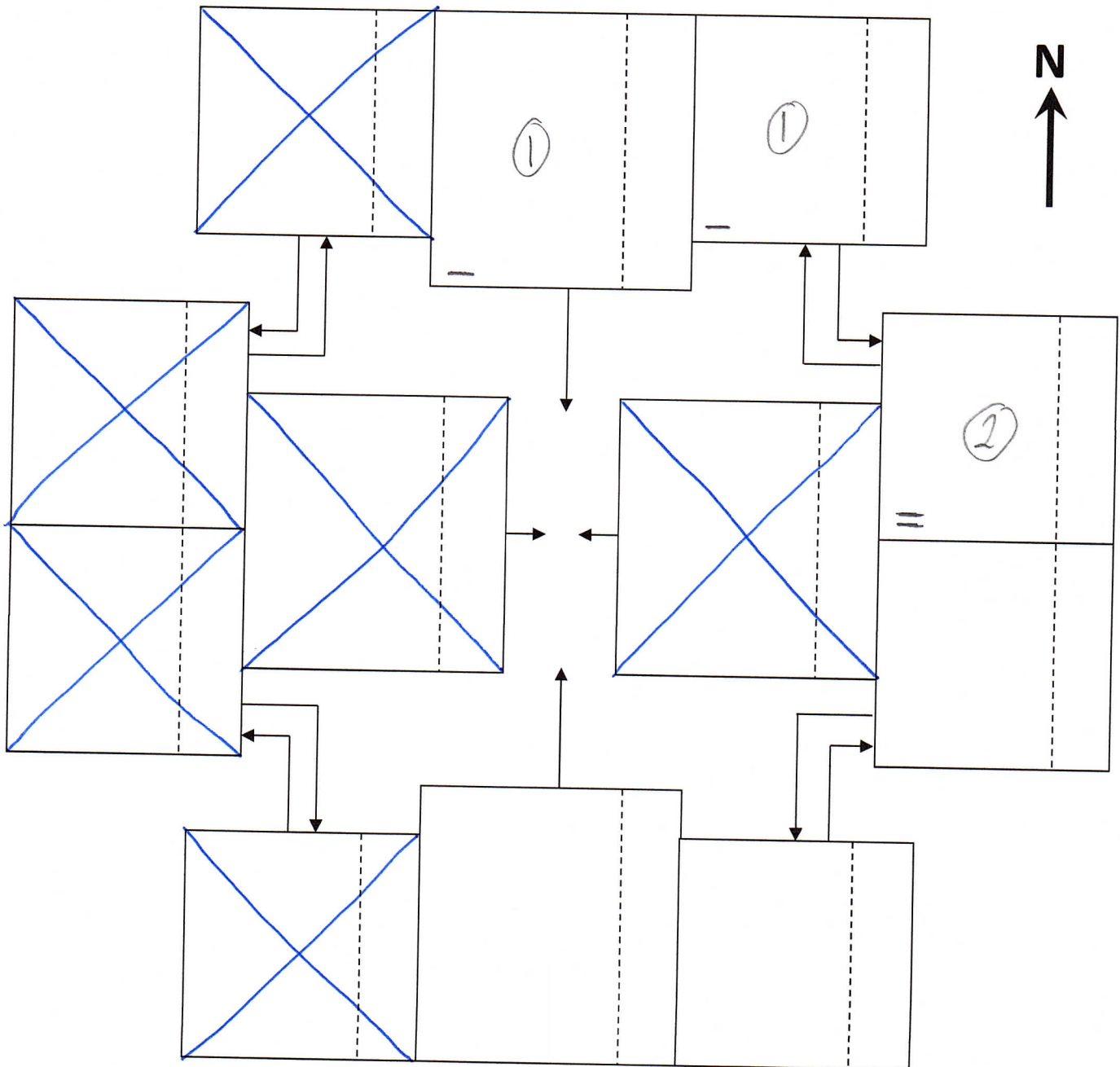
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

Time: 9:45 to 10:00
Date: 12/17/22
Weather: 70 Sunny
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



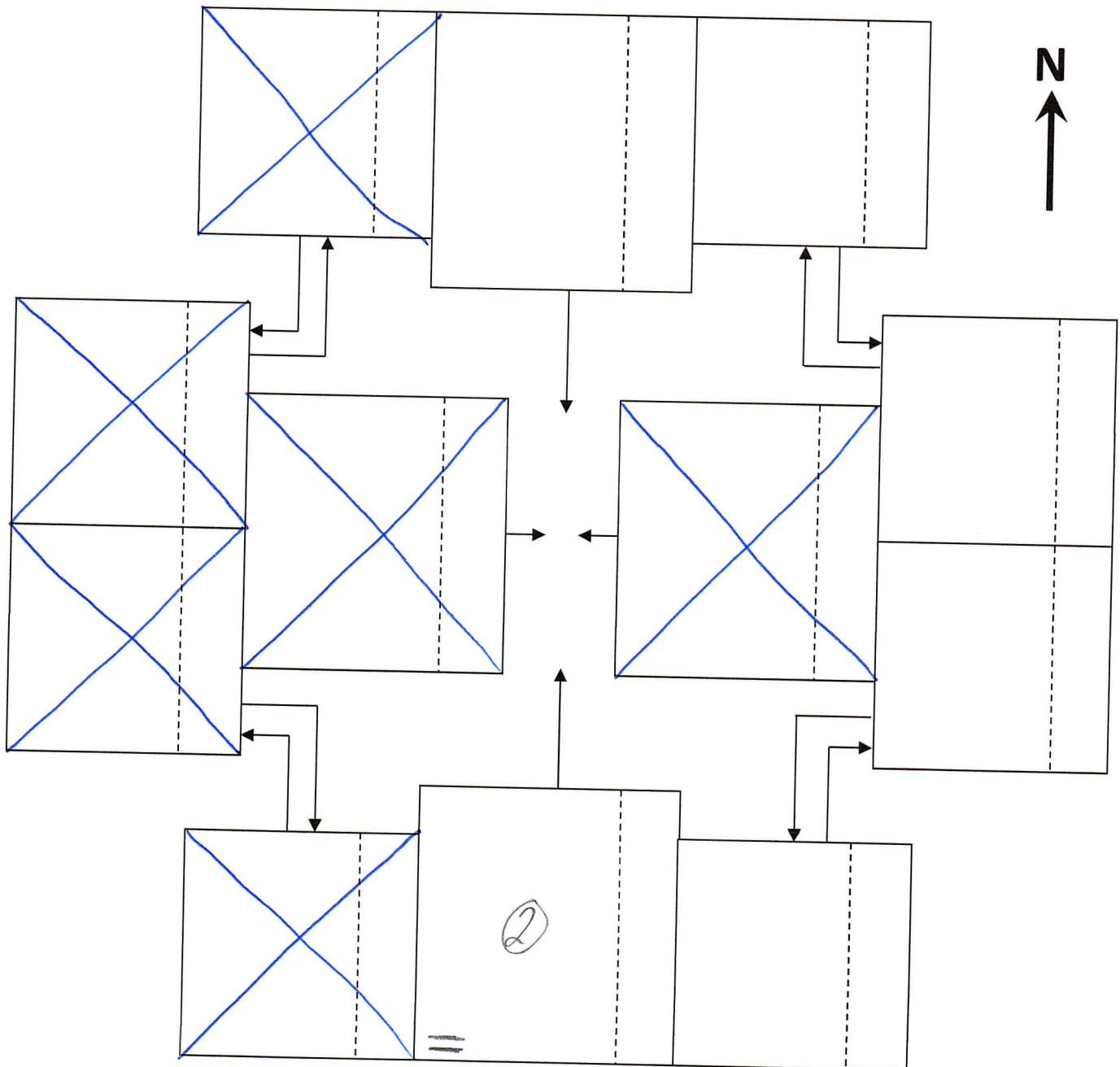
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewod Rd

Time: 1:00 to 1:15
Date: 12/17/22
Weather: _____
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



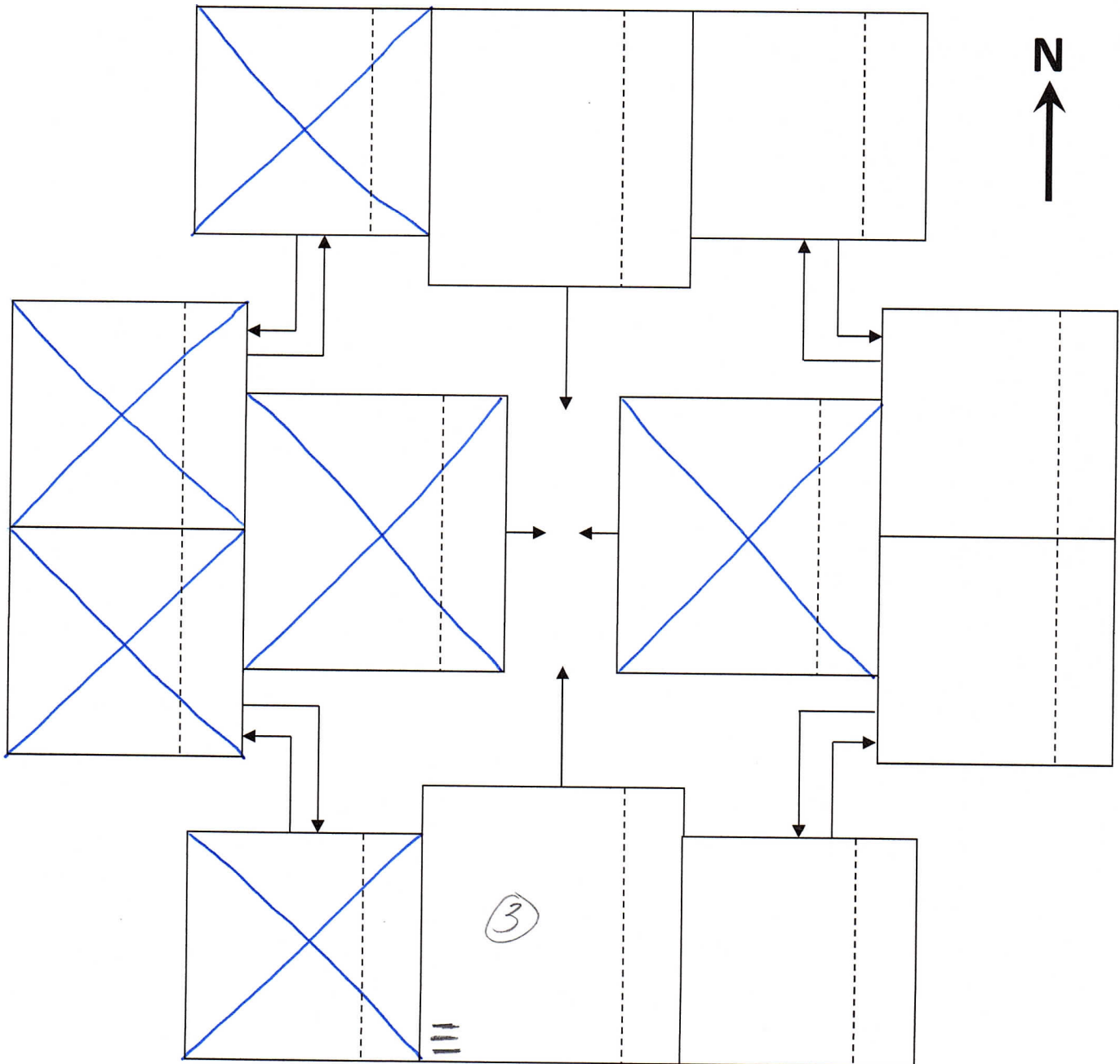
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewod Rd

Time: 1:15 to 1:30
Date: 12/17/22
Weather: 28° Sunny
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



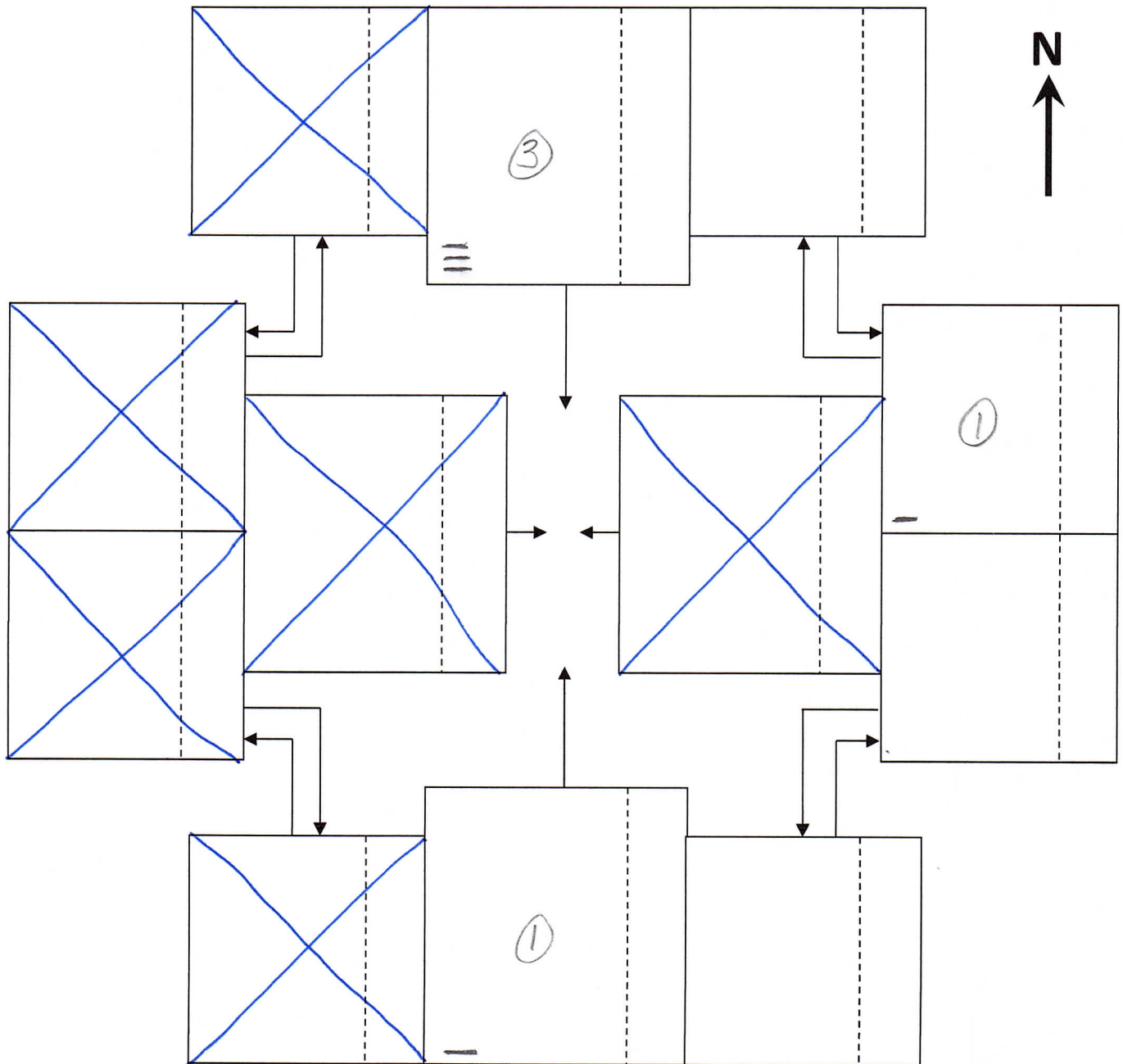
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewod Rd

Time: 1:30 to 1:45
Date: 12/17/22
Weather: _____
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



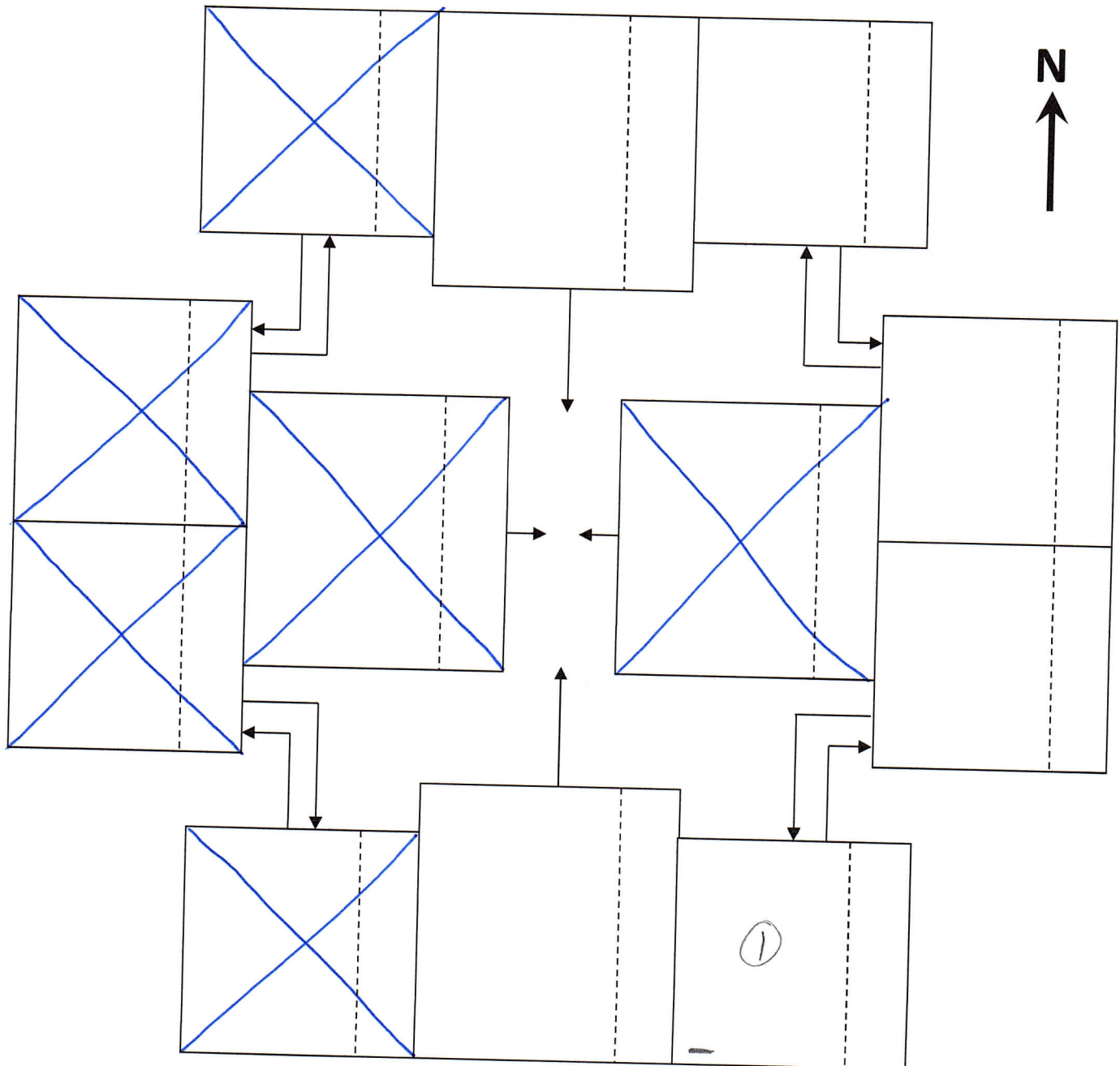
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewod Rd

Time: 1:45 to 2:00
Date: 12/17/22
Weather: 28° Sunny
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



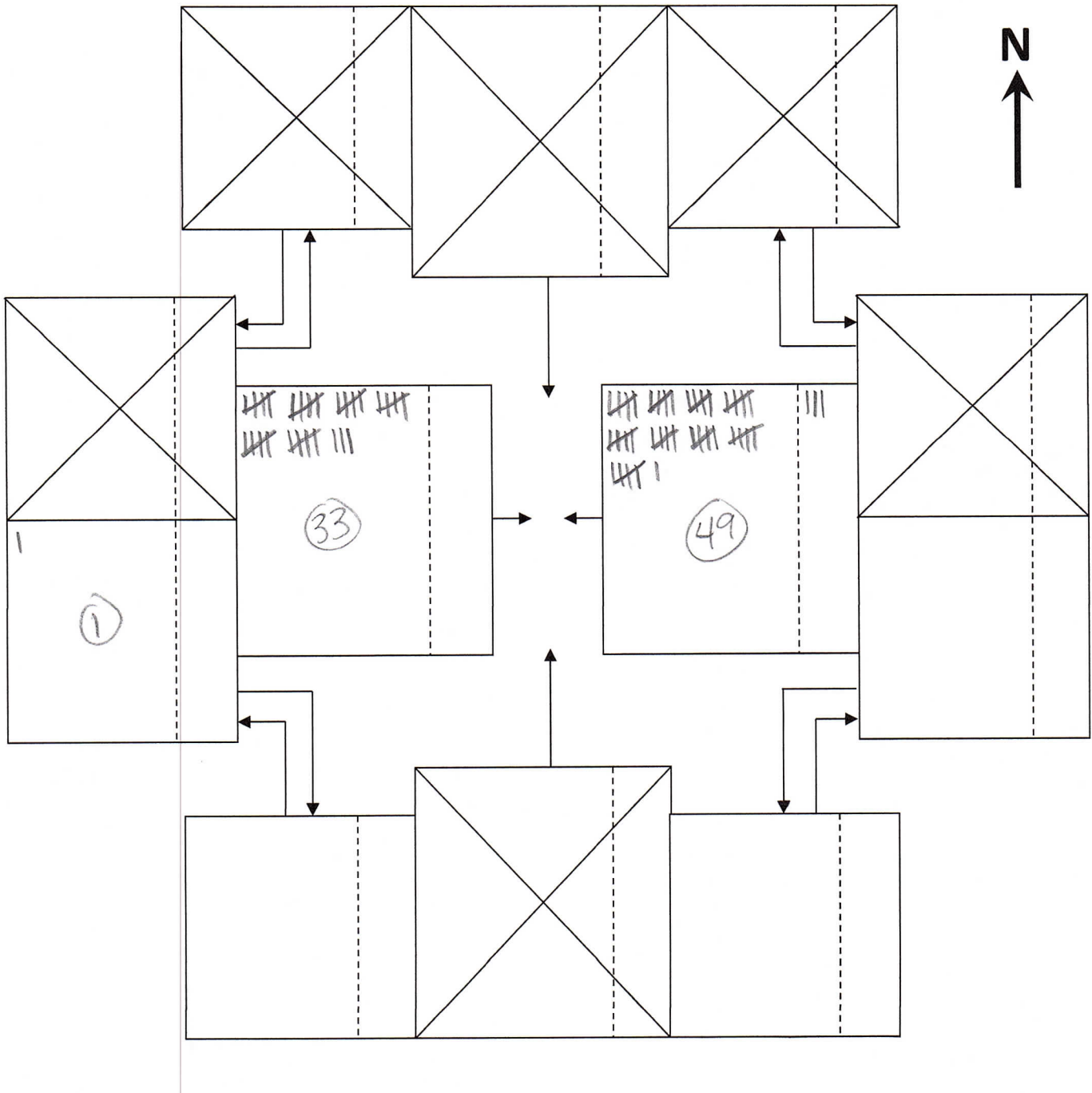
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 9:00 to 9:15
Date: 12/21/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



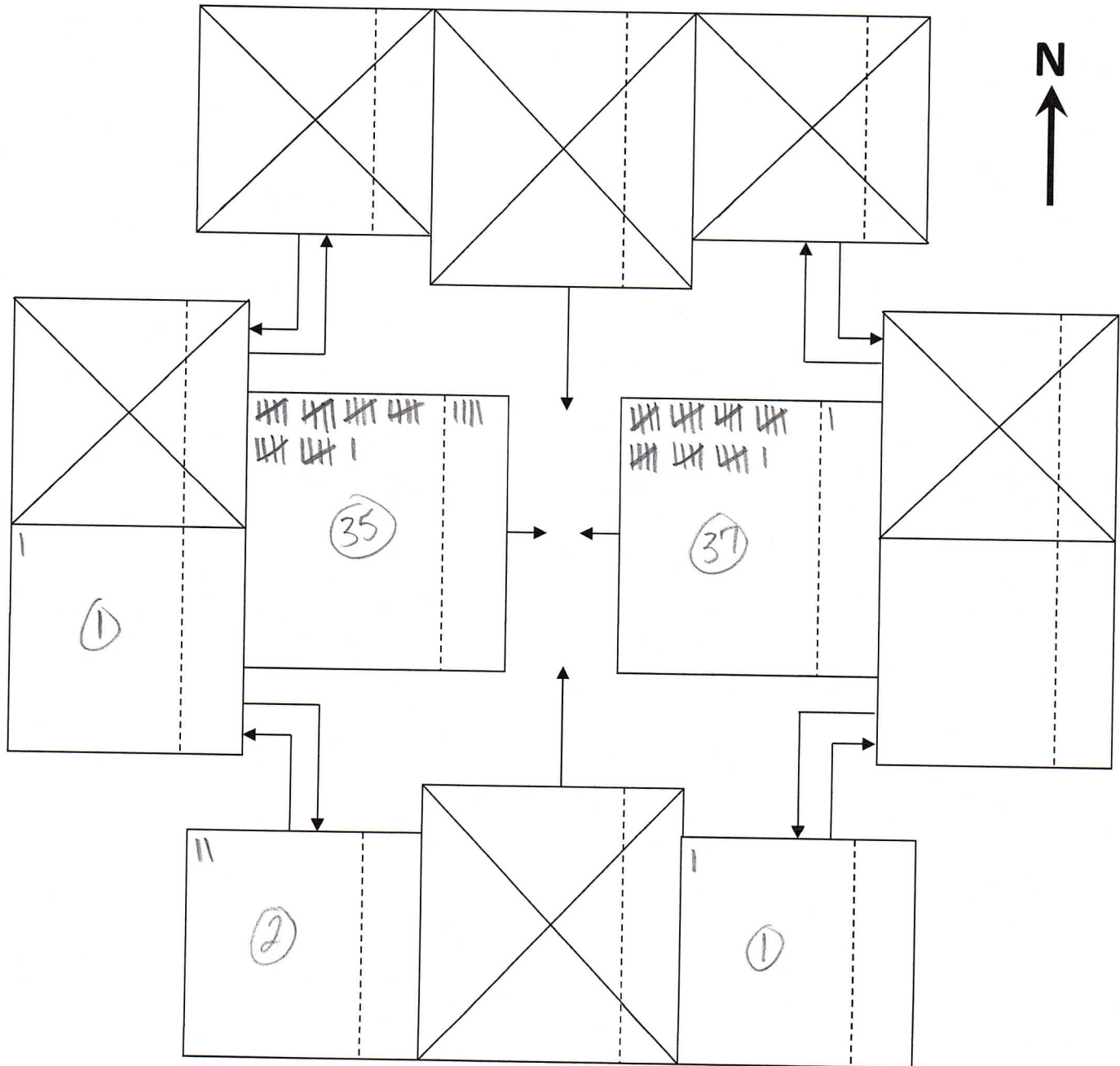
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 9:15 to 9:30
Date: 12/21/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



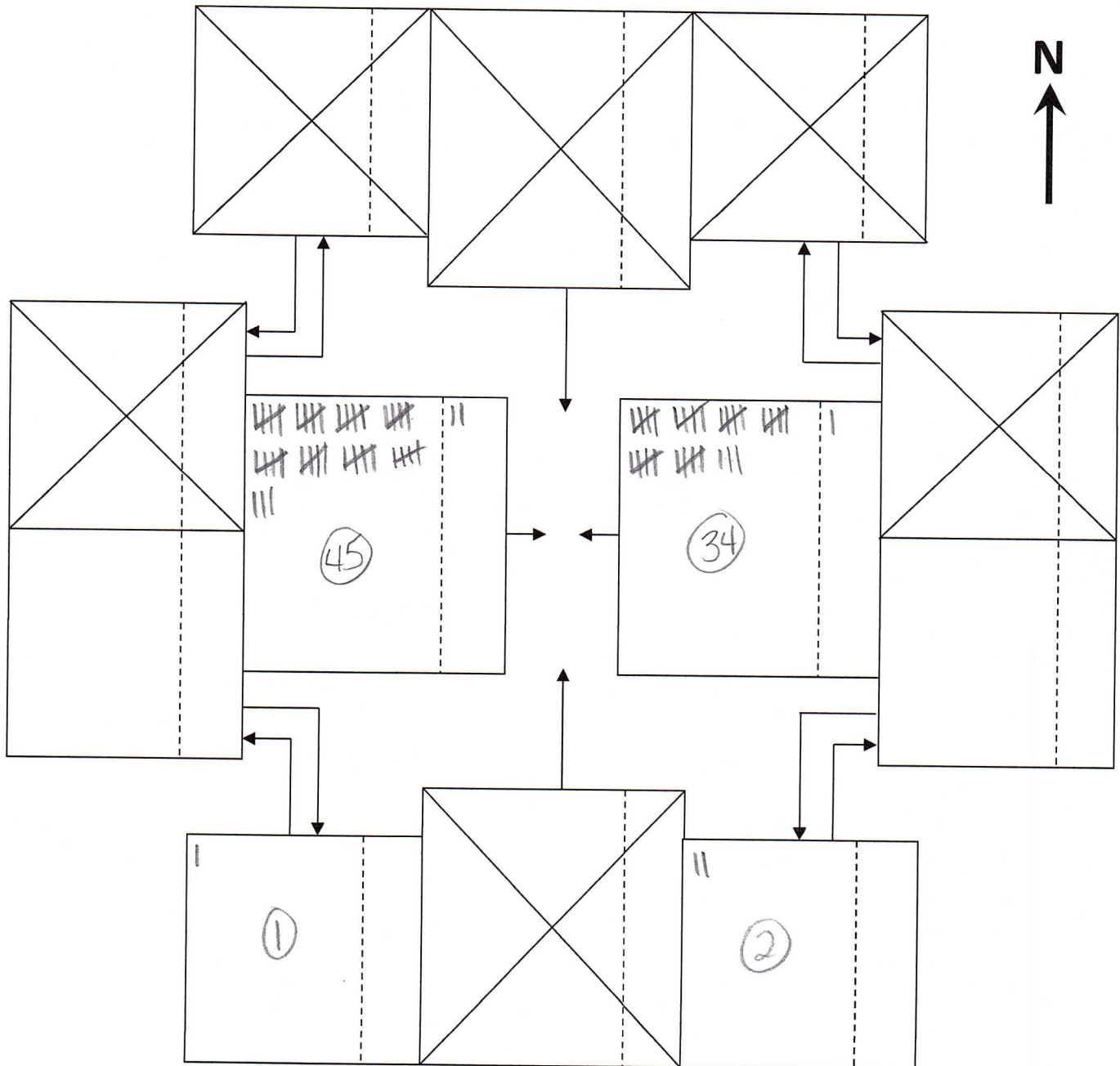
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 9:30 to 9:45
Date: 12/21/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



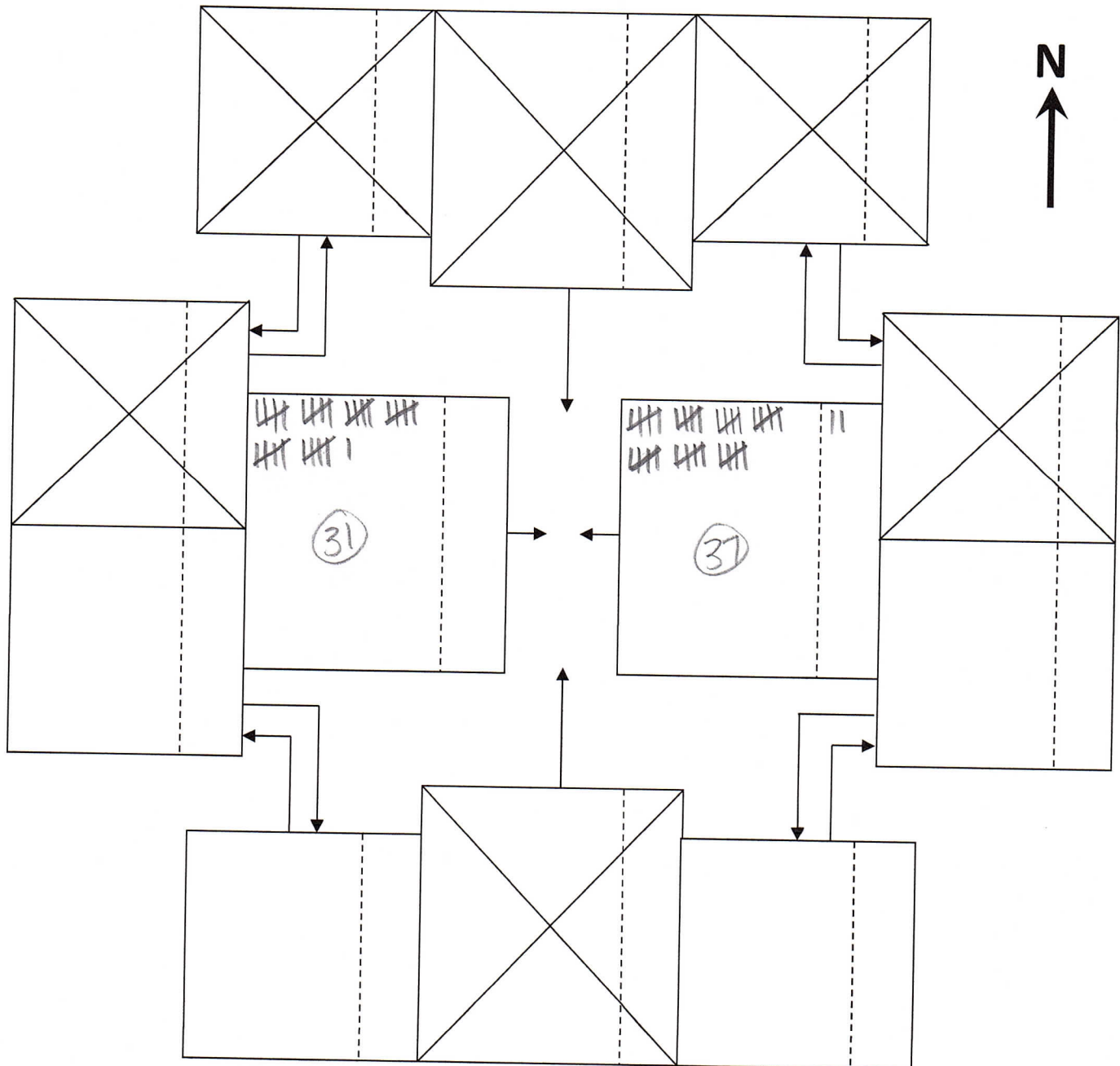
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 9:45 to 10:00
Date: 12/21/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



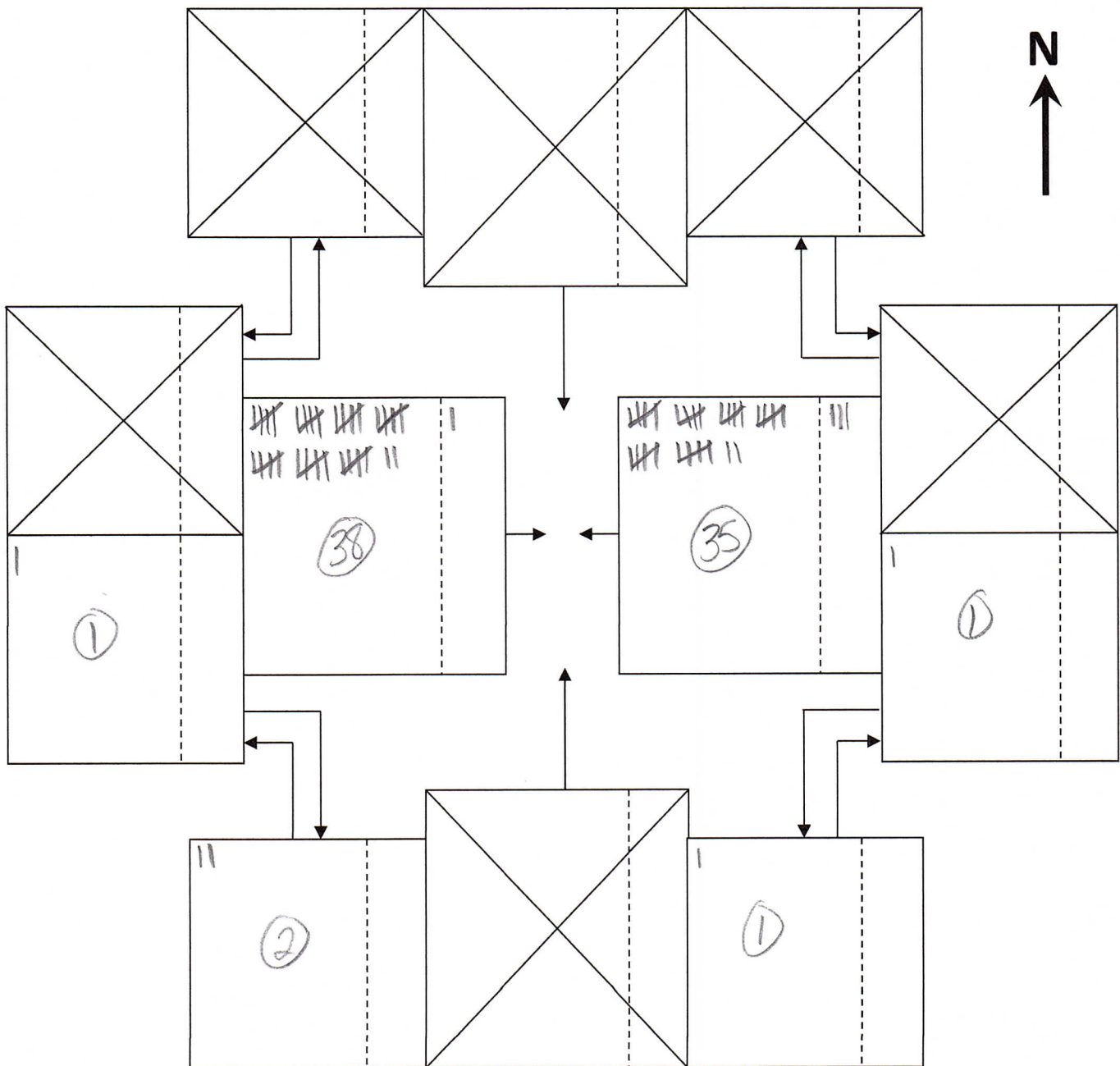
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 1:00 to 1:15
Date: 12/21/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



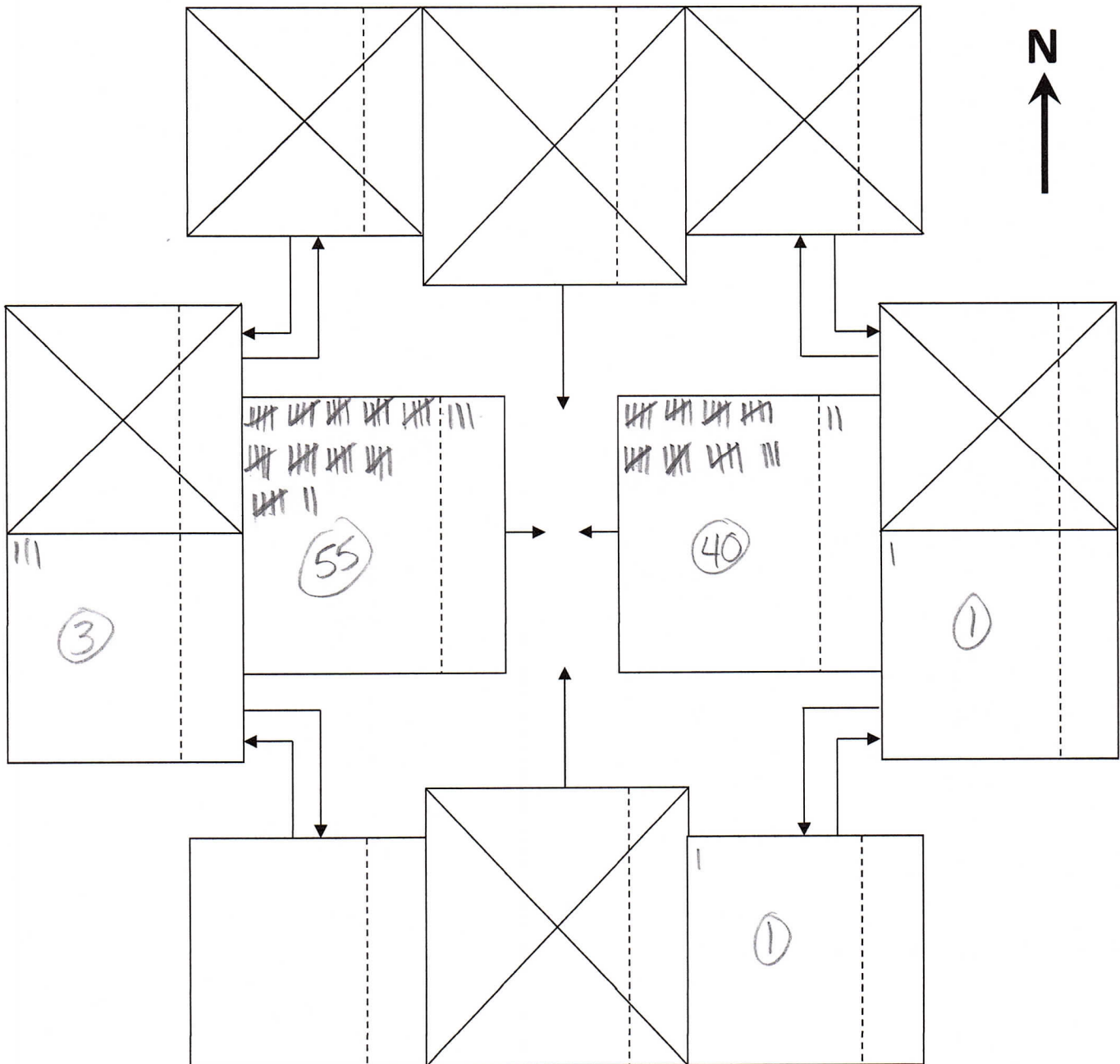
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 1:15 to 1:30
Date: 12/21/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



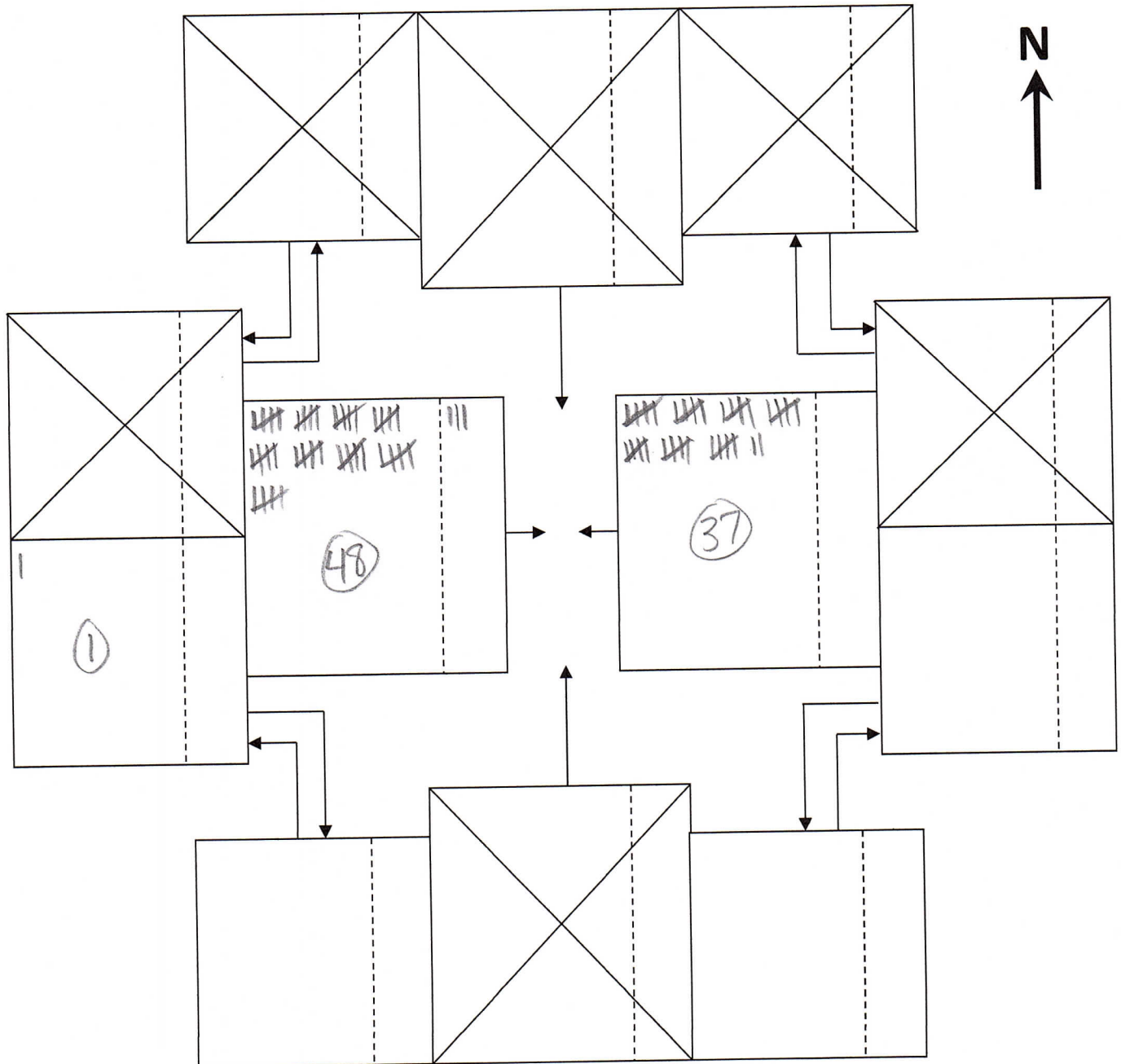
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 1:30 to 1:45
Date: 12/21/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



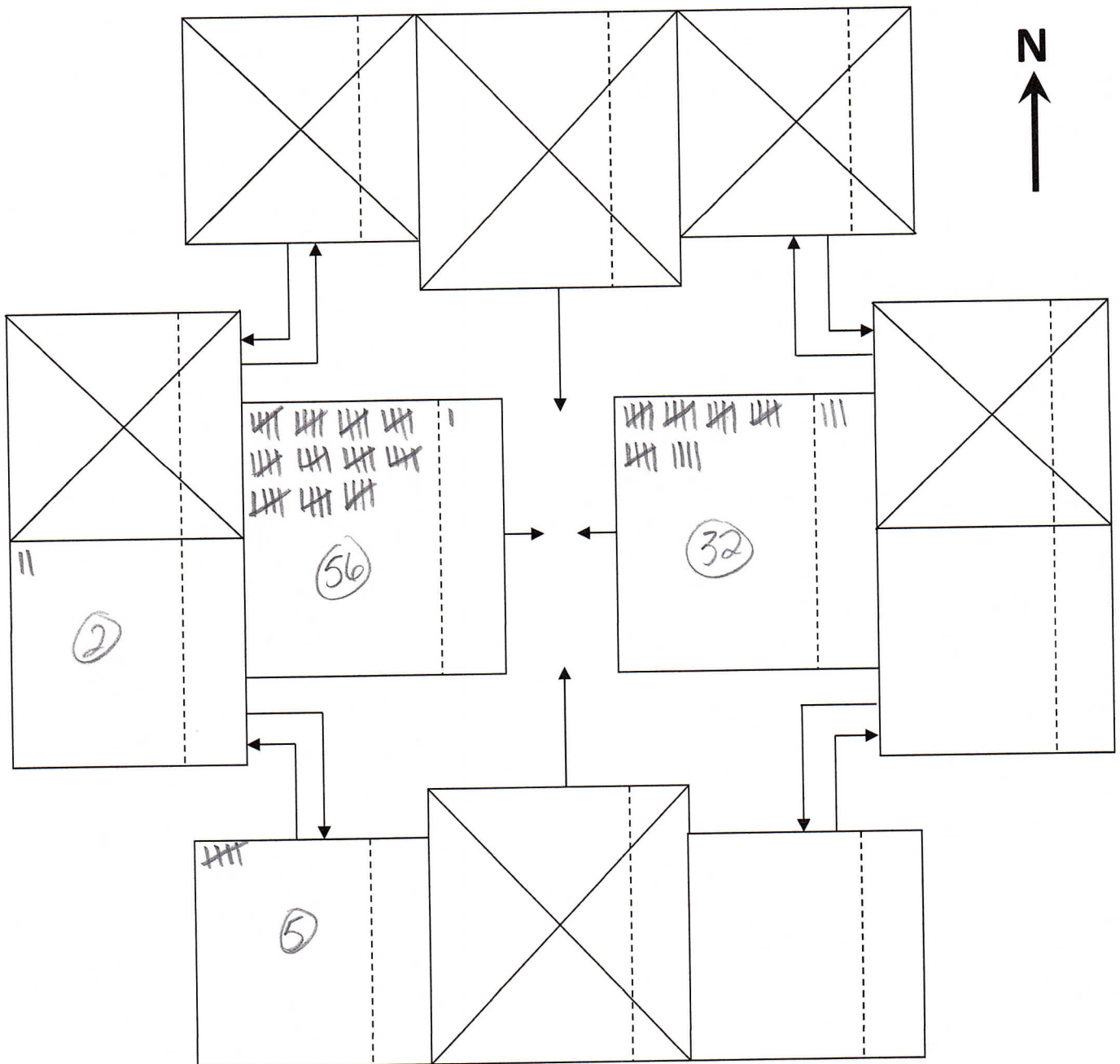
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: 105

Time: 1:45 to 2:00
Date: 12/21/22
Weather: _____
Observer: Brett

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

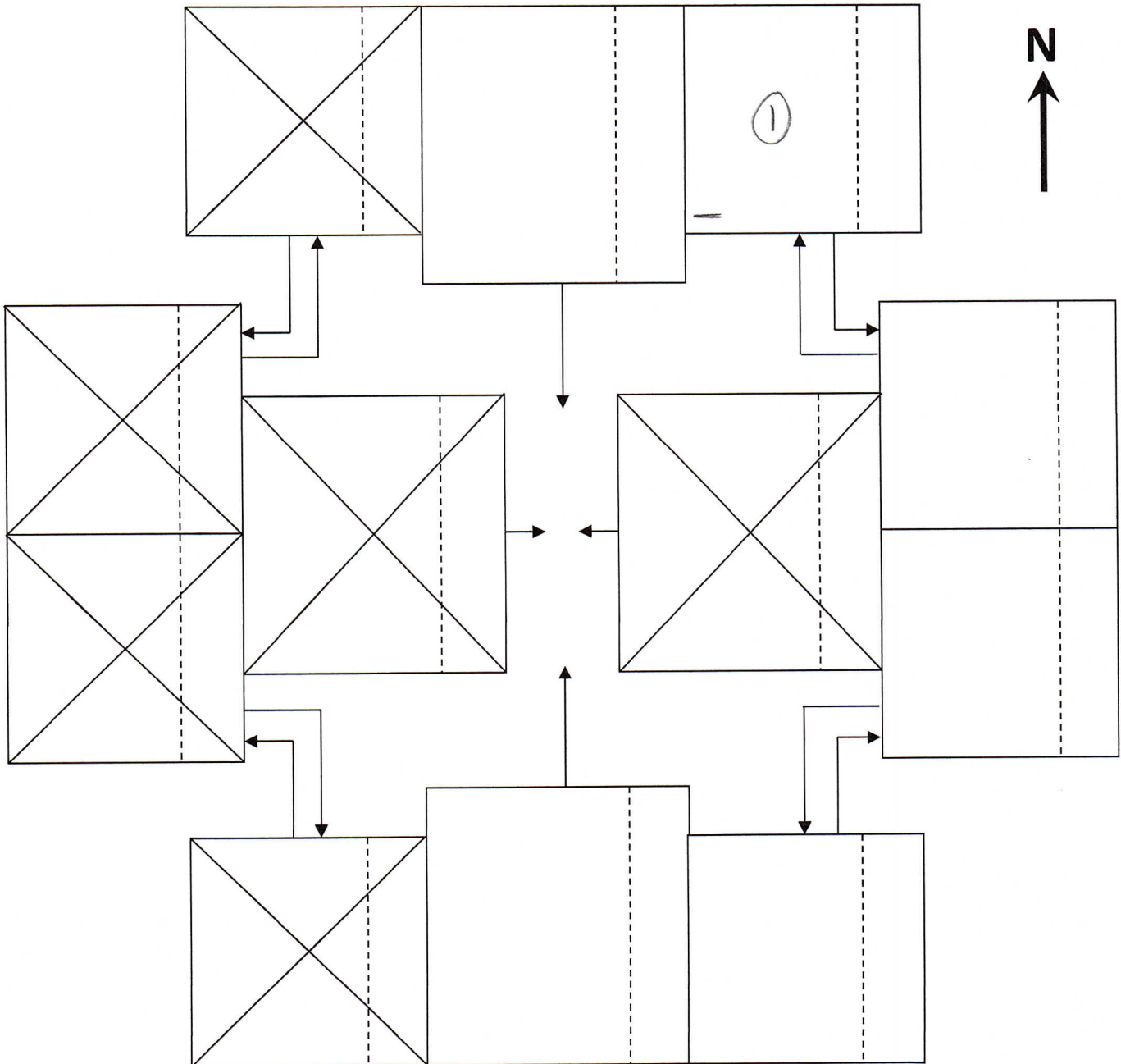
Time: 9:00 to 9:15

Date: 12/21/22

Weather: _____

Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



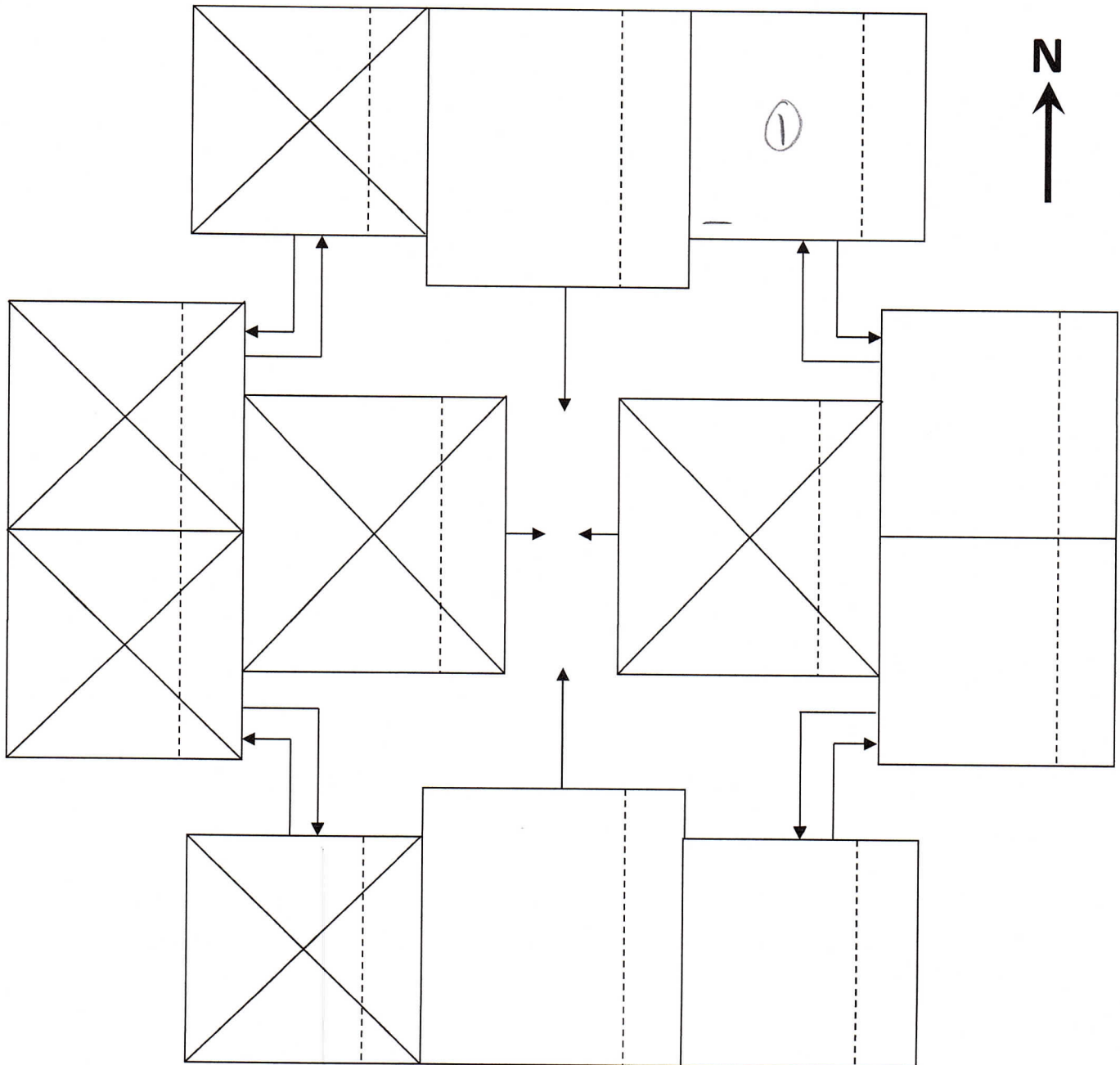
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

Time: 9:15 to 9:30
Date: 12/21/22
Weather: _____
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



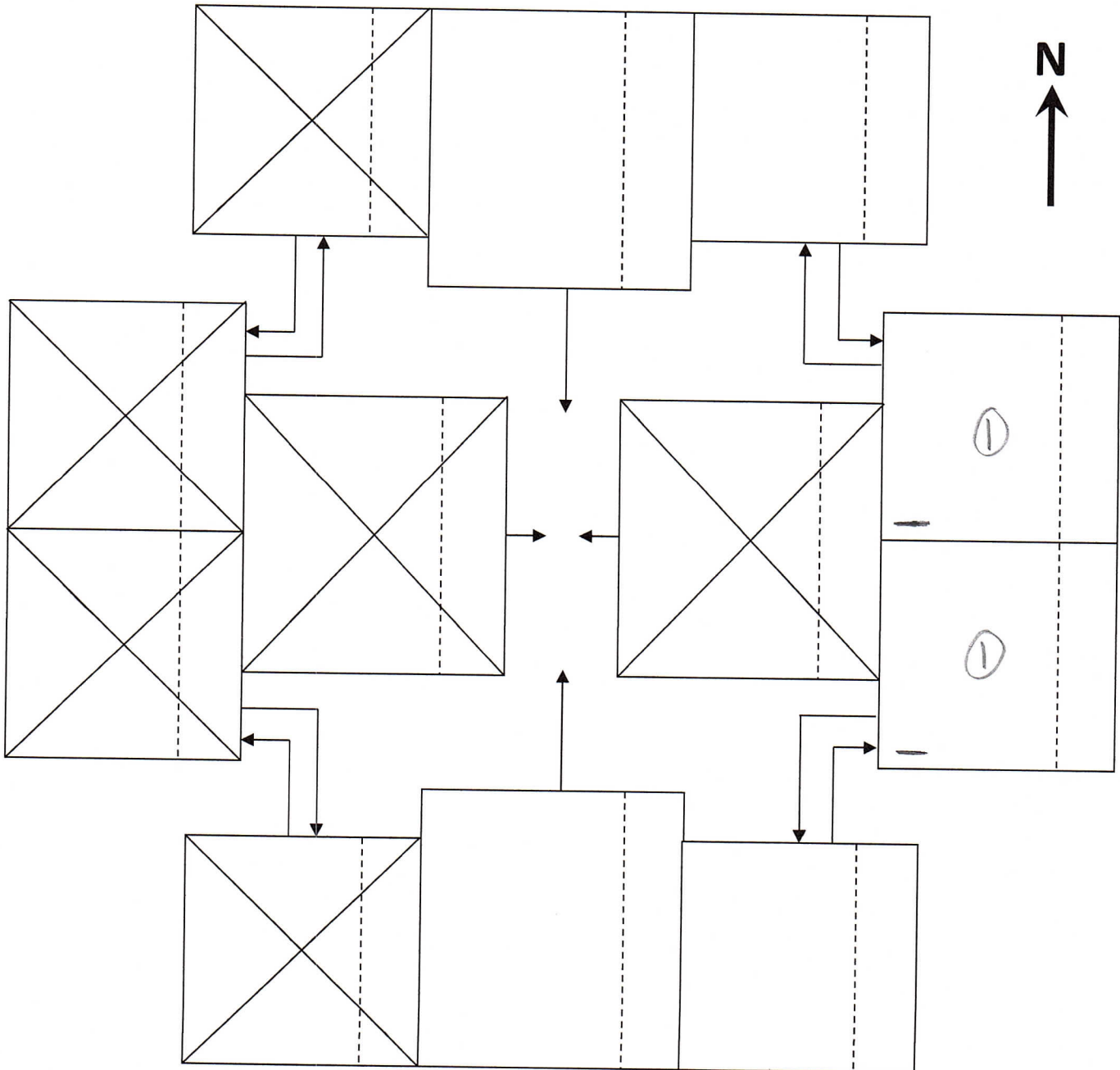
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

Time: 9:30 to 9:45
Date: 12/21/22
Weather: _____
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



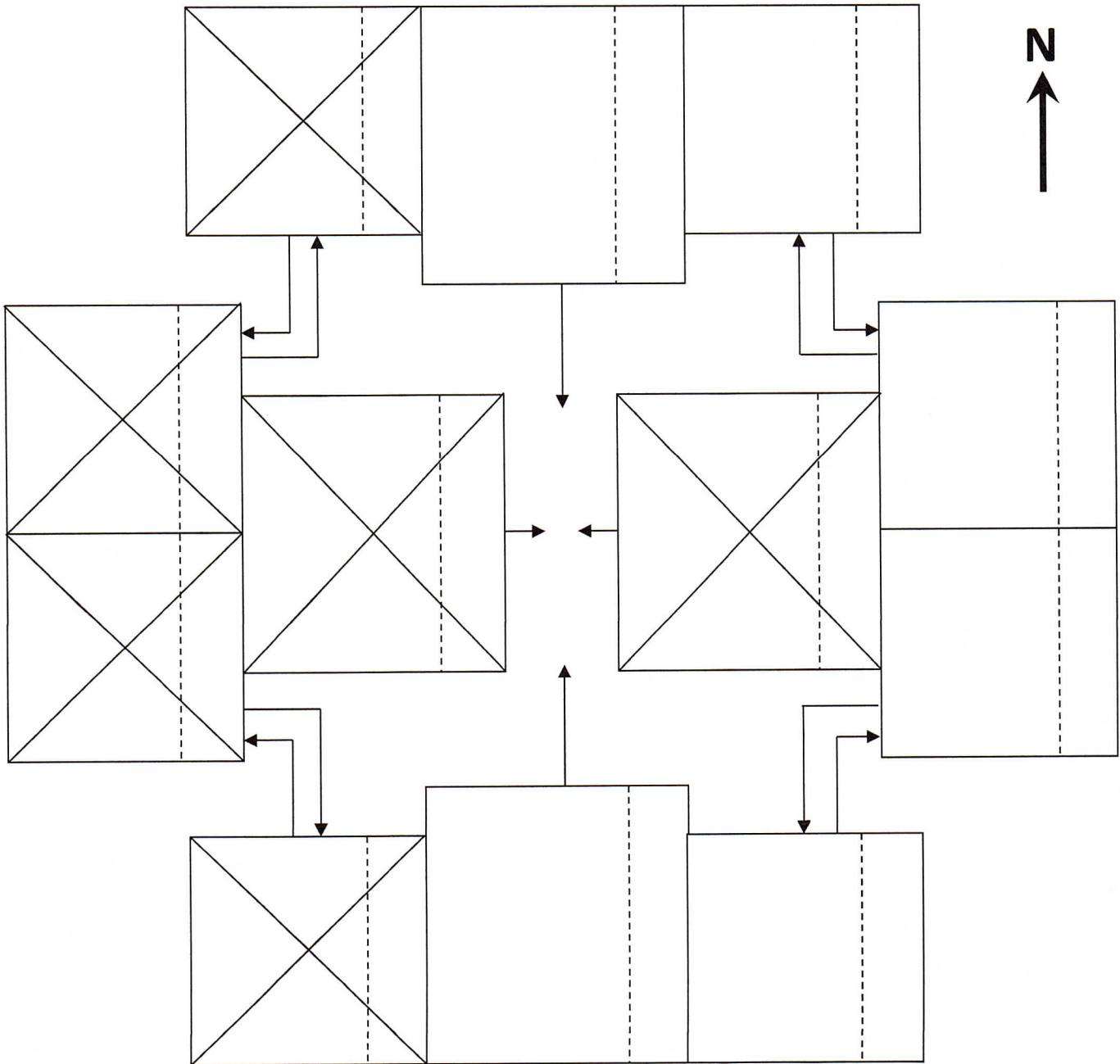
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

Time: 9:45 to 10:00
Date: 12/21/22
Weather: _____
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



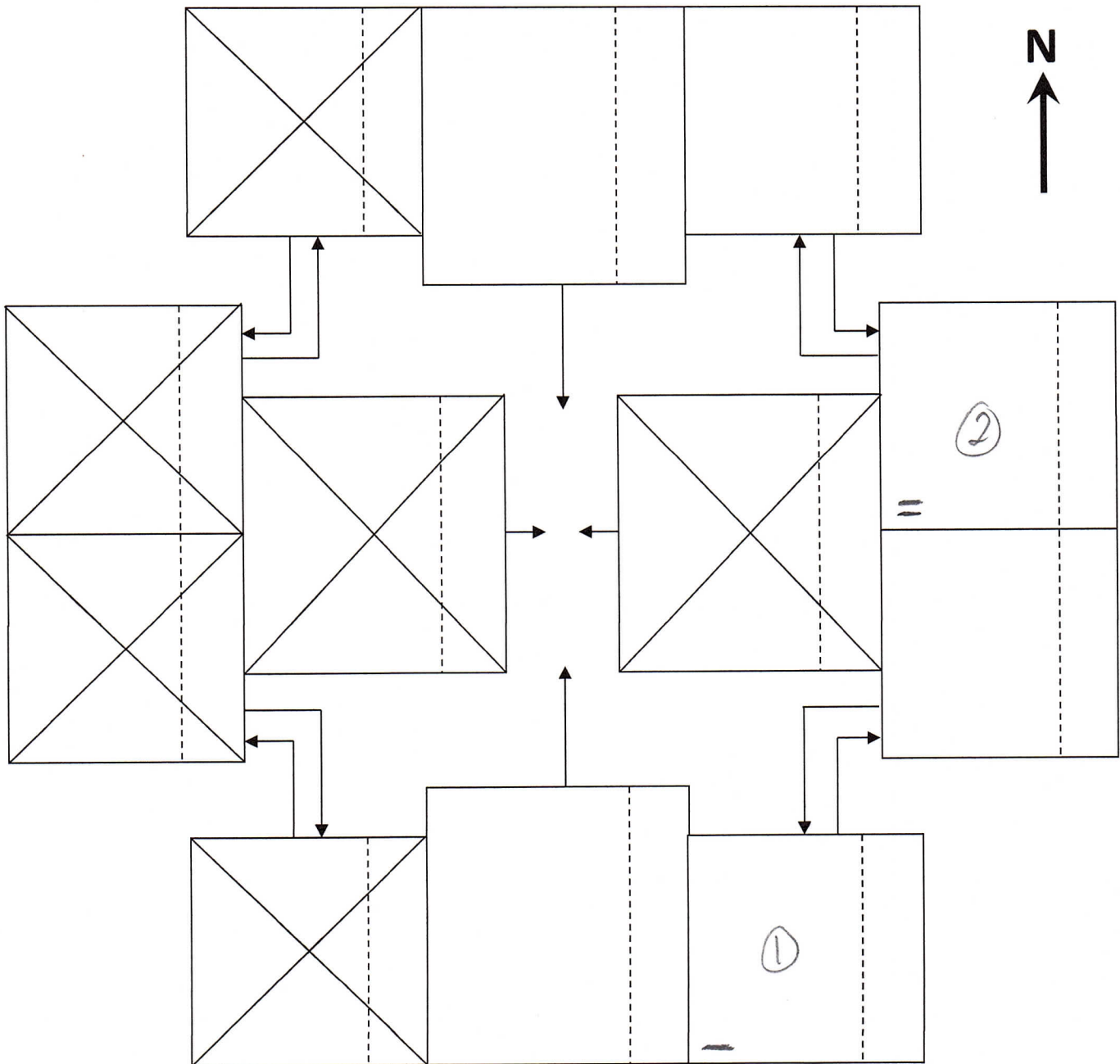
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

Time: 1:00 to 1:15
Date: 12/21/22
Weather: _____
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

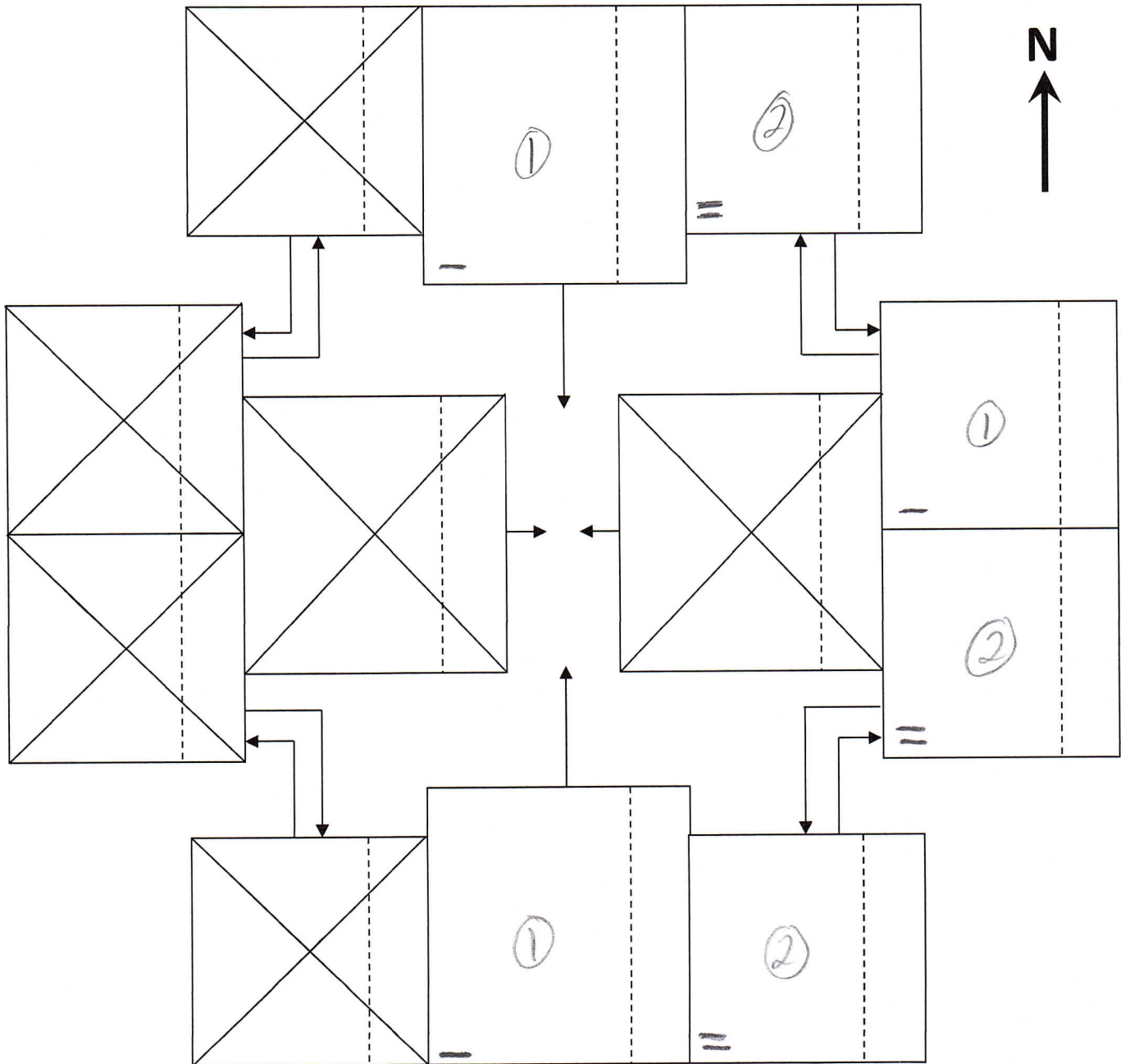
Time: 1:15 to 1:30

Date: 12/21/22

Weather: _____

Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



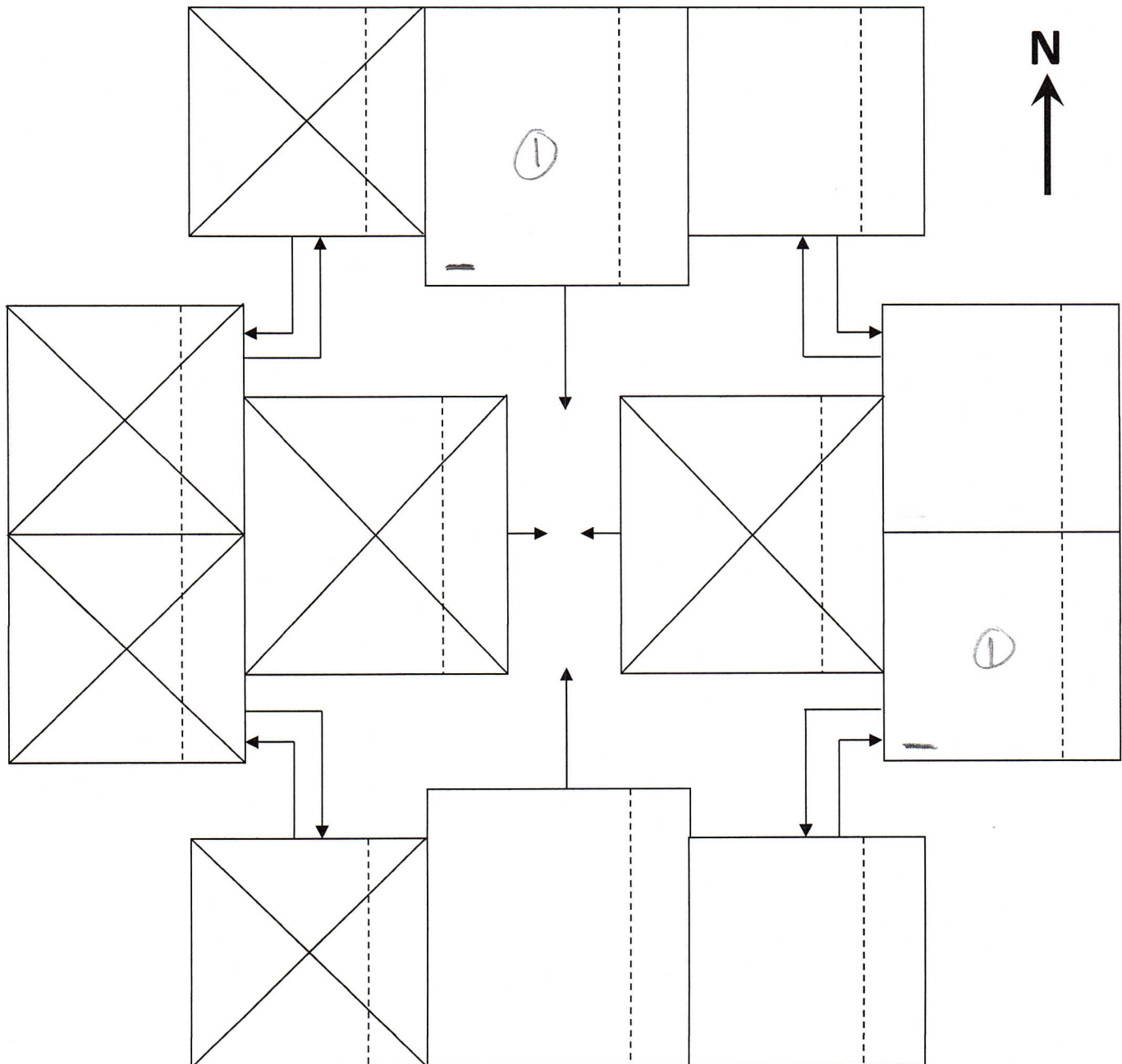
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

Time: 1:30 to 1:45
Date: 12/21/22
Weather: _____
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



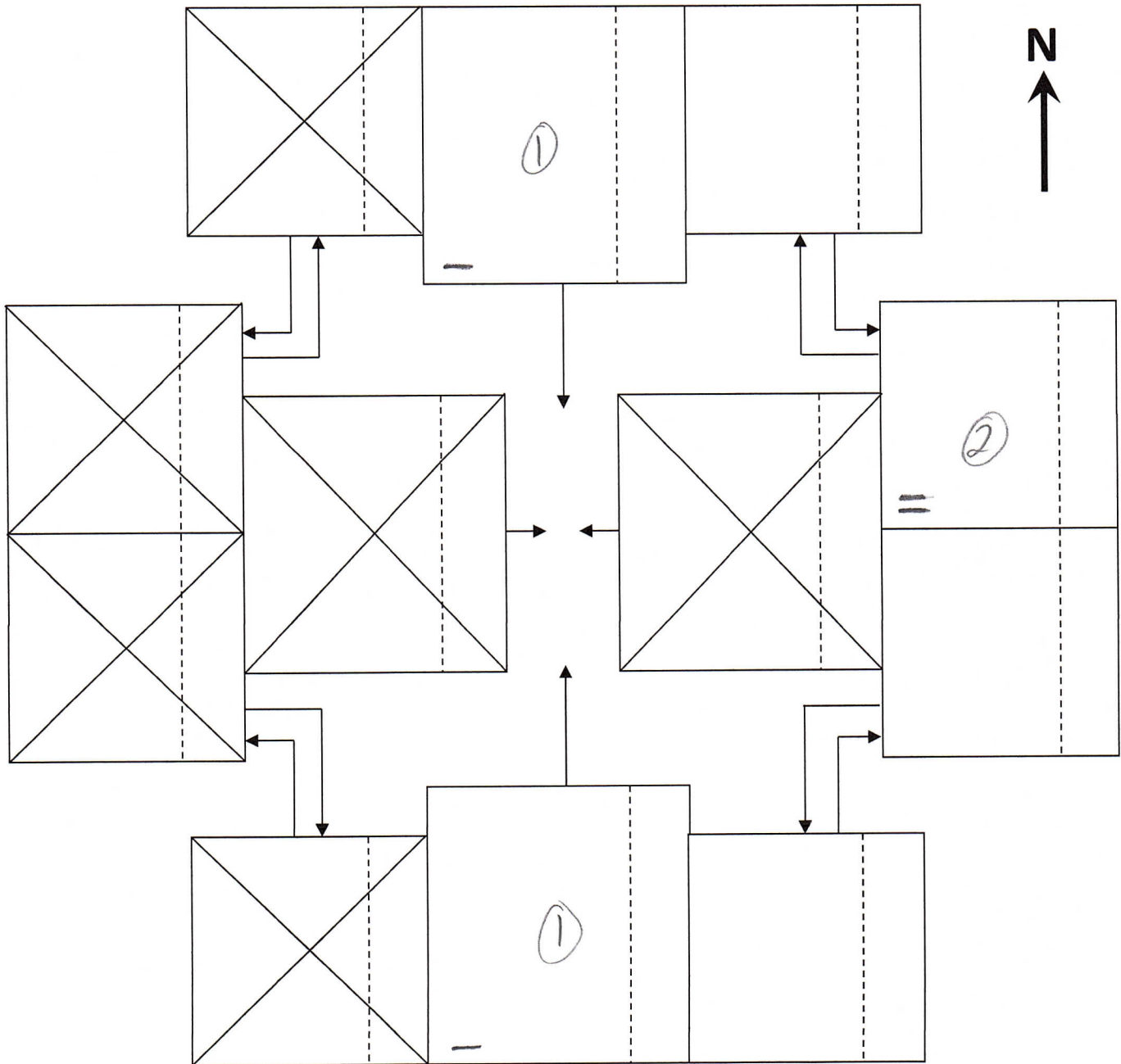
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Canterbury Dr
E/W Street: Saddlewood Rd

Time: 1:45 to 2:00
Date: 12/21/22
Weather: _____
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Appaloosa Rd

E/W Street: Highway 105

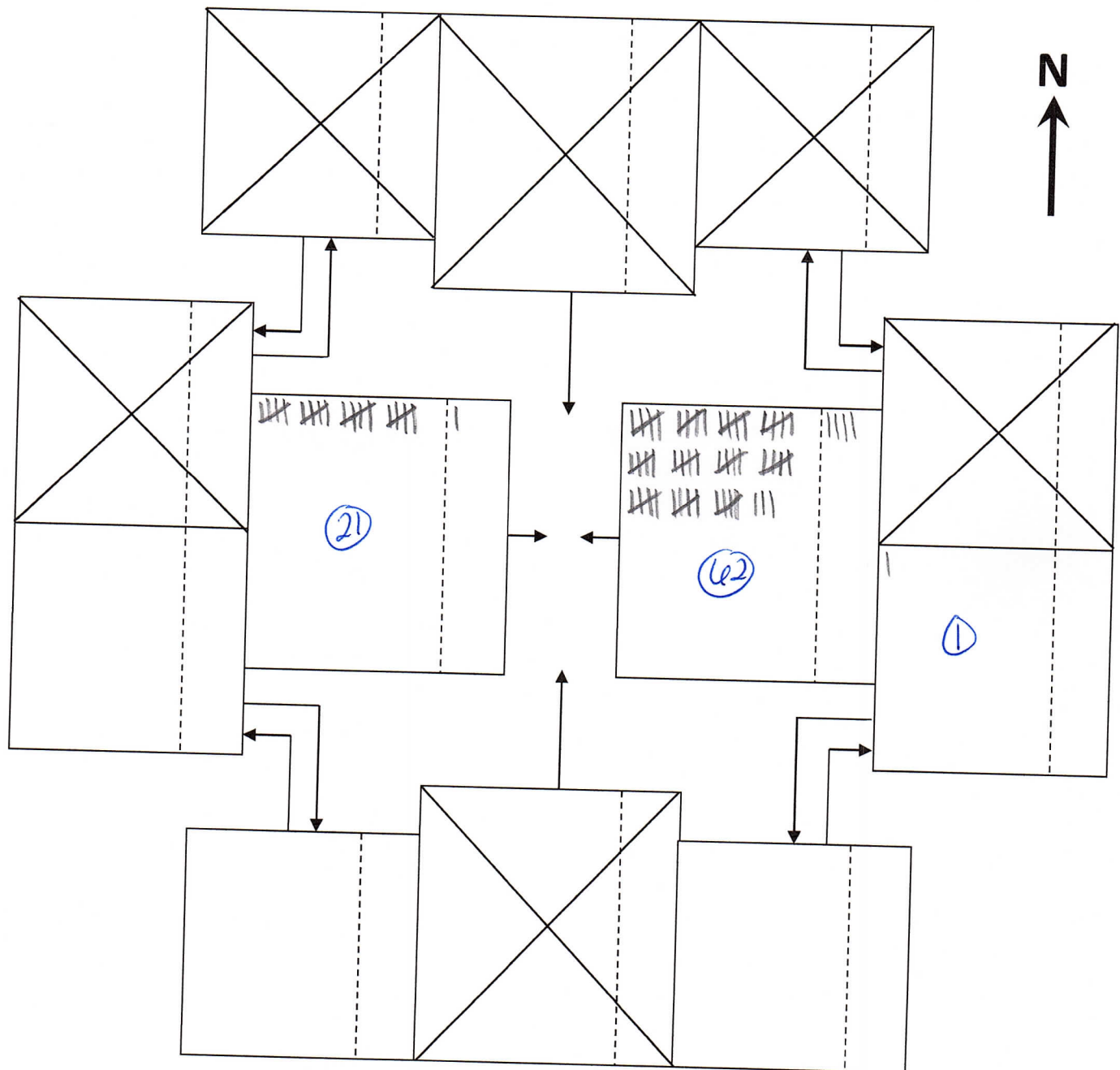
Time: 9:00 to 9:15

Date: 3/14/23

Weather: Partly cloudy

Observer: Gretchen Louk

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



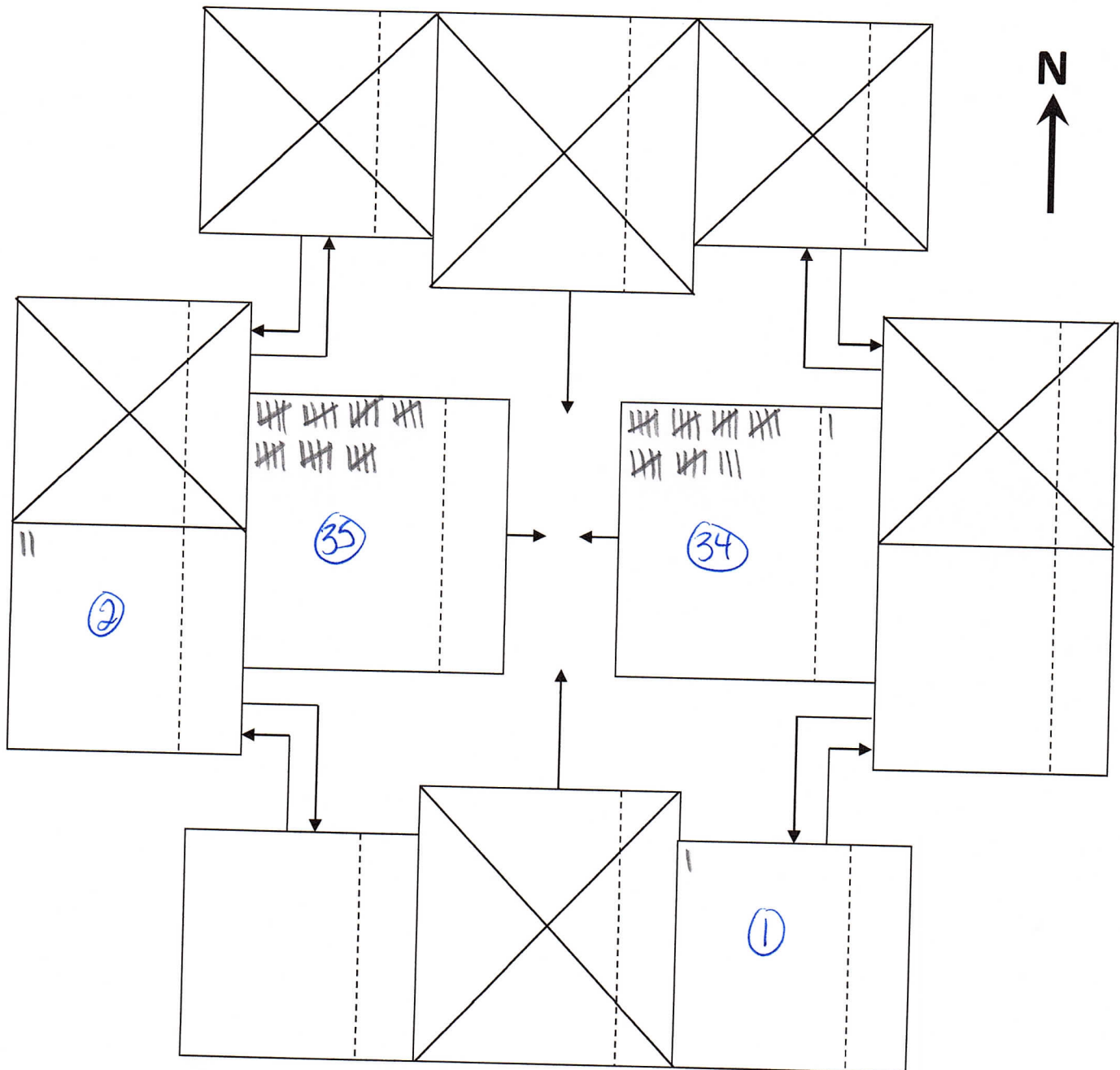
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Appaloosa Rd
E/W Street: Highway 105

Time: 9:15 to 9:30
Date: 3/14/23
Weather: Partly cloudy
Observer: Brett Louk

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



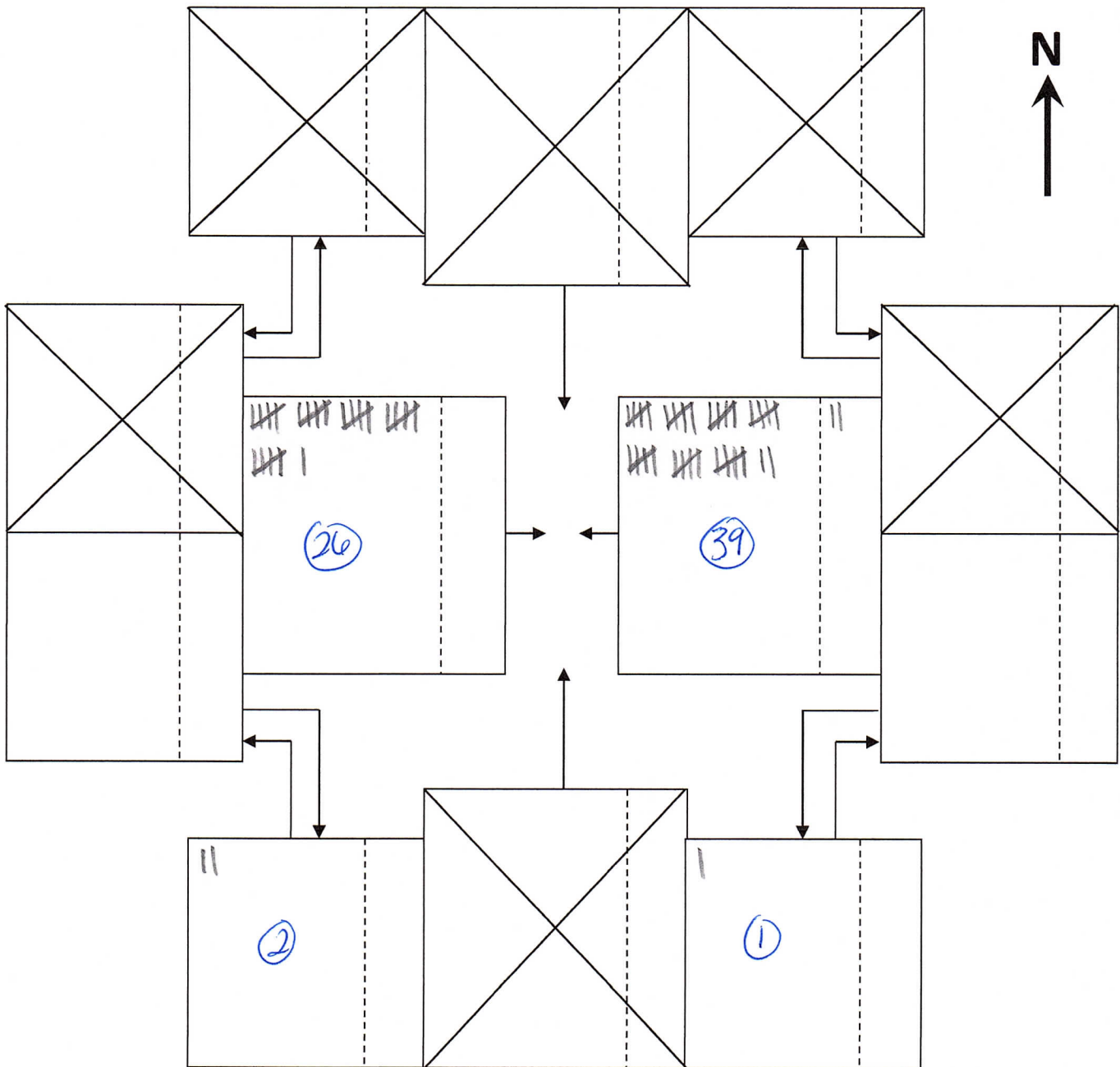
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Appaloosa Rd
E/W Street: Highway 105

Time: 9:30 to 9:45
Date: 3/14/23
Weather: _____
Observer: _____

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Appaloosa Rd

E/W Street: Highway 105

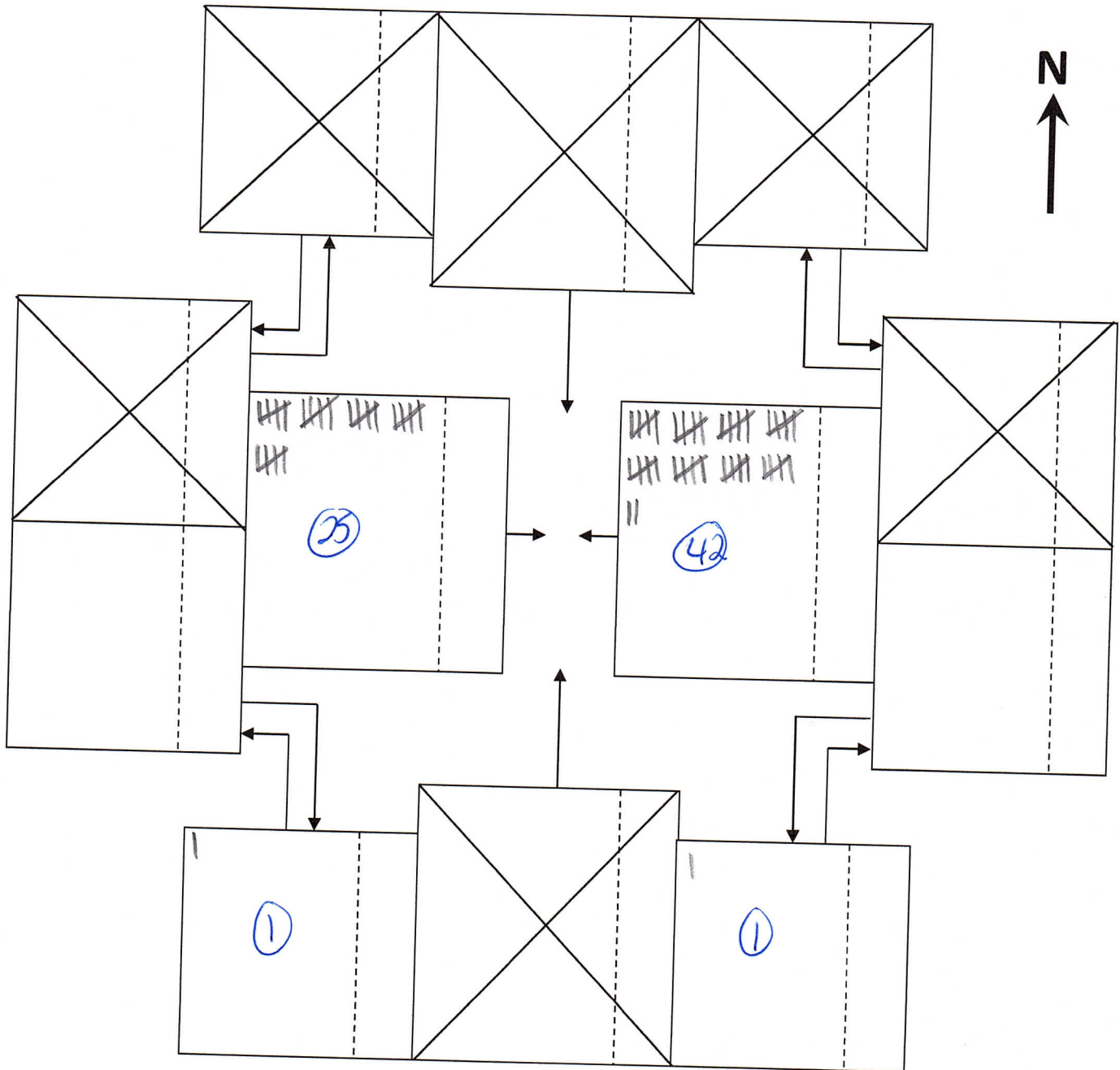
Time: 9:45 to 10:00

Date: 3/14/23

Weather: _____

Observer: _____

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Appaloosa Rd

E/W Street: Highway 105

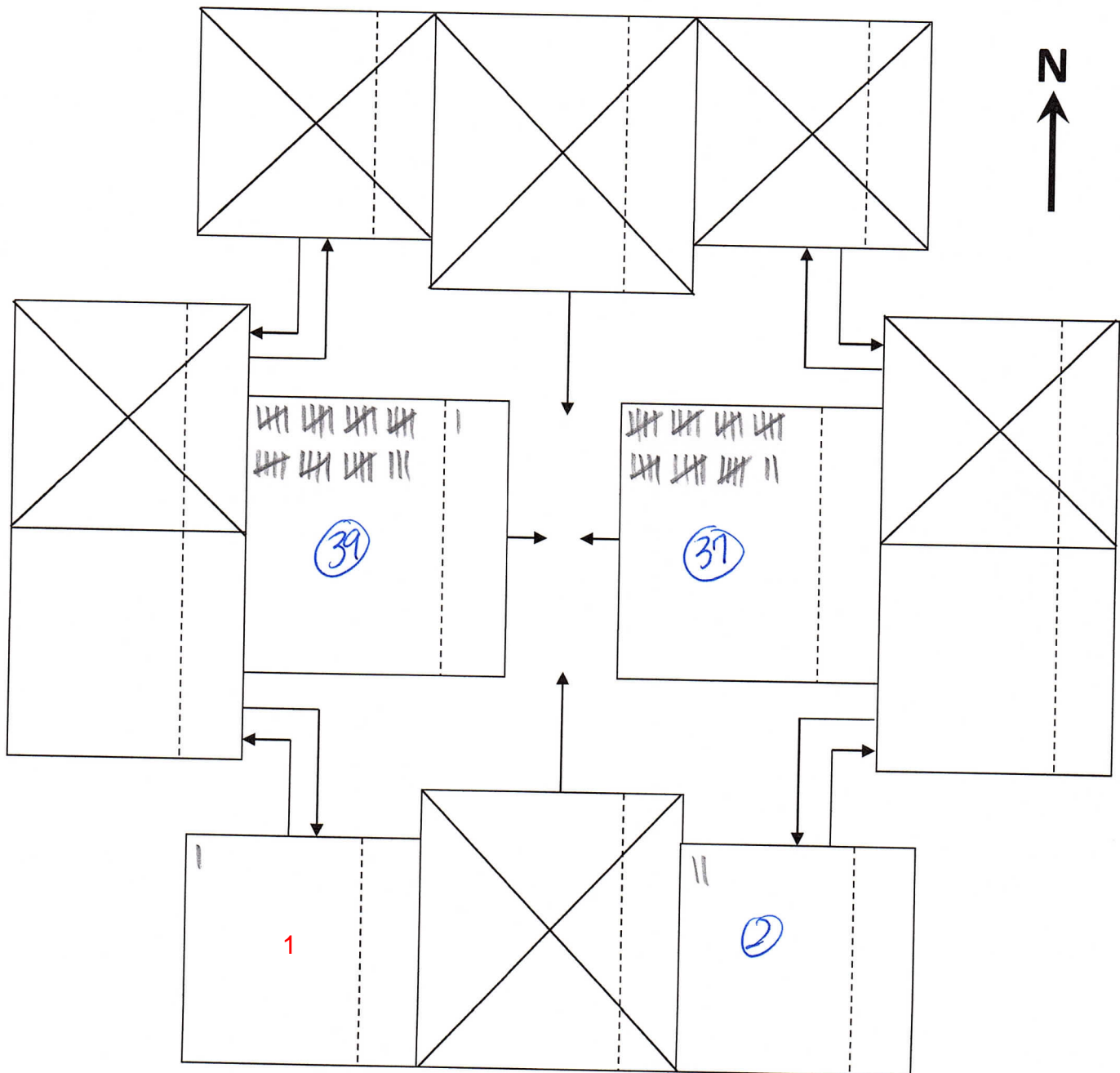
Time: 1:00 to 1:15

Date: 3/14/23

Weather: Partly cloudy

Observer: Brett Beck

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



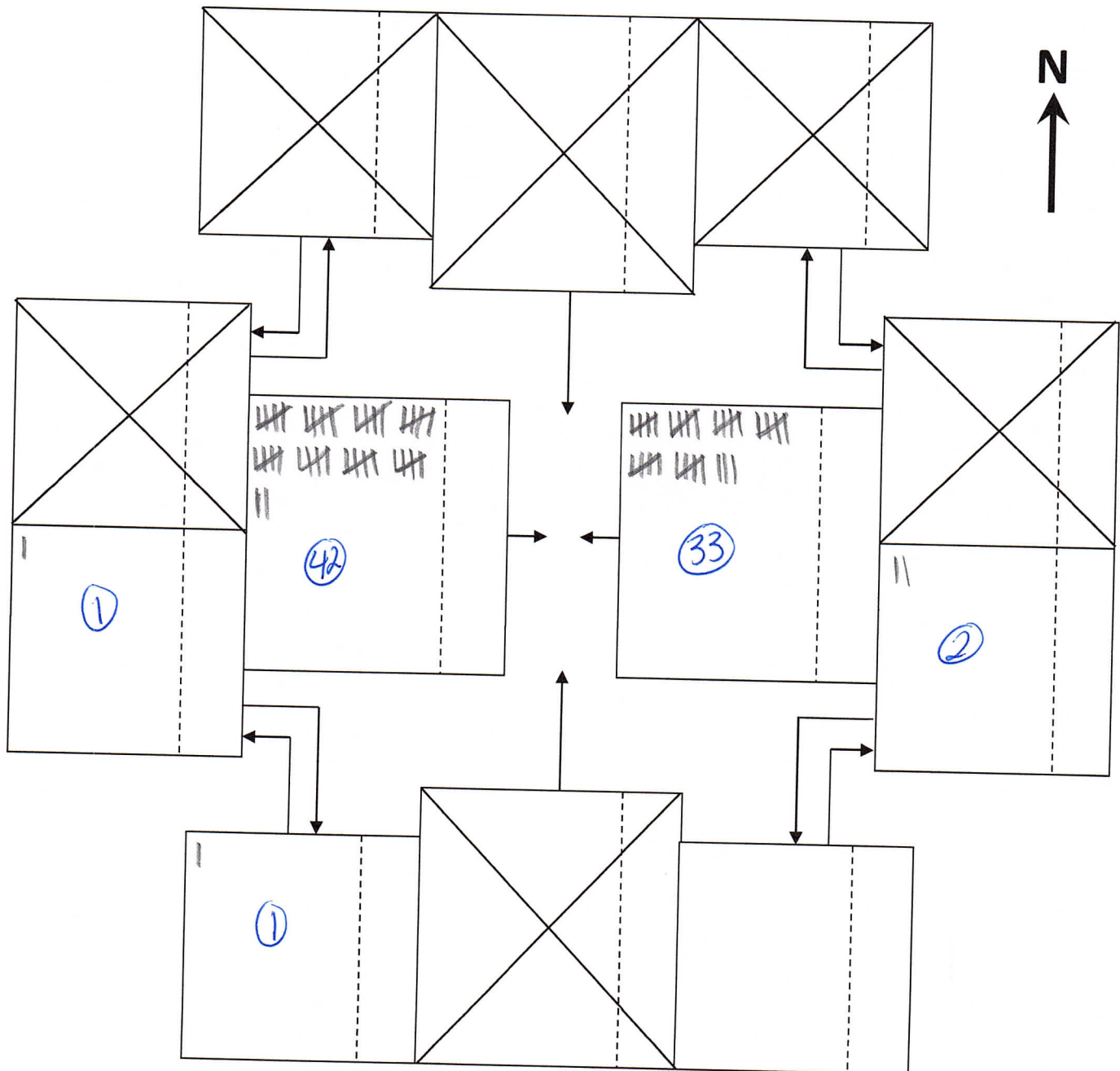
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Appaloosa Rd
E/W Street: Highway 105

Time: 1:15 to 1:30
Date: 3/14/23
Weather: Partly Cloudy
Observer: Brett Louk

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



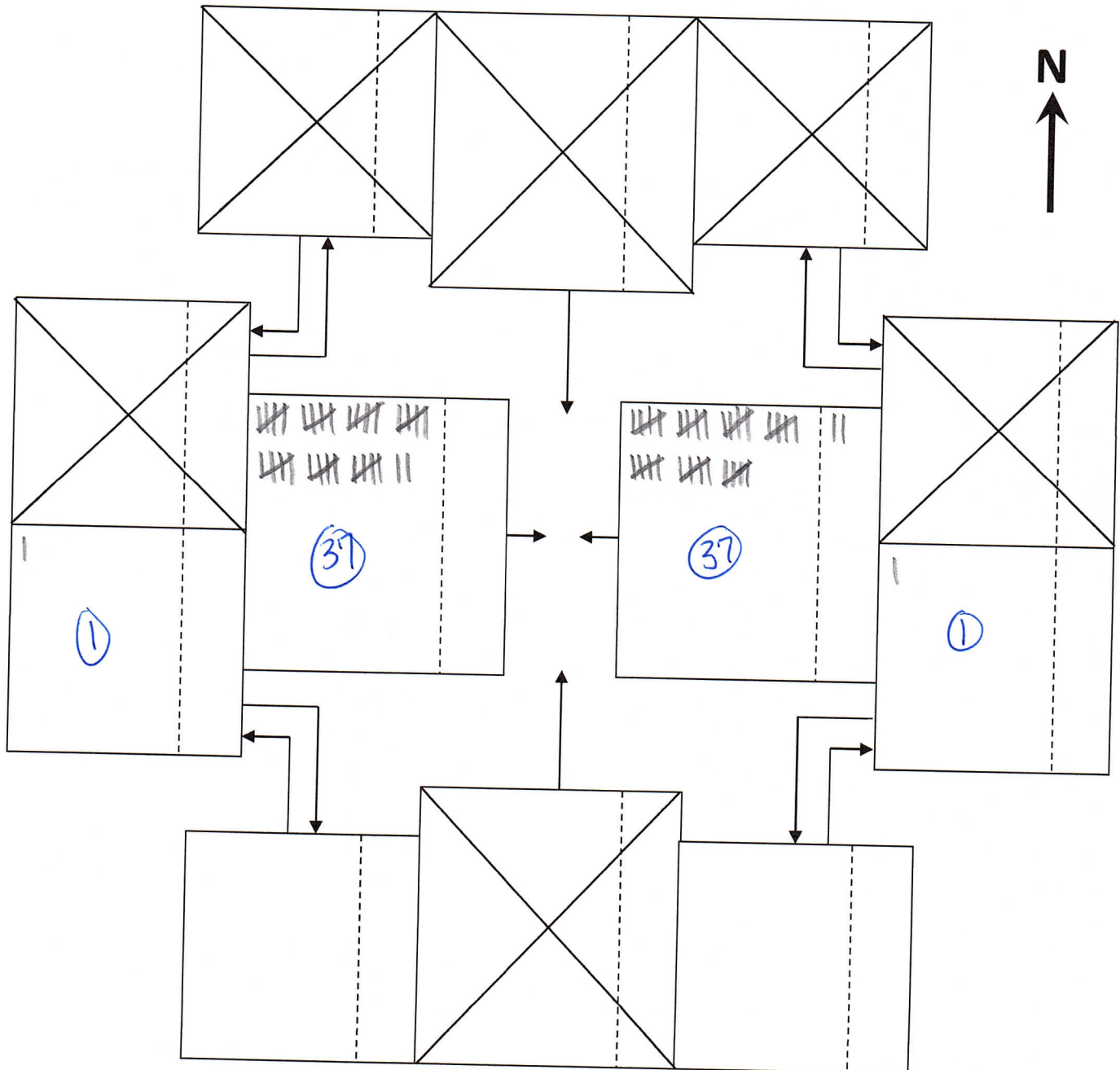
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Appaloosa Rd
E/W Street: Highway 105

Time: 1:30 to 1:45
Date: 3/14/23
Weather: Partly Cloudy
Observer: Brett Louk

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



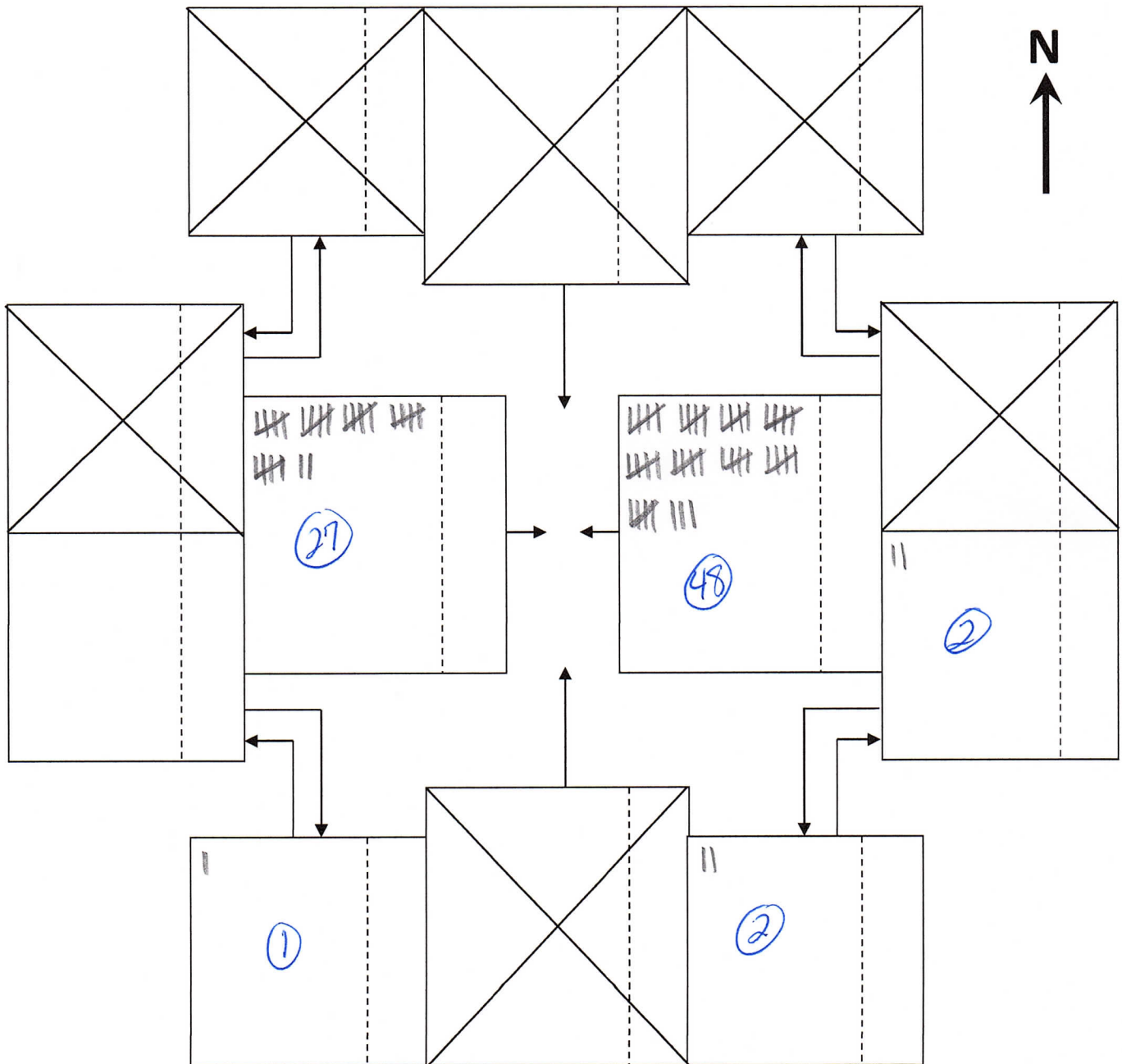
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Appaloosa Rd
E/W Street: Highway 105

Time: 1:45 to 2:00
Date: 3/14/23
Weather: Partly cloudy
Observer: Brett Louk

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

Time: 9:00 to 9:15

Date: 3/18/23

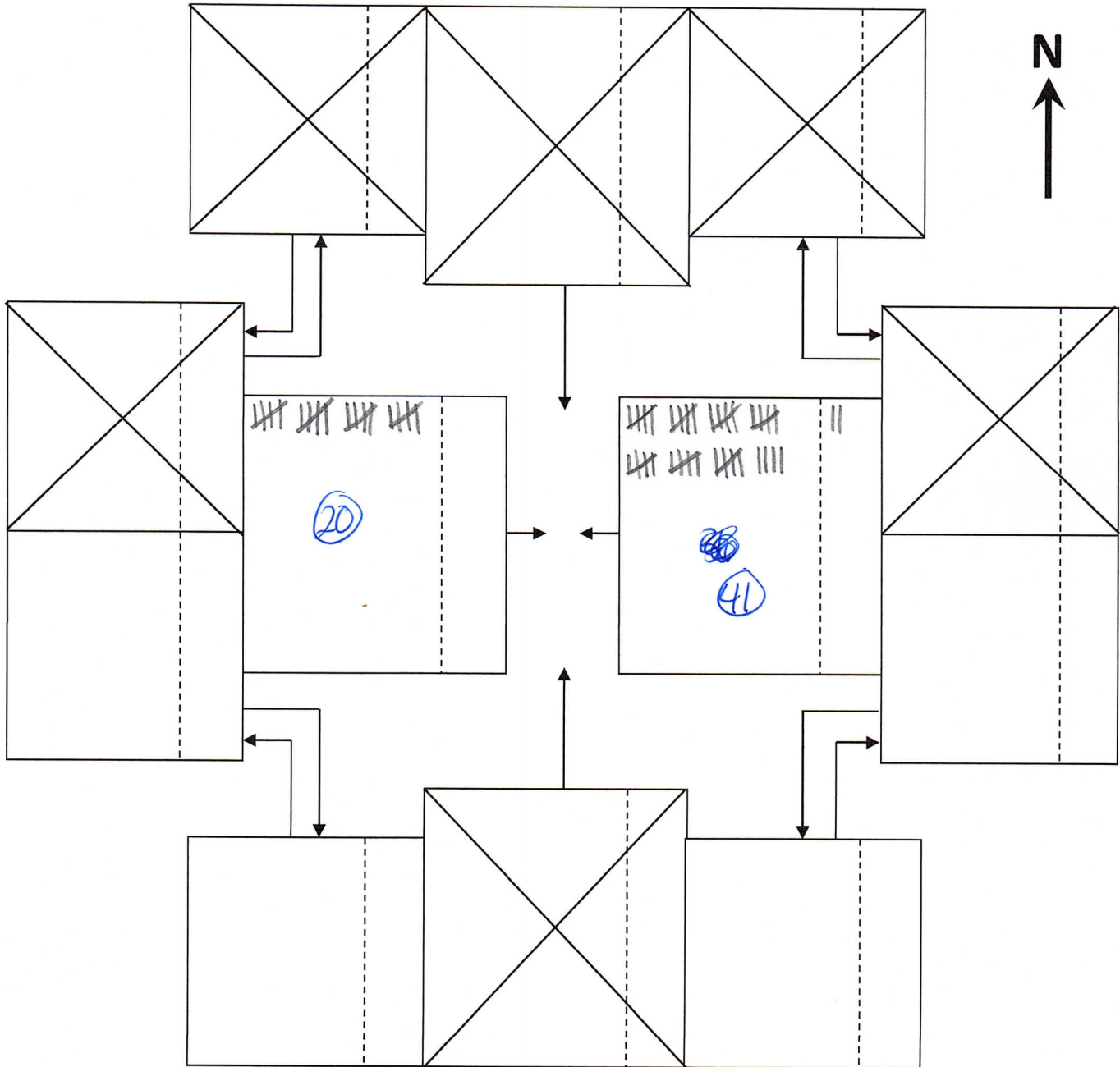
N/S Street: Appaloosa Rd

E/W Street: Highway 105

Weather: Sunny cold

Observer: Brett Louk

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

Time: 9:15 to 9:30

Date: 3/18/23

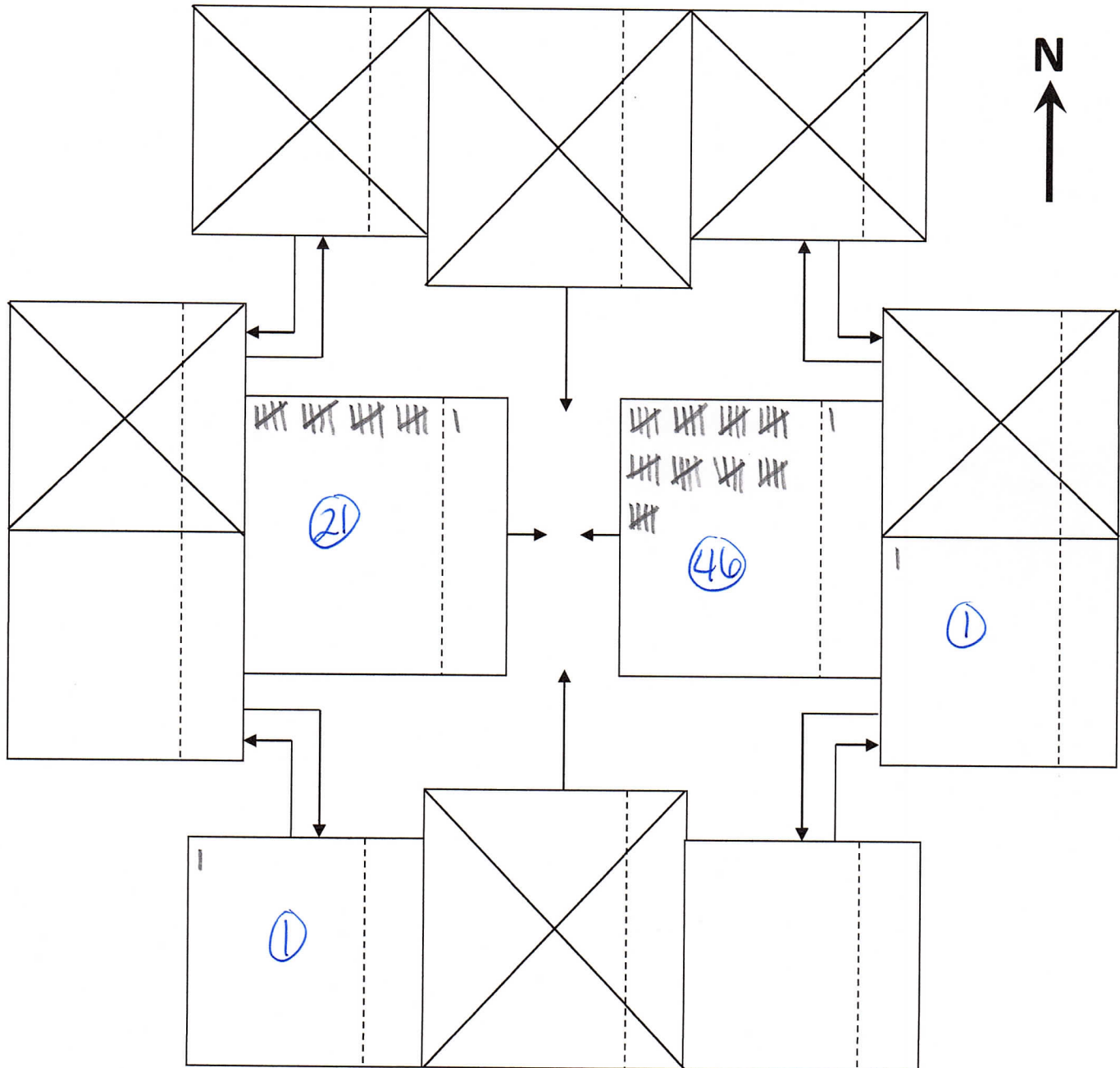
Weather: _____

Observer: _____

N/S Street: Appaloosa Rd

E/W Street: Highway 105

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Appaloosa Rd
E/W Street: Highway 105

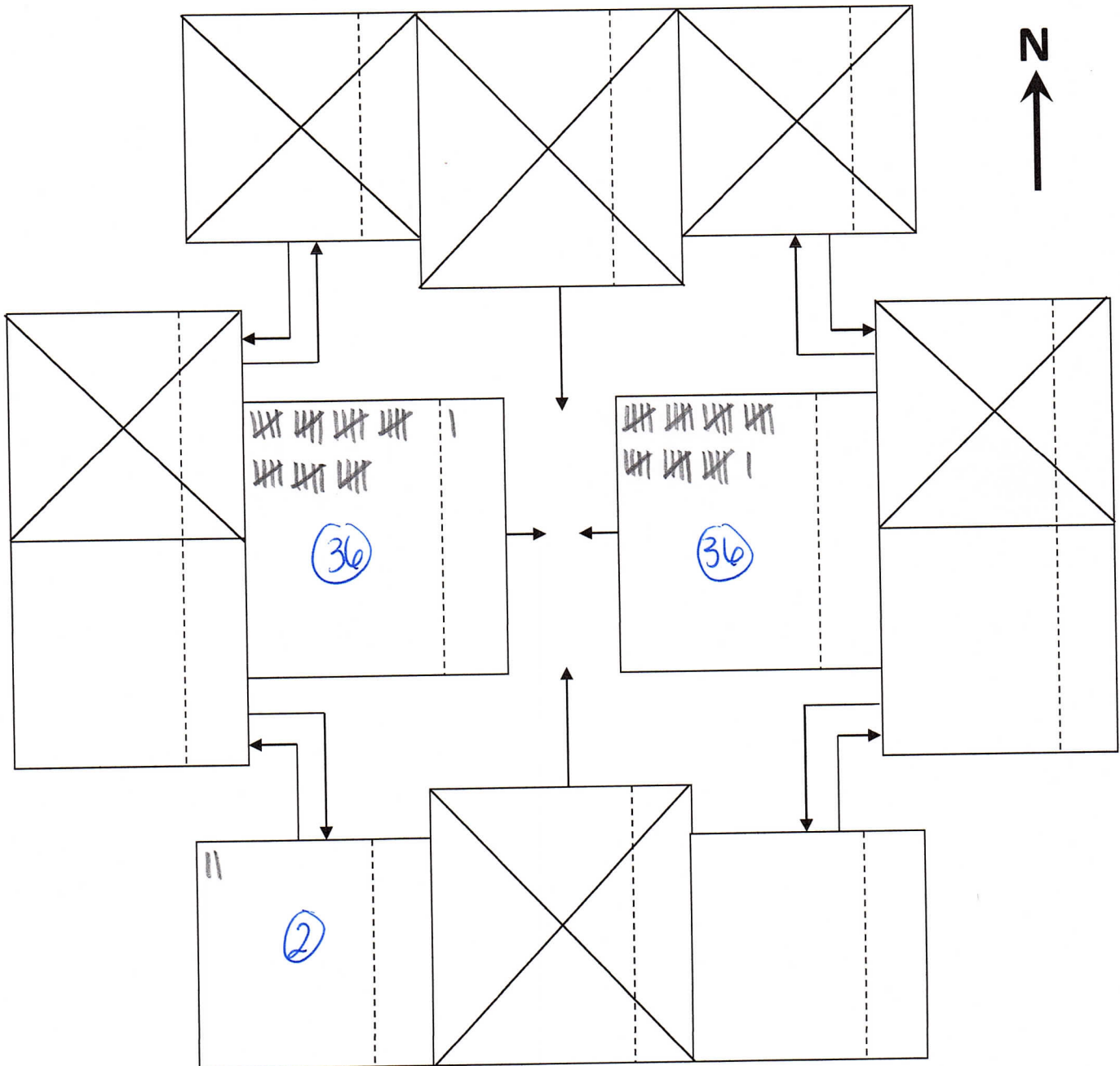
Time: 9:30 to 9:45

Date: 3/18/23

Weather: _____

Observer: _____

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



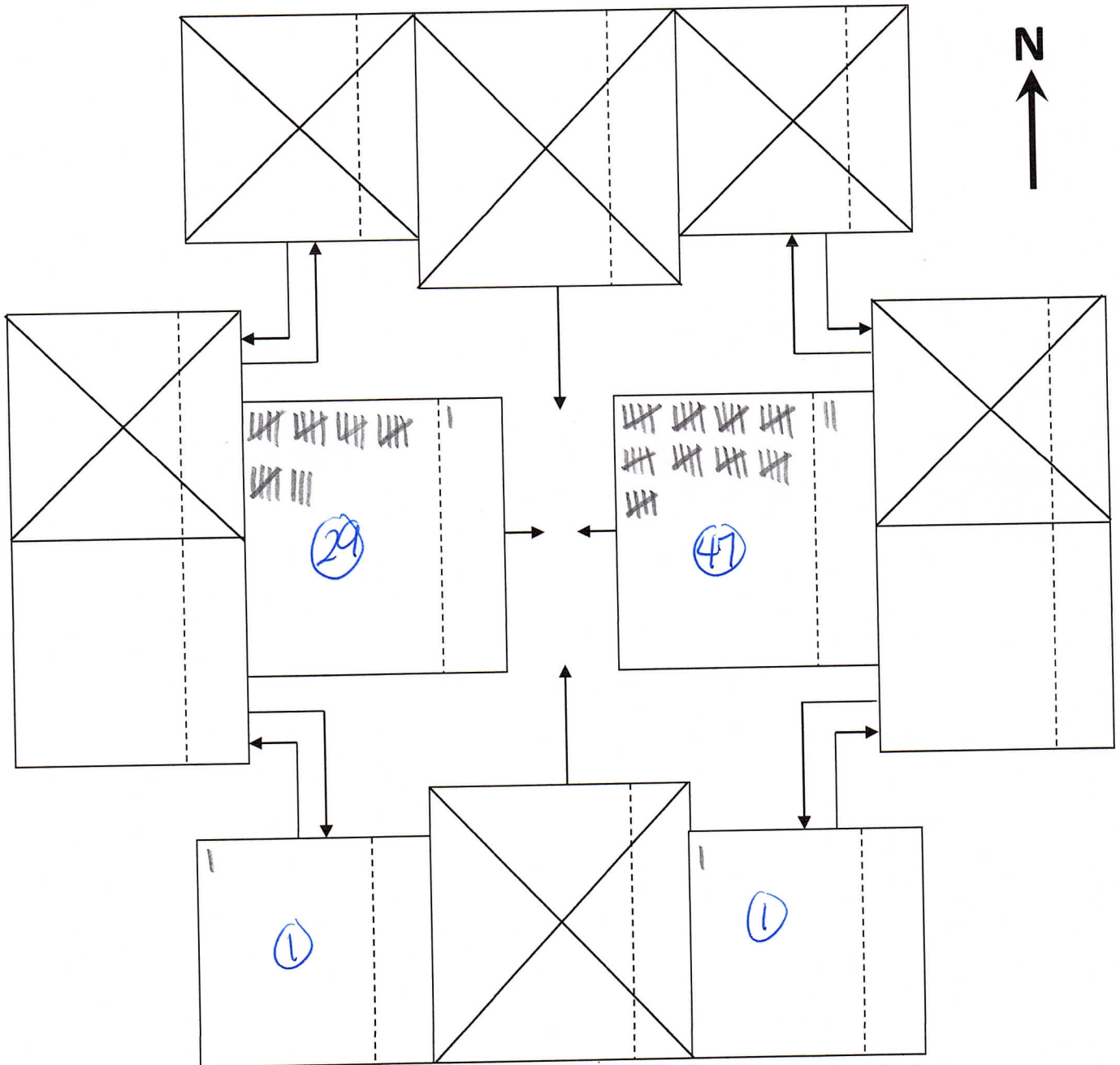
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Appaloosa Rd
E/W Street: Highway 105

Time: 9:45 to 10:00
Date: 3/18/23
Weather: Sunny
Observer: Brett Louk

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Appaloosa Rd
E/W Street: Highway 105

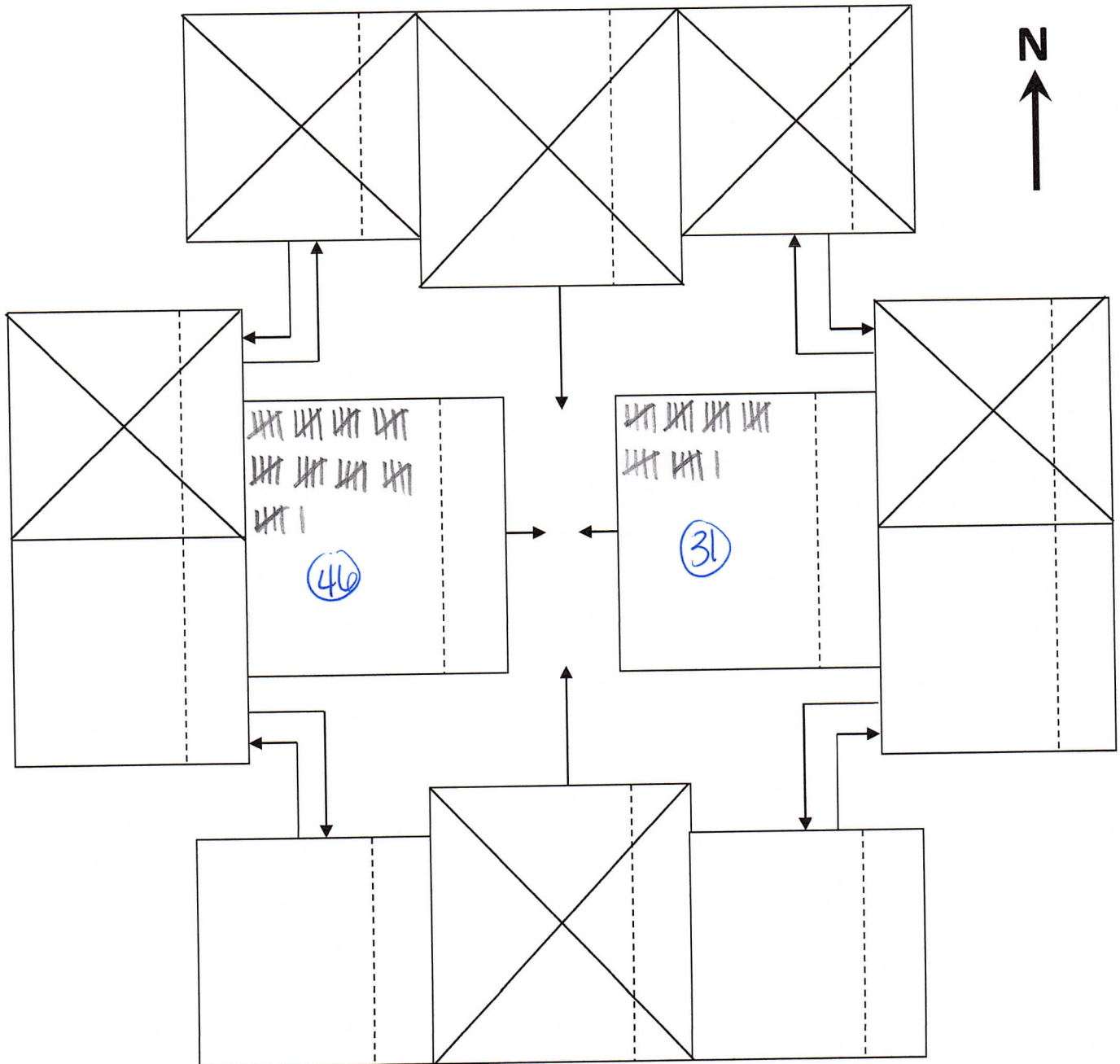
Time: 1:00 to 1:15

Date: 3/18/23

Weather: _____

Observer: Brett Louk

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

Time: 1:15 to 1:30

Date: 3/18/23

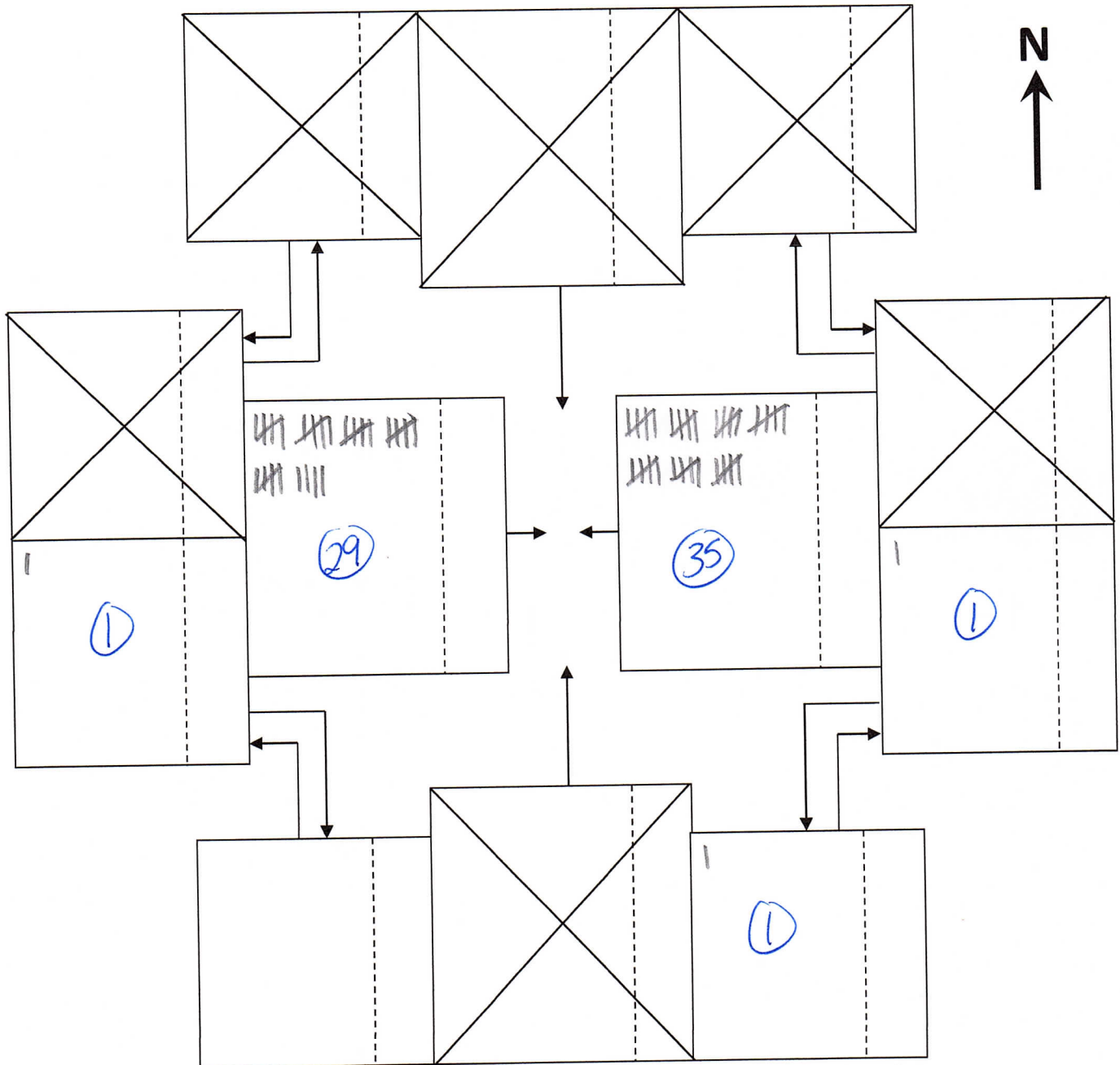
N/S Street: Appaloosa Rd

E/W Street: Highway 105

Weather: _____

Observer: Brett Louk

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

Time: 1:30 to 1:45

Date: 3/18/23

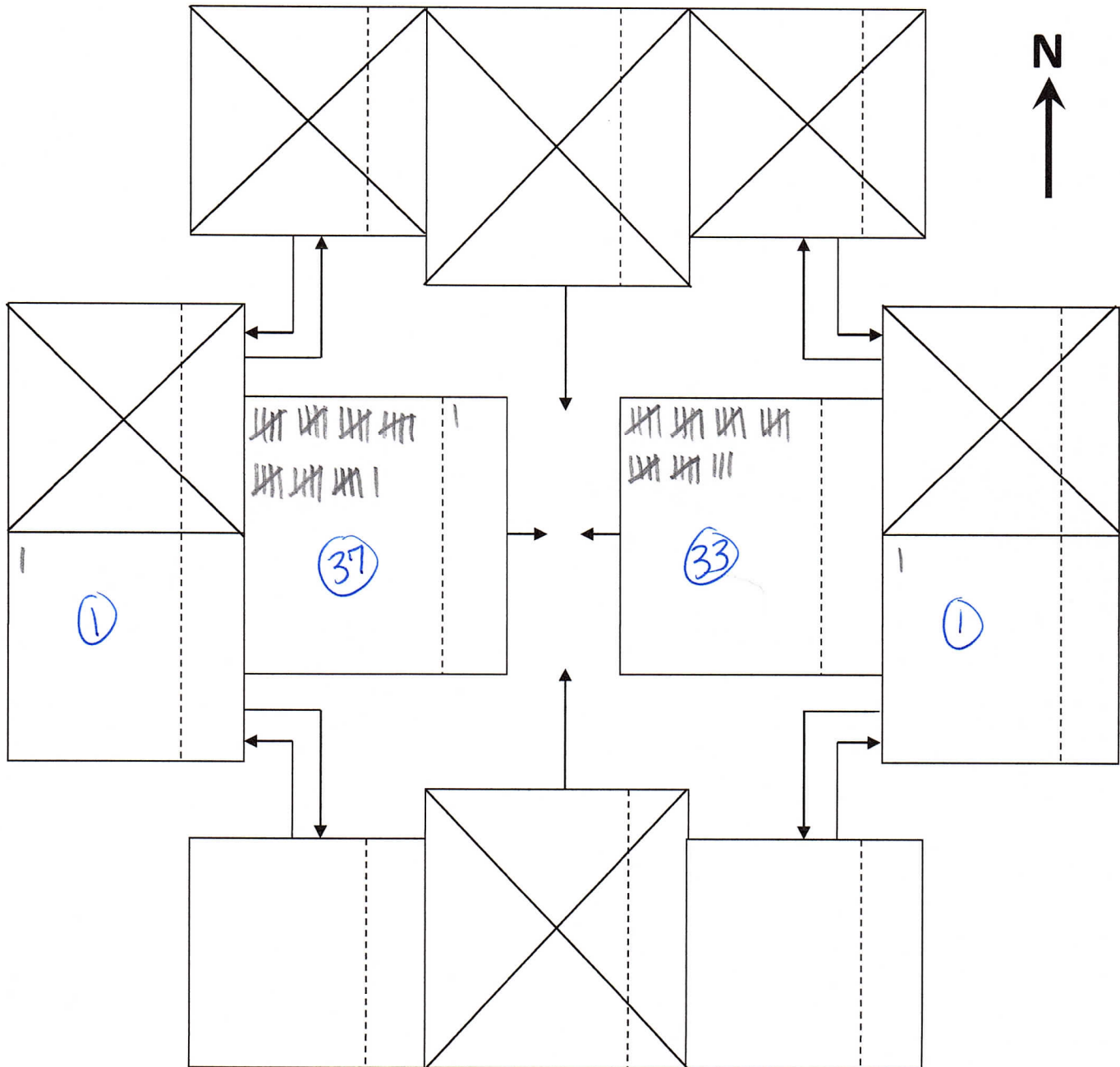
N/S Street: Appaloosa Rd

E/W Street: Highway 105

Weather: _____

Observer: Brett Louk

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

Time: 1:45 to 2:00

Date: 3/18/23

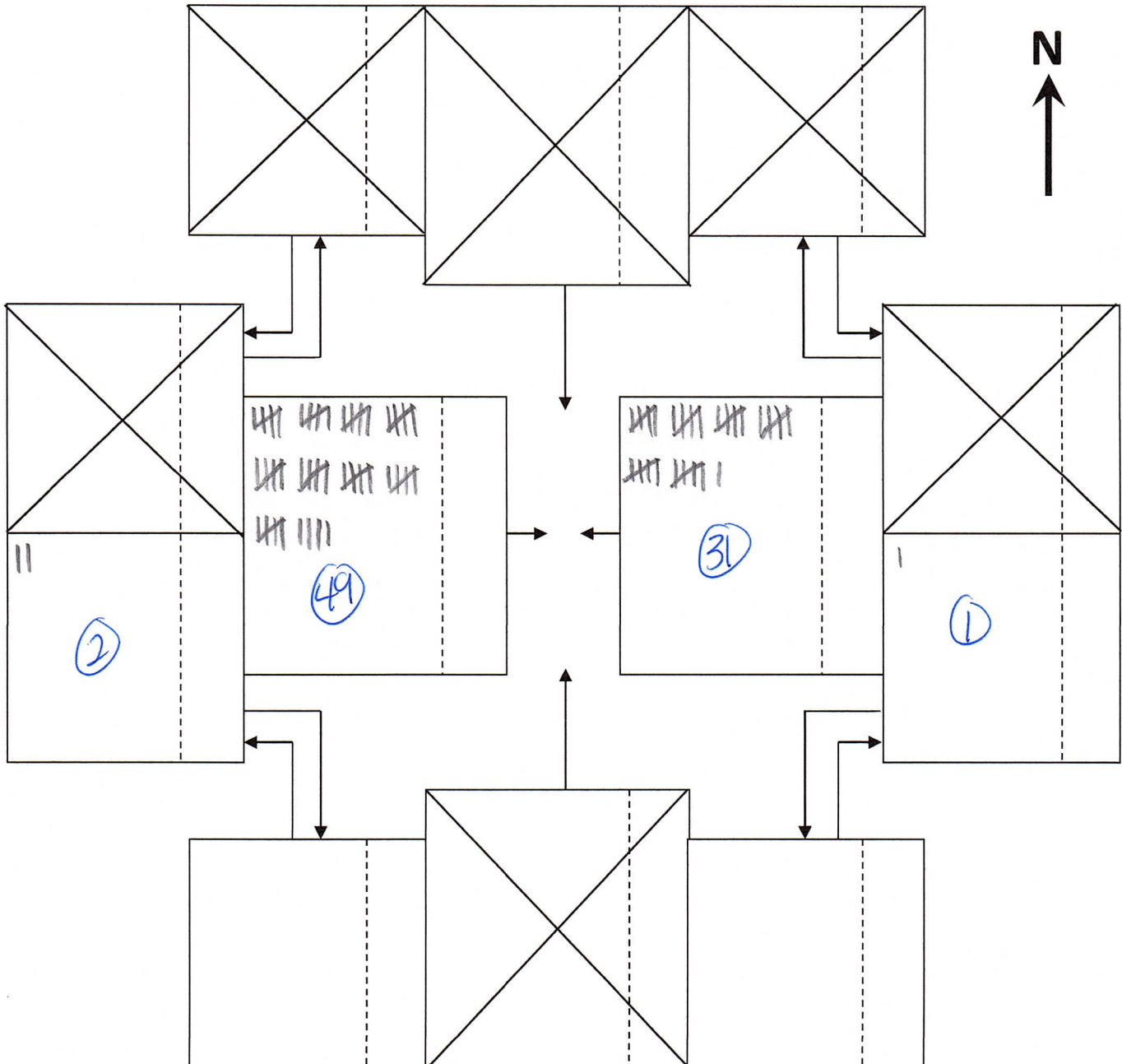
N/S Street: Appaloosa Rd

E/W Street: Highway 105

Weather: _____

Observer: _____

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Cherry Springs Ranch Dr

E/W Street: Highway 105

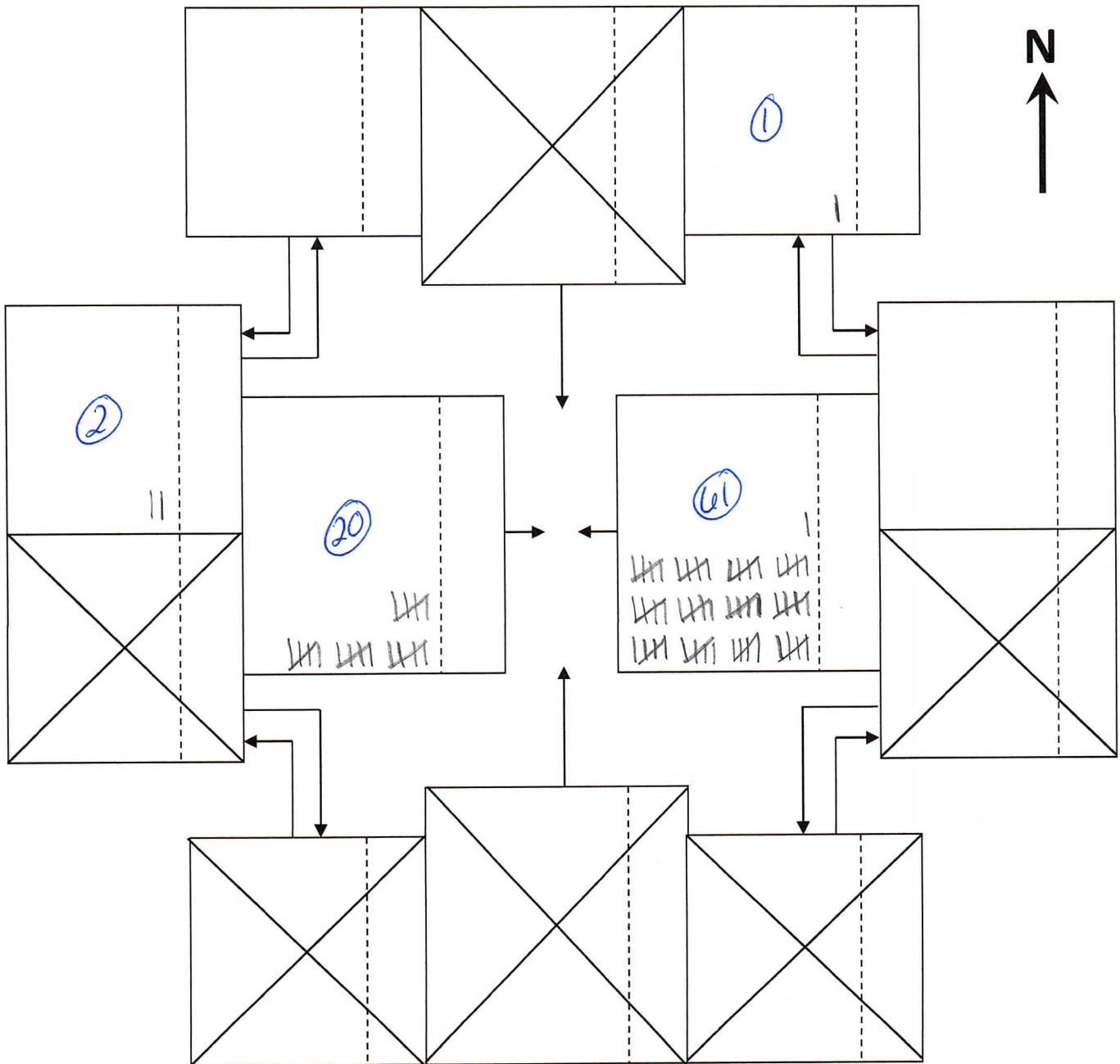
Time: 9:00 to 9:15

Date: 3/14/23

Weather: _____

Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Cherry Springs Ranch Dr

E/W Street: Highway 105

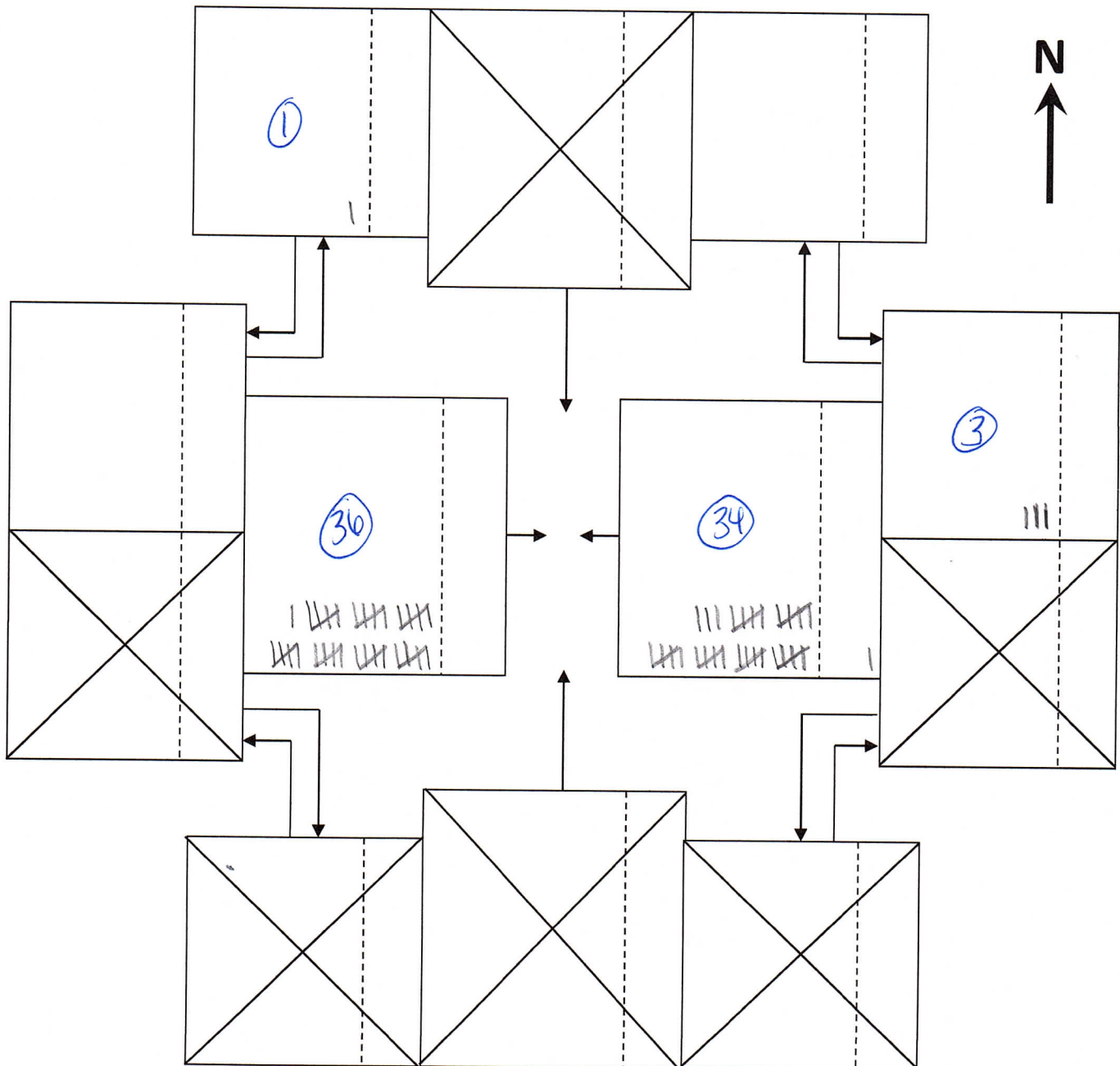
Time: 9:15 to 9:30

Date: 3/14/23

Weather: _____

Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Cherry Springs Ranch Dr

E/W Street: Highway 105

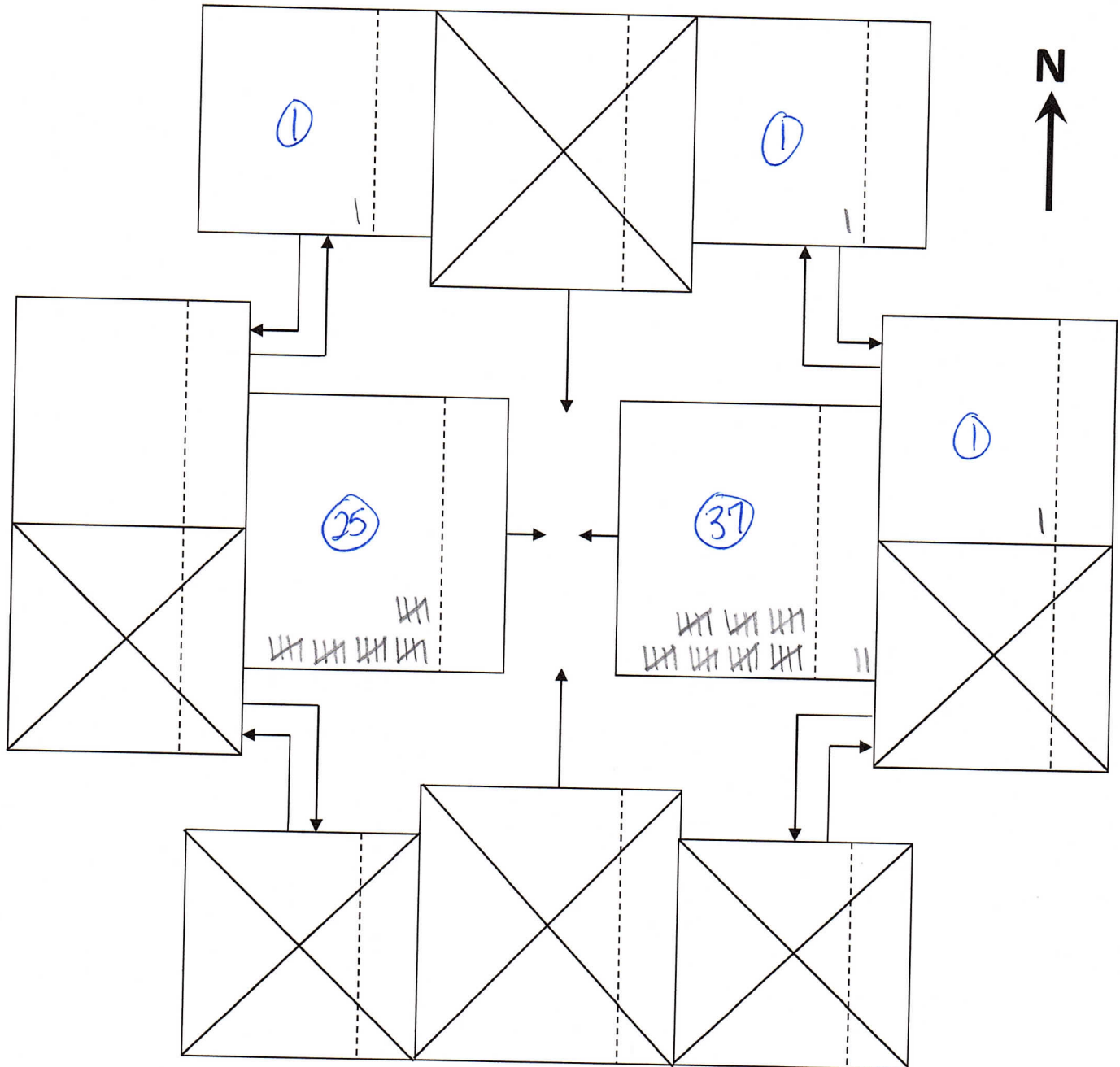
Time: 9:30 to 9:45

Date: 3/14/23

Weather: _____

Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Cherry Springs Ranch Dr

E/W Street: Highway 105

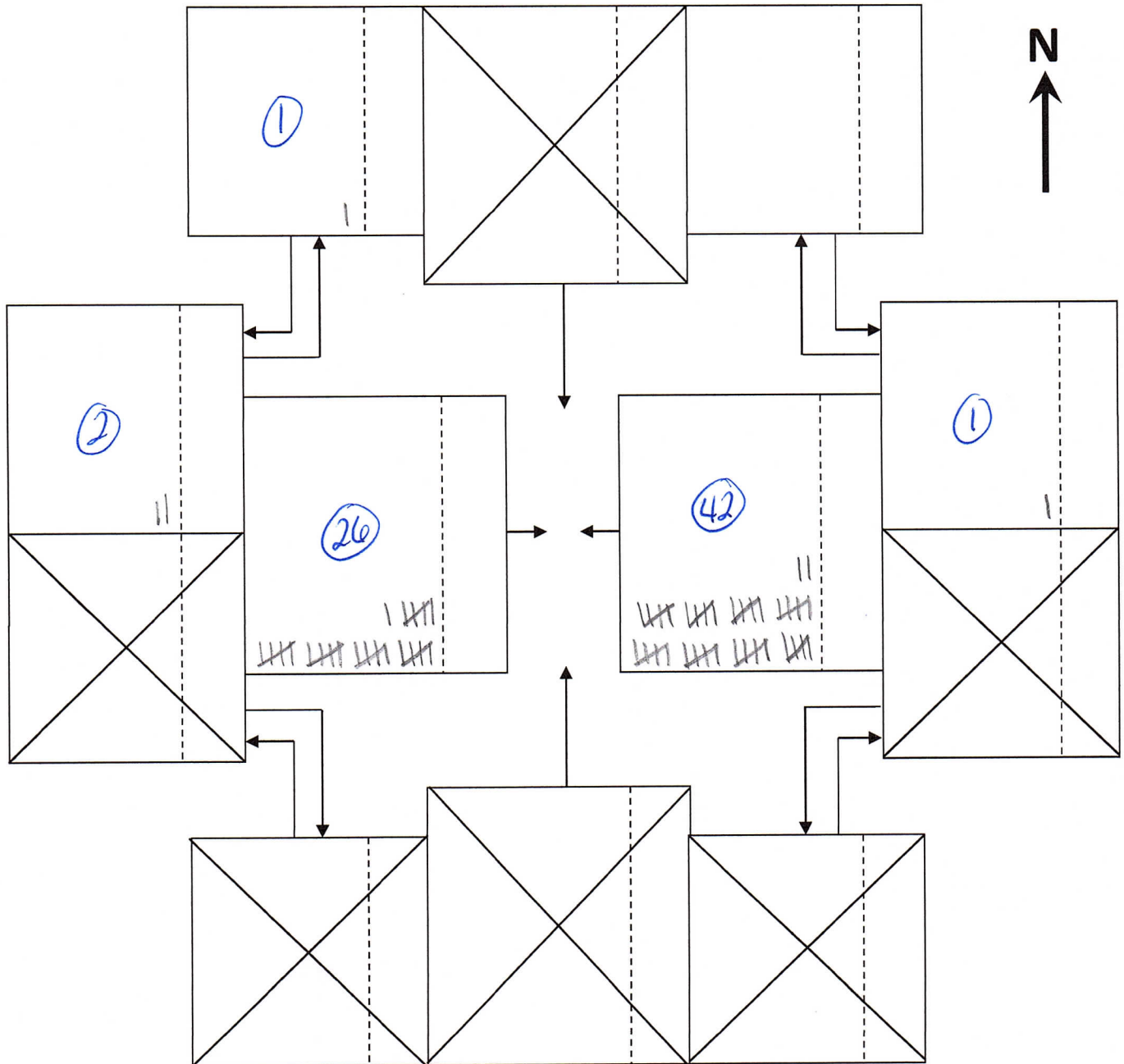
Time: 9:45 to 10:00

Date: 3/14/23

Weather: _____

Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Cherry Springs Ranch Dr

E/W Street: Highway 105

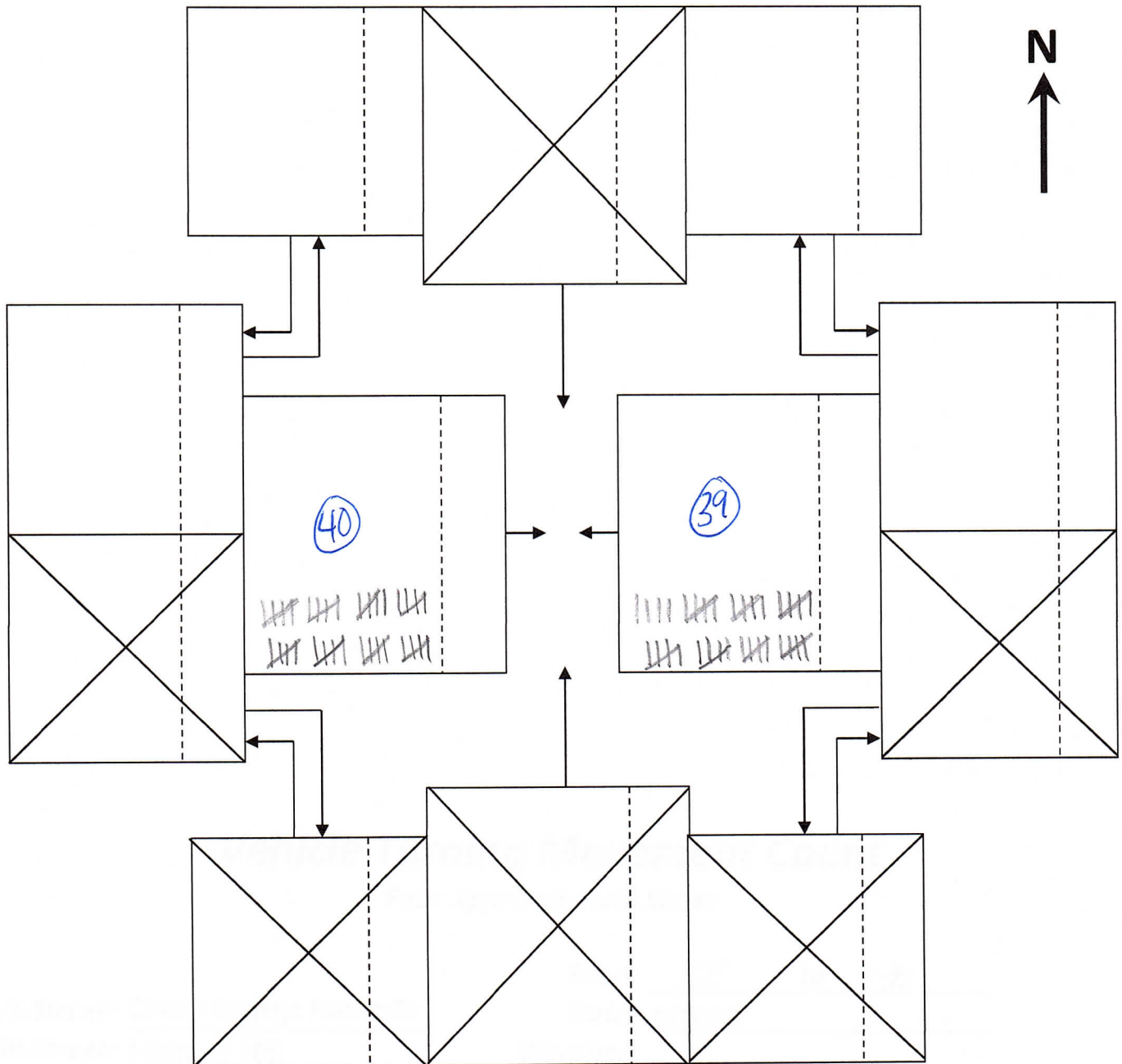
Time: 1:00 to 1:15

Date: 3/14/23

Weather: _____

Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Cherry Springs Ranch Dr

E/W Street: Highway 105

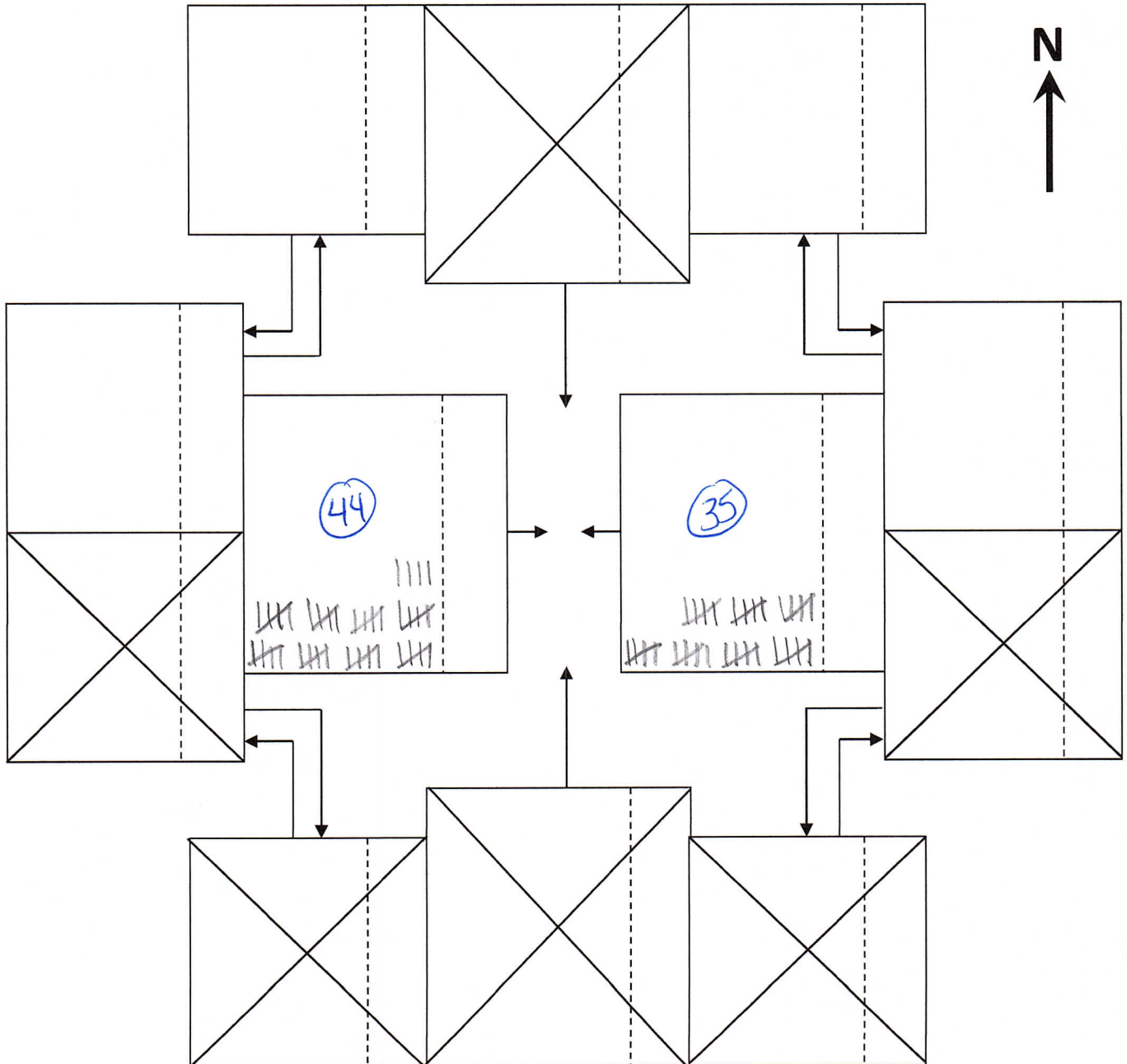
Time: 1:15 to 1:30

Date: 3/14/23

Weather: _____

Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



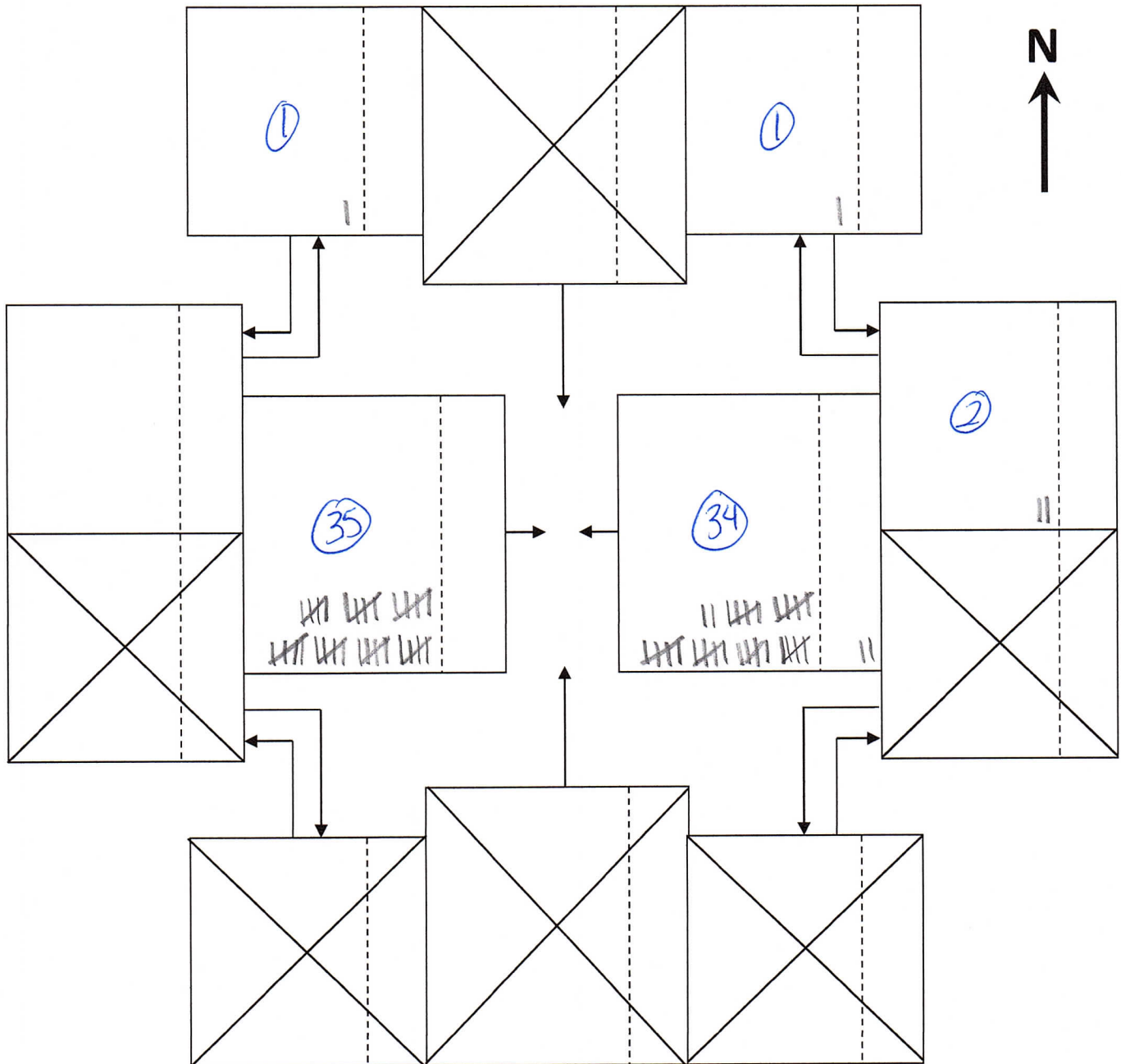
Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Cherry Springs Ranch Dr
E/W Street: Highway 105

Time: 1:30 to 1:45
Date: 3/14/23
Weather: _____
Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)



Vehicle Turning Movement Count

Four Approach Field Sheet

N/S Street: Cherry Springs Ranch Dr

E/W Street: Highway 105

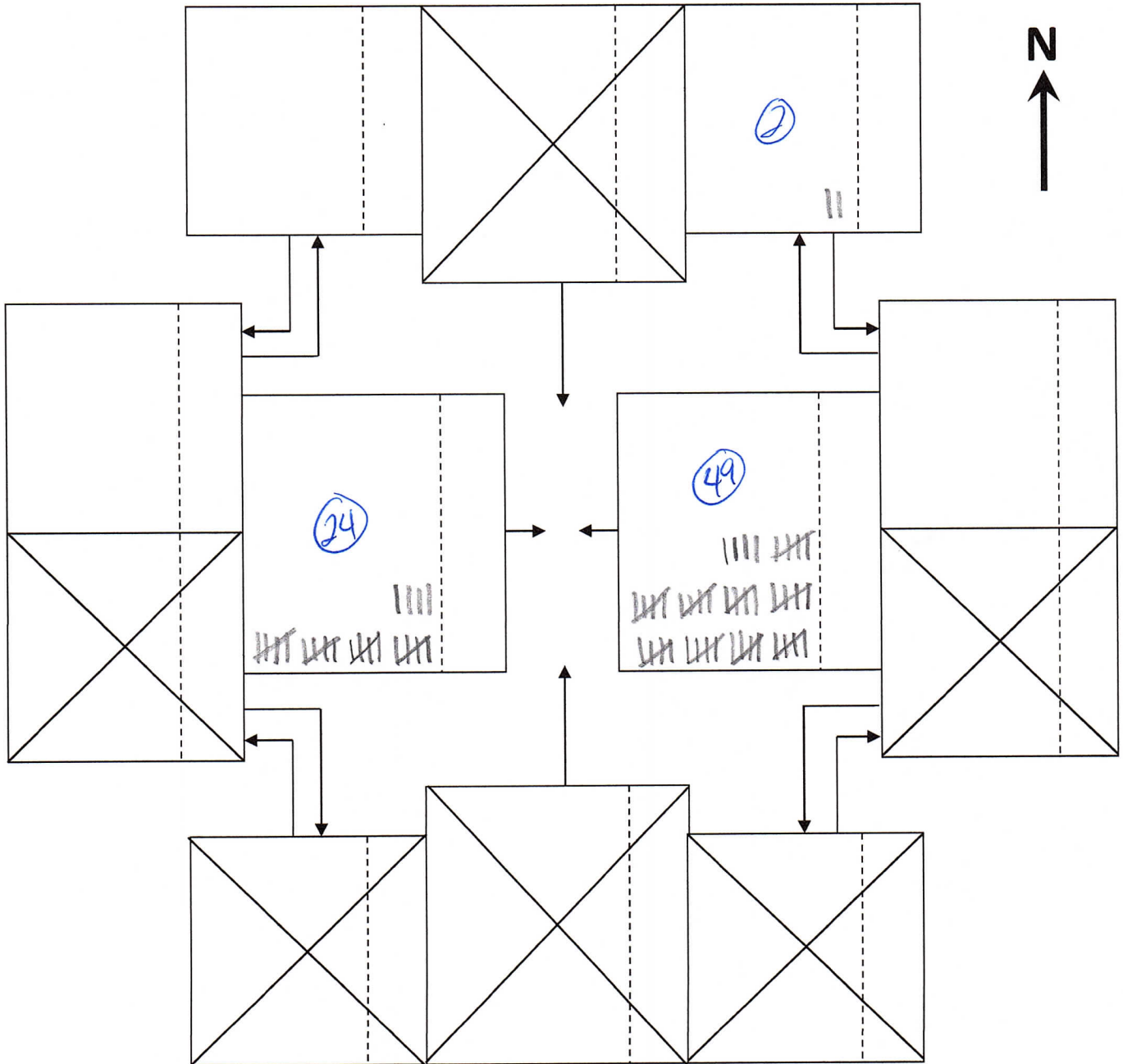
Time: 1:45 to 2:00

Date: 3/14/23

Weather: _____

Observer: Jennifer

Counts are Conducted From the Direction of Travel
(e.g. how many vehicles are turning left from the northbound direction)

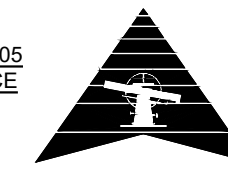


INTERSECTION SIGHT DISTANCE EXHIBIT

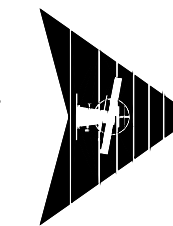
COLORADO PUMPKIN PATCH
COLORADO KID'S RANCH SPECIAL USE APPLICATION
EL PASO COUNTY, COLORADO



CANTERBURY DR & HIGHWAY 105
INTERSECTION SIGHT DISTANCE
NOT TO SCALE

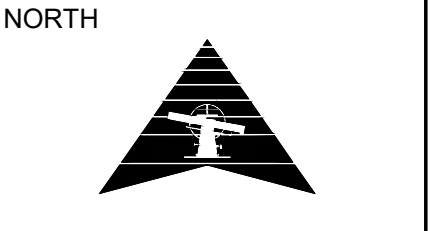


CANTERBURY DR & SADDLEWOOD RD
INTERSECTION SIGHT DISTANCE
NOT TO SCALE



*EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM) REQUIRES THAT THE INTERSECTION SIGHT DISTANCE BE BASED ON THE ROADWAY DESIGN SPEED. HOWEVER, TABLE 2-21, IN THE ECM, DOES NOT PROVIDE AN INTERSECTION SIGHT DISTANCE FOR A DESIGN SPEED OVER 50 MPH. THE DESIGN SPEED FOR HIGHWAY 105 IS 60 MPH. THEREFORE, THE DESIGN INTERSECTION SIGHT DISTANCE SHOWN ON THIS EXHIBIT IS BASED ON THE HIGHEST ROADWAY DESIGN SPEED SHOWN IN THE TABLE. TABLE 2-1 ALSO STATES THAT THE VALUES ARE ONLY APPLICABLE TO TWO-LANE ROADS WITH STOP CONTROL, WHICH IS THE SCENARIO AT ALL INTERSECTIONS ANALYZED.

REVISION DATE	REVISION DESCRIPTION (DESCRIPTION)
00/00/00	



PROJECT #: 2211-0442
CHECKED BY: BML
DRAWN BY: EDM

DATE: 7/17/2023

SHEET # **1**

TOTAL SHEETS 2

INTERSECTION SIGHT DISTANCES

COLORADO PUMPKIN PATCH
COLORADO KID'S RANCH SPECIAL USE APPLICATION
EL PASO COUNTY, COLORADO



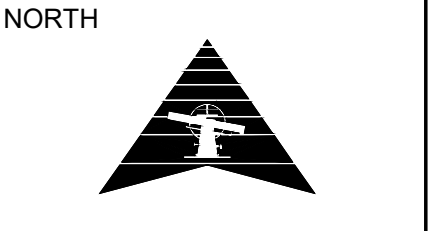
CHERRY SPRINGS RANCH & HIGHWAY 105
INTERSECTION SIGHT DISTANCE
NOT TO SCALE



APPALOOSA RD & HIGHWAY 105
INTERSECTION SIGHT DISTANCE
NOT TO SCALE

*EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM) REQUIRES THAT THE INTERSECTION SIGHT DISTANCE BE BASED ON THE ROADWAY DESIGN SPEED. HOWEVER, TABLE 2-21, IN THE ECM, DOES NOT PROVIDE AN INTERSECTION SIGHT DISTANCE FOR A DESIGN SPEED OVER 50 MPH. THE DESIGN SPEED FOR HIGHWAY 105 IS 60 MPH. THEREFORE, THE DESIGN INTERSECTION SIGHT DISTANCE SHOWN ON THIS EXHIBIT IS BASED ON THE HIGHEST ROADWAY DESIGN SPEED SHOWN IN THE TABLE. TABLE 2-1 ALSO STATES THAT THE VALUES ARE ONLY APPLICABLE TO TWO-LANE ROADS WITH STOP CONTROL, WHICH IS THE SCENARIO AT ALL INTERSECTIONS ANALYZED.

REVISION DATE	REVISION DESCRIPTION (DESCRIPTION)
00/00/00	



PROJECT #: 2211-0442
CHECKED BY: BML
DRAWN BY: EDM

DATE: 7/17/2023

SHEET # **2**

TOTAL SHEETS 2

INTERSECTION SIGHT DISTANCES

EXISTING PEAK HOUR CALCULATIONS

Canterbury Dr. & 105 12-17-22	
Time Period	Volume
9:00 to 9:15 am	54
9:15 to 9:30 am	43
9:30 to 9:45 am	68
9:45 to 10:00 am	74

Canterbury Dr. & 105 12-17-22	
Time Period	Volume
9:00 to 10:00 am	239

Canterbury Dr. & 105
12-17-22
Peak Hour Factor
= 0.807

Canterbury Dr. & 105 12-17-22	
Time Period	Volume
1:00 to 1:15 pm	80
1:15 to 1:30 pm	71
1:30 to 1:45 pm	96
1:45 to 2:00 pm	75

Canterbury Dr. & 105 12-17-22	
Time Period	Volume
1:00 to 2:00 pm	322

Canterbury Dr. & 105
Peak Hour Factor
= 0.839

Canterbury Dr. & Saddlewood Rd. 12-17-22	
Time Period	Volume
9:00 to 9:15 am	1
9:15 to 9:30 am	3
9:30 to 9:45 am	1
9:45 to 10:00 am	4

Canterbury Dr. & Saddlewood Rd. 12-17-22	
Time Period	Volume
9:00 to 10:00 am	9

Canterbury Dr. & Saddlewood Rd.
12-17-22
Peak Hour Factor
= 0.563

Canterbury Dr. & Saddlewood Rd. 12-17-22	
Time Period	Volume
1:00 to 1:15 pm	2
1:15 to 1:30 pm	3
1:30 to 1:45 pm	5
1:45 to 2:00 pm	1

Canterbury Dr. & Saddlewood Rd. 12-17-22	
Time Period	Volume
1:00 to 2:00 pm	11

Canterbury Dr. & Saddlewood Rd.
12-17-22
Peak Hour Factor
= 0.550

Canterbury Dr. & 105
12-21-22

Time Period	Volume
9:00 to 9:15 am	83
9:15 to 9:30 am	76
9:30 to 9:45 am	82
9:45 to 10:00 am	68

Canterbury Dr. & 105
12-21-22

Time Period	Volume
9:00 to 10:00 am	309

Canterbury Dr. & 105
12-21-22

Peak Hour Factor
= 0.931

Canterbury Dr. & 105
12-21-22

Time Period	Volume
1:00 to 1:15 pm	78
1:15 to 1:30 pm	100
1:30 to 1:45 pm	86
1:45 to 2:00 pm	95

Canterbury Dr. & 105
12-21-22

Time Period	Volume
1:00 to 2:00 pm	359

Canterbury Dr. & 105

Peak Hour Factor
= 0.898

Canterbury Dr. & Saddlewood Rd.
12-21-22

Time Period	Volume
9:00 to 9:15 am	1
9:15 to 9:30 am	1
9:30 to 9:45 am	2
9:45 to 10:00 am	0

Canterbury Dr. & Saddlewood Rd.
12-21-22

Time Period	Volume
9:00 to 10:00 am	4

Canterbury Dr. & Saddlewood Rd.
12-21-22

Peak Hour Factor
= 0.500

Canterbury Dr. & Saddlewood Rd.
12-21-22

Time Period	Volume
1:00 to 1:15 pm	3
1:15 to 1:30 pm	9
1:30 to 1:45 pm	2
1:45 to 2:00 pm	4

Canterbury Dr. & Saddlewood Rd.
12-21-22

Time Period	Volume
1:00 to 2:00 pm	18

Canterbury Dr. & Saddlewood Rd.
12-17-22

Peak Hour Factor
= 0.500

105 & Cherry Springs Ranch 03-18-23		
Time Period	Volume	
9:00 to 9:15 am	62	
9:15 to 9:30 am	78	
9:30 to 9:45 am	76	
9:45 to 10:00 am	79	

105 & Cherry Springs Ranch 03-18-23		
Time Period	Volume	
9:00 to 10:00 am	295	

105 & Cherry Springs Ranch 03-18-23		
Peak Hour Factor		
=	0.934	

105 & Cherry Springs Ranch 03-18-23		
Time Period	Volume	
1:00 to 1:15 pm	78	
1:15 to 1:30 pm	68	
1:30 to 1:45 pm	70	
1:45 to 2:00 pm	81	

105 & Cherry Springs Ranch 03-18-23		
Time Period	Volume	
1:00 to 2:00 pm	297	

105 & Cherry Springs Ranch 03-18-23		
Peak Hour Factor		
=	0.917	

105 & Appaloosa Rd 03-18-23		
Time Period	Volume	
9:00 to 9:15 am	61	
9:15 to 9:30 am	69	
9:30 to 9:45 am	74	
9:45 to 10:00 am	78	

105 & Appaloosa Rd 03-18-23		
Time Period	Volume	
9:00 to 10:00 am	282	

105 & Appaloosa Rd 03-18-23		
Peak Hour Factor		
=	0.904	

105 & Appaloosa Rd 03-18-23		
Time Period	Volume	
1:00 to 1:15 pm	77	
1:15 to 1:30 pm	67	
1:30 to 1:45 pm	72	
1:45 to 2:00 pm	83	

105 & Appaloosa Rd 03-18-23		
Time Period	Volume	
1:00 to 2:00 pm	299	

105 & Appaloosa Rd 03-18-23		
Peak Hour Factor		
=	0.901	

105 & Cherry Springs Ranch
03-14-23

Time Period	Volume
9:00 to 9:15 am	84
9:15 to 9:30 am	74
9:30 to 9:45 am	65
9:45 to 10:00 am	72

105 & Cherry Springs Ranch
03-14-23

Time Period	Volume
9:00 to 10:00 am	295

105 & Cherry Springs Ranch
03-14-23

Peak Hour Factor
= 0.878

105 & Cherry Springs Ranch
03-14-23

Time Period	Volume
1:00 to 1:15 pm	79
1:15 to 1:30 pm	79
1:30 to 1:45 pm	73
1:45 to 2:00 pm	75

105 & Cherry Springs Ranch
03-14-23

Time Period	Volume
1:00 to 2:00 pm	306

105 & Cherry Springs Ranch
03-14-23

Peak Hour Factor
= 0.968

105 & Appaloosa Rd
03-14-23

Time Period	Volume
9:00 to 9:15 am	84
9:15 to 9:30 am	72
9:30 to 9:45 am	68
9:45 to 10:00 am	69

105 & Appaloosa Rd
03-14-23

Time Period	Volume
9:00 to 10:00 am	293

105 & Appaloosa Rd
03-14-23

Peak Hour Factor
= 0.872

105 & Appaloosa Rd
03-14-23

Time Period	Volume
1:00 to 1:15 pm	79
1:15 to 1:30 pm	79
1:30 to 1:45 pm	76
1:45 to 2:00 pm	80

105 & Appaloosa Rd
03-14-23

Time Period	Volume
1:00 to 2:00 pm	314

105 & Appaloosa Rd
03-14-23

Peak Hour Factor
= 0.981

EXISTING PEAK HOUR TURNING MOVEMENTS

Canterbury/Hwy 105						
Peak Hour: 9:00 am to 10:00 am						
Existing Weekend						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	116	1	1	114	0	
Canterbury						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	0	0	0	0	7	

Peak Hour Volume: 239

Canterbury/Saddlewood						
Peak Hour: 9:00 am to 10:00 am						
Existing Weekday						
Saddlewood						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	0	0	0	0	3	
Canterbury						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	2	2	1	1	0	

Peak Hour Volume: 9

Appaloosa/Hwy 105						
Peak Hour: 9:00 am to 10:00 am						
Existing Weekday						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	107	2	1	177	0	
Appaloosa						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	0	0	3	0	3	

Peak Hour Volume: 293

Cherry Springs Ranch/Hwy 105						
Peak Hour: 9:00 am to 10:00 am						
Existing Weekday						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
4	107	0	0	174	5	
Cherry Springs Ranch						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
3	0	2	0	0	0	

Peak Hour Volume: 295

Canterbury/Hwy 105						
Peak Hour: 9:00 am to 10:00 am						
Existing Weekday						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	144	2	0	157	0	
Canterbury						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	0	0	3	0	3	

Peak Hour Volume: 309

Canterbury/Saddlewood						
Peak Hour: 9:00 am to 10:00 am						
Existing Weekday						
Saddlewood						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	0	0	1	0	1	
Canterbury						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	0	2	0	0	0	

Peak Hour Volume: 4

Appaloosa/Hwy 105						
Peak Hour: 9:00 am to 10:00 am						
Existing Weekday						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	106	0	1	170	0	
Appaloosa						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	0	0	1	0	4	

Peak Hour Volume: 282

Cherry Springs Ranch/Hwy 105						
Peak Hour: 9:00 am to 10:00 am						
Existing Weekend						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
7	103	0	0	162	13	
Cherry Springs Ranch						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
6	0	4	0	0	0	

Peak Hour Volume: 295

Canterbury/Hwy 105						
Peak Hour: 1:00 pm to 2:00 pm						
Existing Weekend						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	161	3	0	148	0	
Canterbury						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	0	0	3	0	7	

Peak Hour Volume: 322

Canterbury/Saddlewood						
Peak Hour: 1:00 pm to 2:00 pm						
Existing Weekday						
Saddlewood						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	0	0	0	0	1	
Canterbury						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	3	0	1	6	0	

Peak Hour Volume: 11

Appaloosa/Hwy 105						
Peak Hour: 1:00 pm to 2:00 pm						
Existing Weekday						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	145	2	5	155	0	
Appaloosa						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	0	0	4	0	3	

Peak Hour Volume: 314

Cherry Springs Ranch/Hwy 105						
Peak Hour: 1:00 pm to 2:00 pm						
Existing Weekday						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	143	0	0	157	2	
Cherry Springs Ranch						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
1	0	3	0	0	0	

Peak Hour Volume: 306

Canterbury/Hwy 105						
Peak Hour: 1:00 pm to 2:00 pm						
Existing Weekday						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	197	7	2	144	0	
Canterbury						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	0	0	2	0	7	

Peak Hour Volume: 359

Canterbury/Saddlewood						
Peak Hour: 1:00 pm to 2:00 pm						
Existing Weekday						
Saddlewood						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	0	0	3	0	5	
Canterbury						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	3	2	3	2	0	

Peak Hour Volume: 18

Appaloosa/Hwy 105						
Peak Hour: 1:00 pm to 2:00 pm						
Existing Weekend						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	161	4	3	130	0	
Appaloosa						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
0	0	0	1	0	0	

Peak Hour Volume: 299

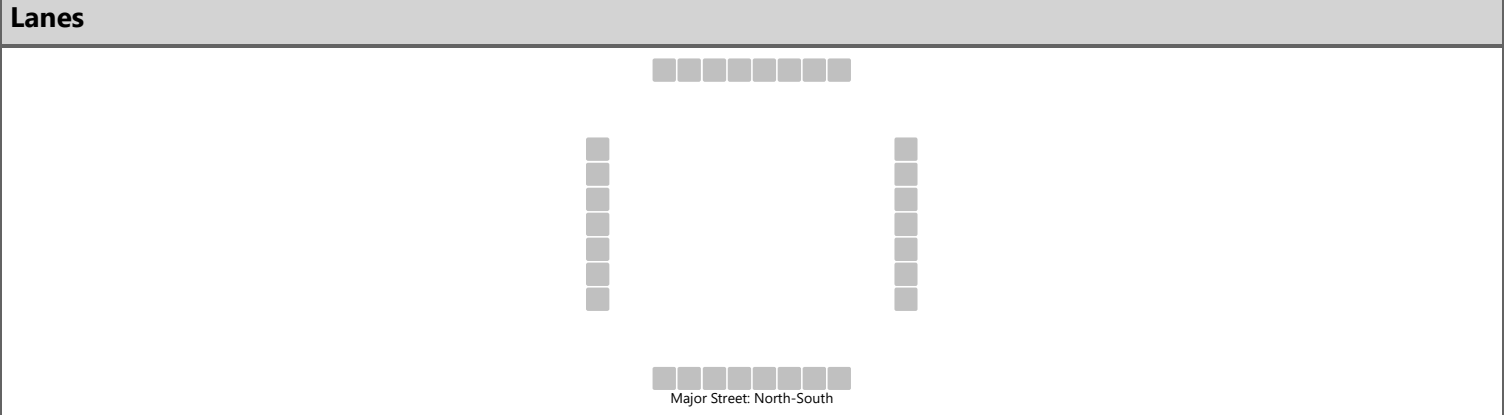
Cherry Springs Ranch/Hwy 105						
Peak Hour: 1:00 pm to 2:00 pm						
Existing Weekend						
Hwy 105						
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT	
0	166	0	0	126	2	
Cherry Springs Ranch						
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT	
2	0	1	0	0	0	

Peak Hour Volume: 297

EXISTING LEVEL OF SERVICE (LOS)

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						1		1		0	0	0		2	0	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

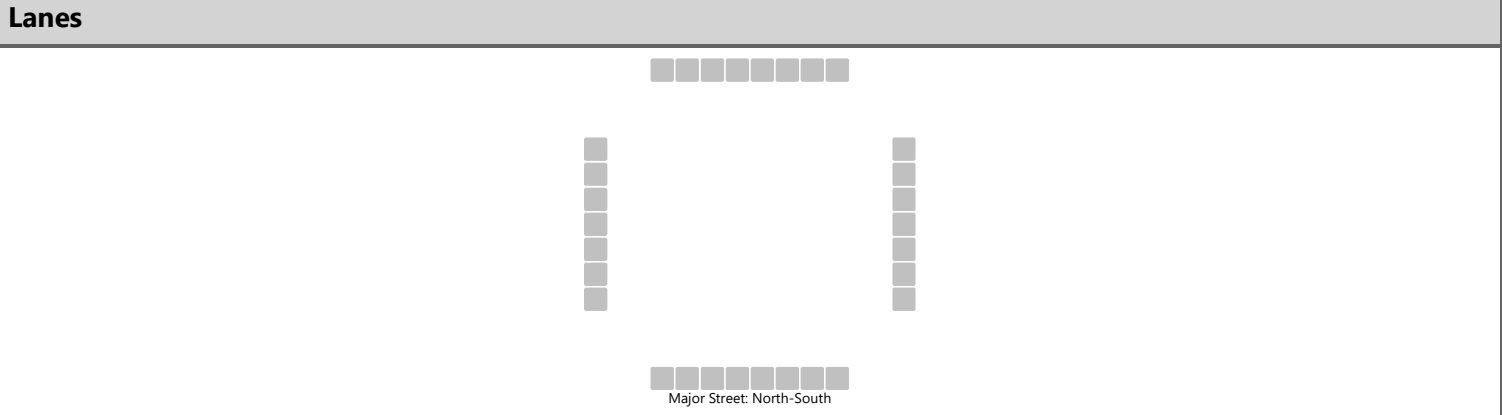
Base Critical Headway (sec)						7.1		6.2			4.1				4.1	
Critical Headway (sec)						7.12		6.22			4.12				4.12	
Base Follow-Up Headway (sec)						3.5		3.3			2.2				2.2	
Follow-Up Headway (sec)						3.52		3.32			2.22				2.22	

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2				0				2		
Capacity, c (veh/h)						1049				1623				1623		
v/c Ratio						0.00				0.00				0.00		
95% Queue Length, Q ₉₅ (veh)						0.0				0.0				0.0		
Control Delay (s/veh)						8.4				7.2				7.2		
Level of Service (LOS)						A				A				A		
Approach Delay (s/veh)					8.4								7.2			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						3		5		0	2	3		2	3	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

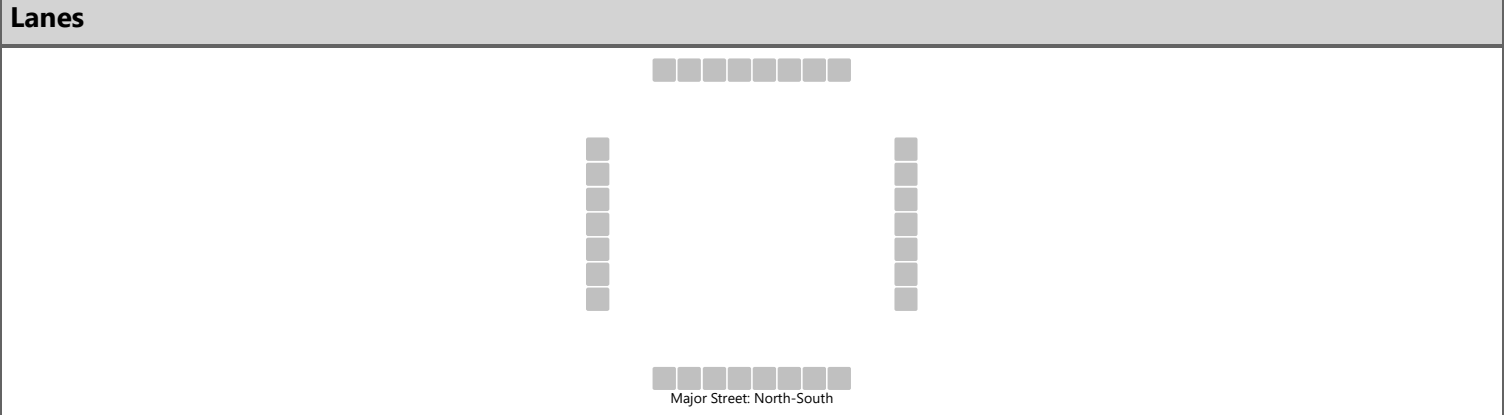
Base Critical Headway (sec)						7.1		6.2		4.1				4.1		
Critical Headway (sec)						7.12		6.22		4.12				4.12		
Base Follow-Up Headway (sec)						3.5		3.3		2.2				2.2		
Follow-Up Headway (sec)						3.52		3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						9				0				2		
Capacity, c (veh/h)						1050				1618				1615		
v/c Ratio						0.01				0.00				0.00		
95% Queue Length, Q ₉₅ (veh)						0.0				0.0				0.0		
Control Delay (s/veh)						8.5				7.2				7.2		
Level of Service (LOS)						A				A				A		
Approach Delay (s/veh)					8.5				0.0				2.9			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						0		3		0	1	1		2	2	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

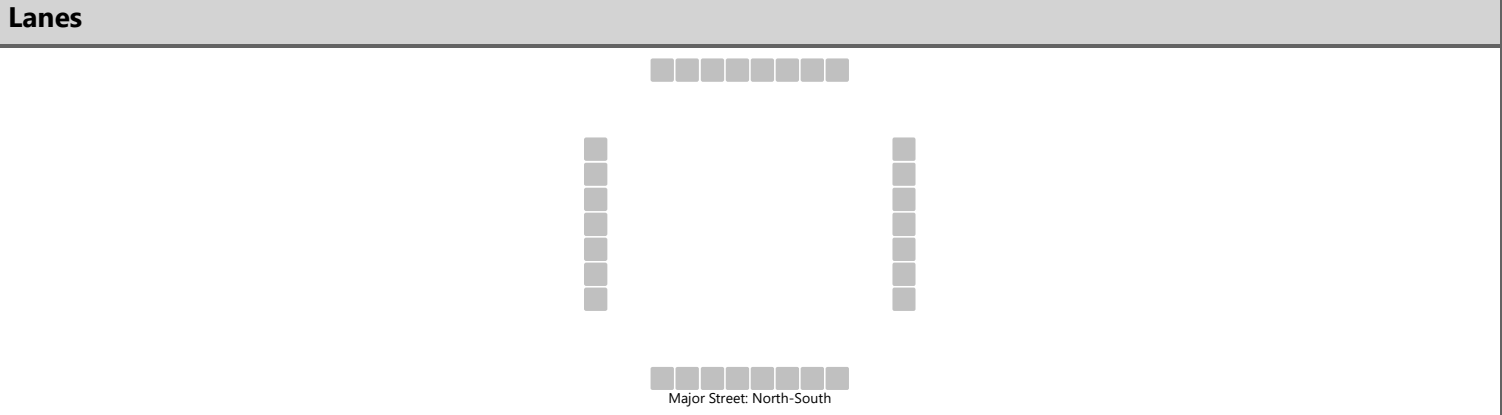
Base Critical Headway (sec)						7.1		6.2		4.1				4.1		
Critical Headway (sec)						7.12		6.22		4.12				4.12		
Base Follow-Up Headway (sec)						3.5		3.3		2.2				2.2		
Follow-Up Headway (sec)						3.52		3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4				0				2		
Capacity, c (veh/h)						1083				1620				1620		
v/c Ratio						0.00				0.00				0.00		
95% Queue Length, Q ₉₅ (veh)						0.0				0.0				0.0		
Control Delay (s/veh)						8.3				7.2				7.2		
Level of Service (LOS)						A				A				A		
Approach Delay (s/veh)					8.3				0.0				3.6			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						0		1		0	6	1		0	3	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

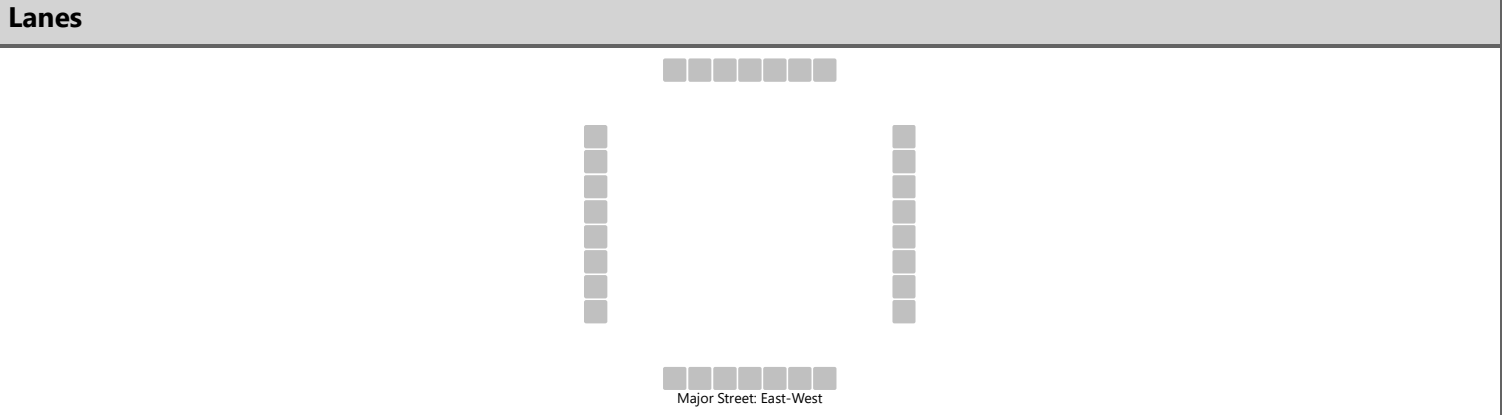
Base Critical Headway (sec)						7.1		6.2		4.1				4.1		
Critical Headway (sec)						7.12		6.22		4.12				4.12		
Base Follow-Up Headway (sec)						3.5		3.3		2.2				2.2		
Follow-Up Headway (sec)						3.52		3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1				0				0		
Capacity, c (veh/h)						1075				1618				1612		
v/c Ratio						0.00				0.00				0.00		
95% Queue Length, Q ₉₅ (veh)						0.0				0.0				0.0		
Control Delay (s/veh)						8.4				7.2				7.2		
Level of Service (LOS)						A				A				A		
Approach Delay (s/veh)					8.4				0.0				0.0			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Canterbury & Hwy 105 AM		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.93		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	144	2		0	157	0		3		3				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

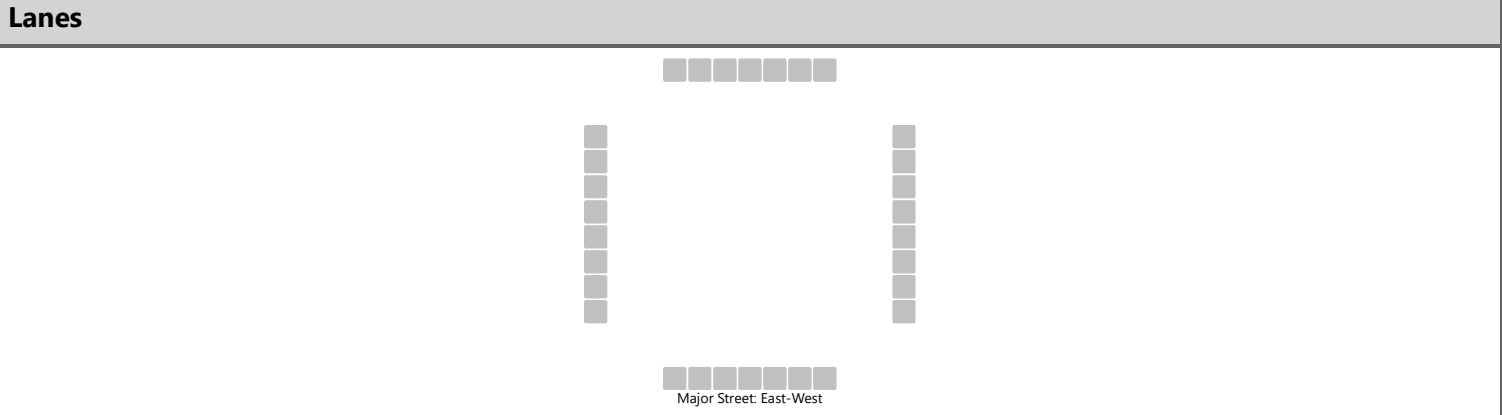
Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				0					6					
Capacity, c (veh/h)		1409				1423					737					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.6				7.5					9.9					
Level of Service (LOS)		A				A					A					
Approach Delay (s/veh)		0.0				0.0				9.9						
Approach LOS										A						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Canterbury & Hwy 105 PM		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkn Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	197	7		2	144	0		7		2				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage					Undivided											

Critical and Follow-up Headways

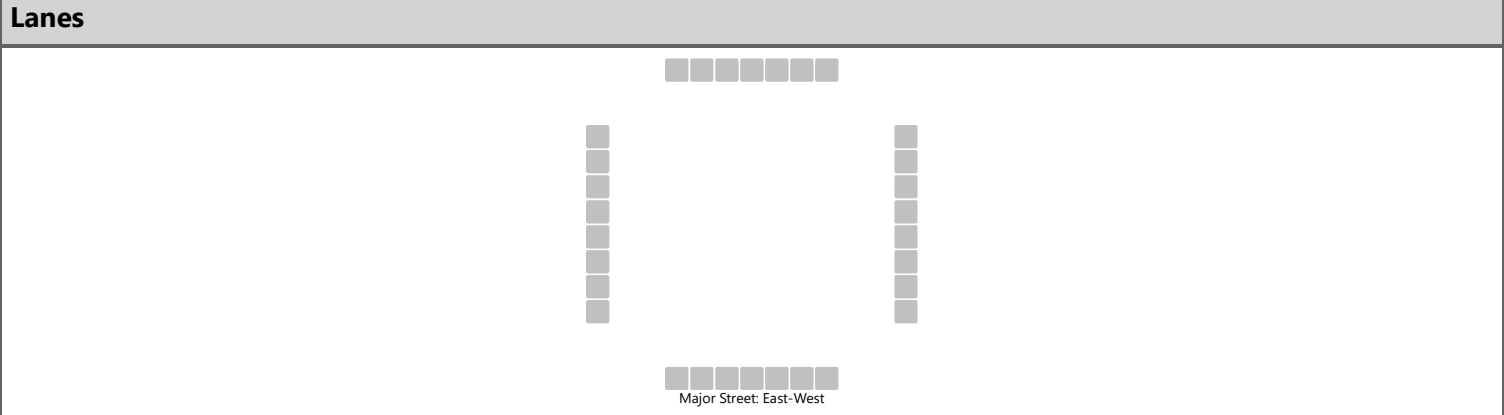
Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				2					10					
Capacity, c (veh/h)		1419				1342					612					
v/c Ratio		0.00				0.00					0.02					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.5				7.7					11.0					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				0.1				11.0						
Approach LOS		A				A				B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Canterbury & Hwy 105 AM		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 AM Weekend			Peak Hour Factor	0.85		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	116	1		1	114	0		7		0				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

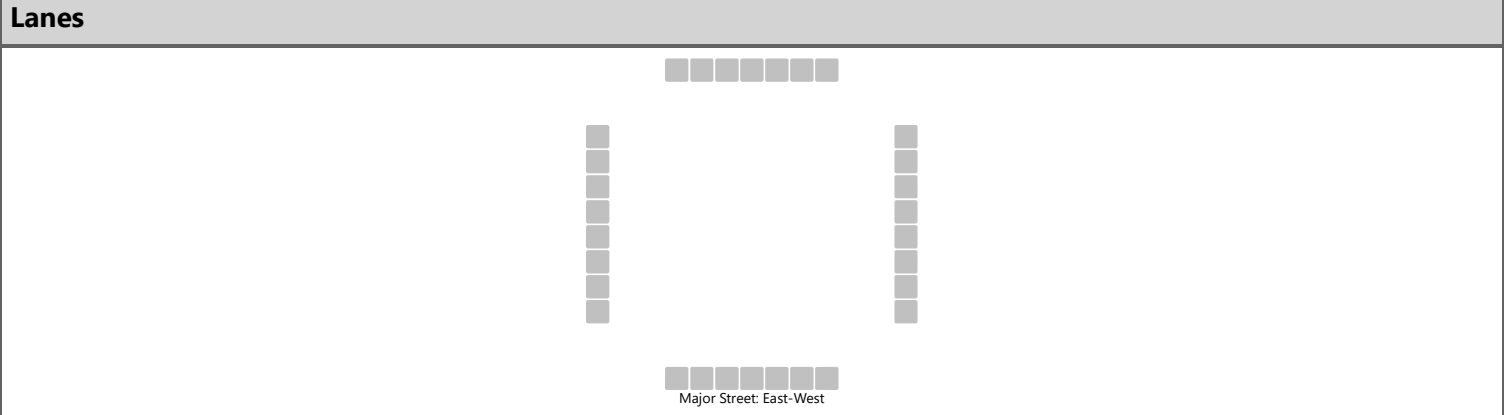
Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				1					8					
Capacity, c (veh/h)		1450				1446					678					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.5				7.5					10.4					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				0.1				10.4						
Approach LOS										B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.85		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	161	3		0	148	0		7		3				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

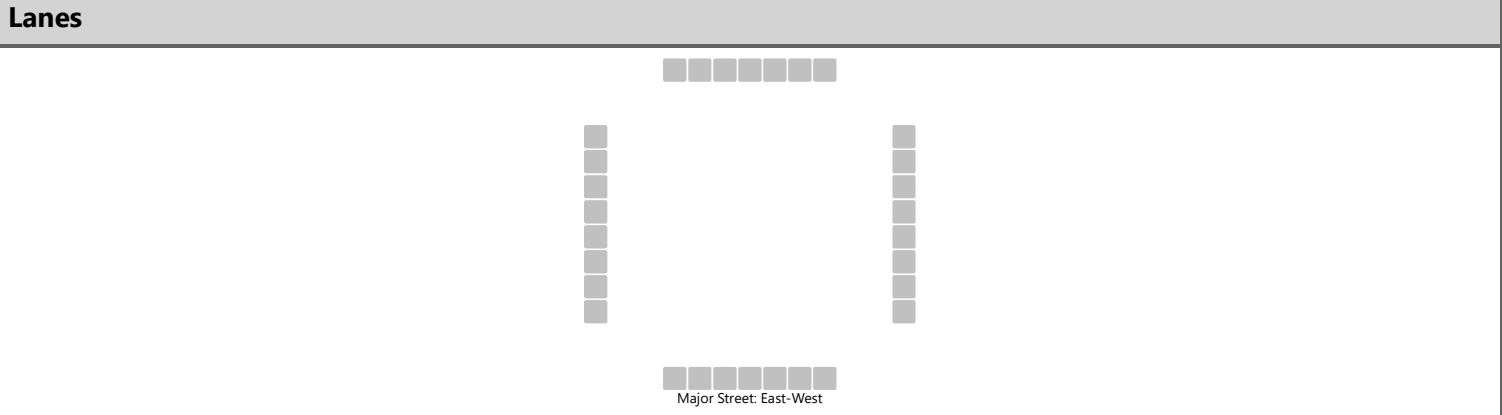
Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				0					12					
Capacity, c (veh/h)		1402				1380					650					
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)		7.6				7.6					10.6					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)	0.0				0.0				10.6							
Approach LOS	A				A				B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.87		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	107	2		1	177	0		3		3				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

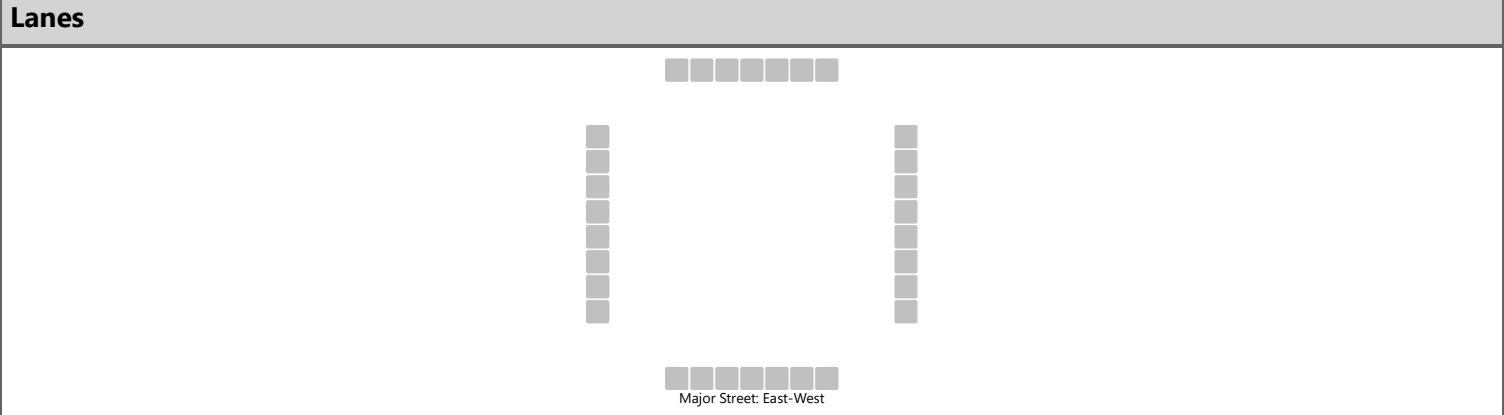
Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				1					7					
Capacity, c (veh/h)		1368				1461					745					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.6				7.5					9.9					
Level of Service (LOS)		A				A					A					
Approach Delay (s/veh)	0.0				0.0				9.9							
Approach LOS	A				A				A							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.98		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	145	2		5	155	0		3		4				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

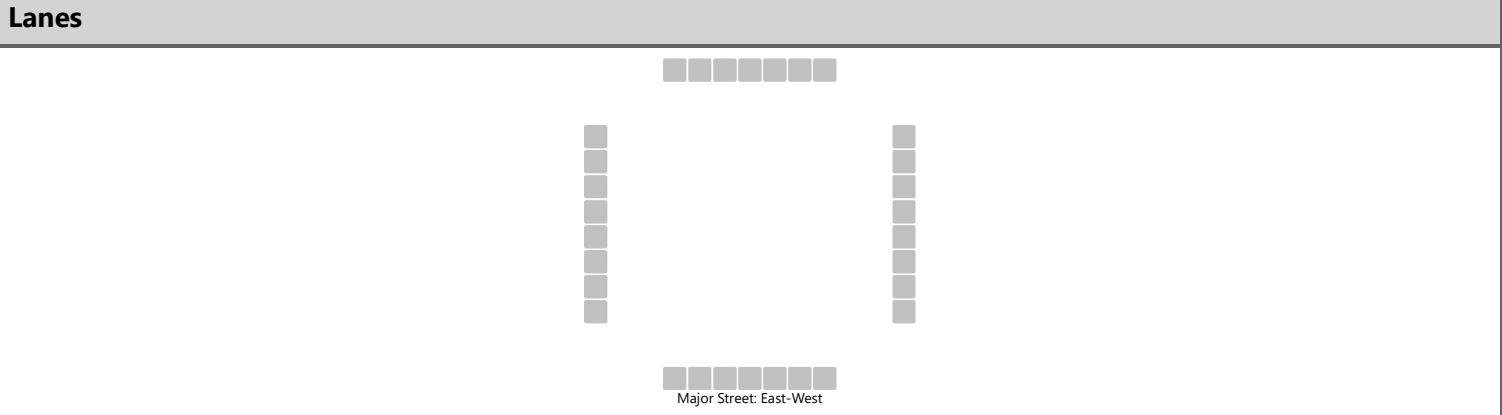
Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				5					7					
Capacity, c (veh/h)		1421				1431					762					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.5				7.5					9.8					
Level of Service (LOS)		A				A					A					
Approach Delay (s/veh)	0.0				0.3				9.8							
Approach LOS	A				A				A							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	106	0		1	170	0		4		1				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

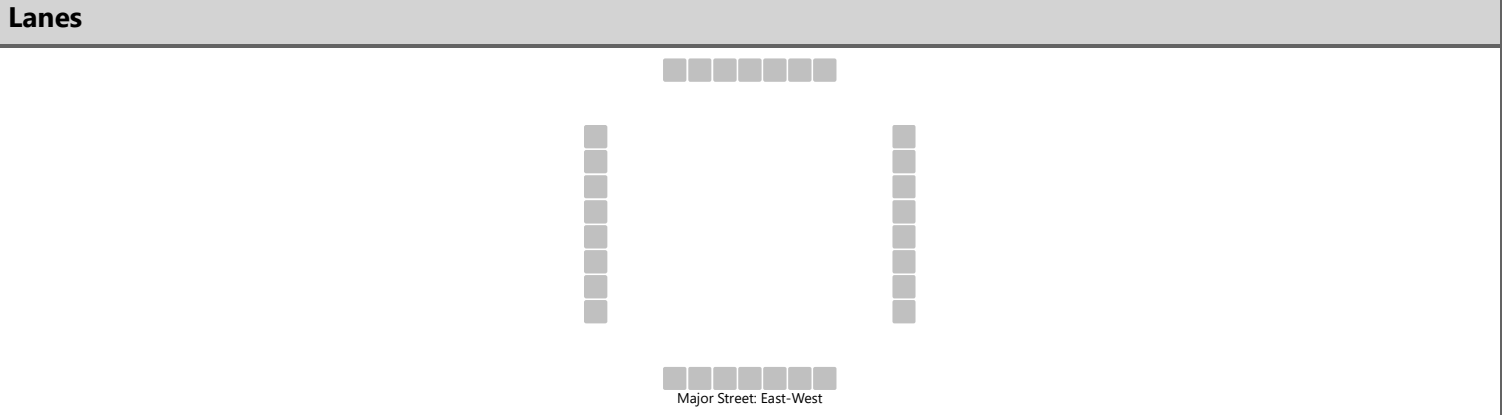
Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				1					6					
Capacity, c (veh/h)		1385				1470					686					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.6				7.5					10.3					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				0.0				10.3						
Approach LOS										B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	161	4		3	130	0		0		1				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

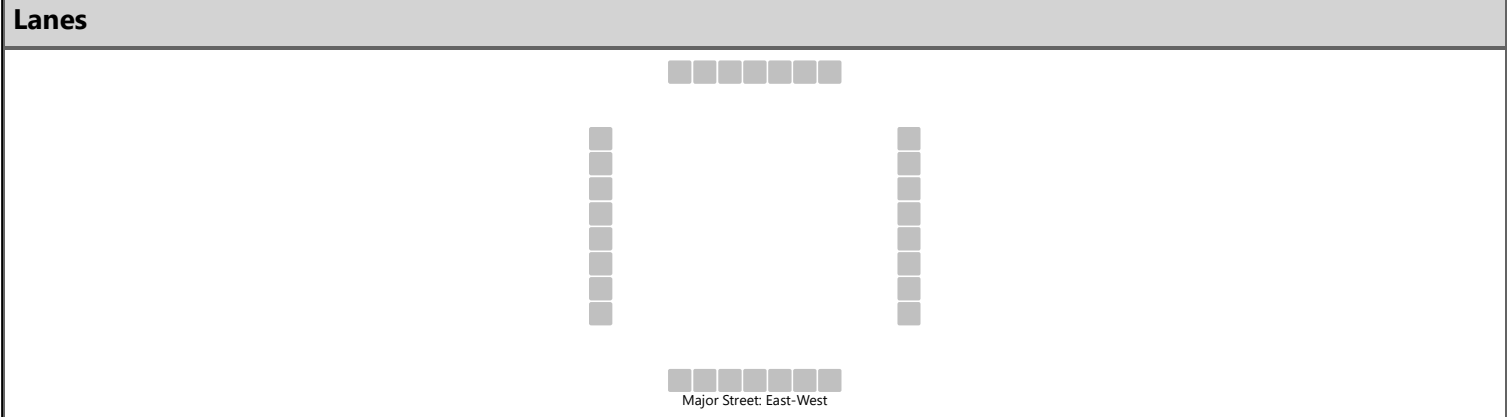
Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				3					1					
Capacity, c (veh/h)		1438				1392					862					
v/c Ratio		0.00				0.00					0.00					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.5				7.6					9.2					
Level of Service (LOS)		A				A					A					
Approach Delay (s/veh)	0.0				0.2				9.2							
Approach LOS	A				A				A							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Cherry Spr R & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs Ranch		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.88		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LR	
Volume (veh/h)		4	107	0		0	174	5						2		3
Percent Heavy Vehicles (%)		2				2								2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

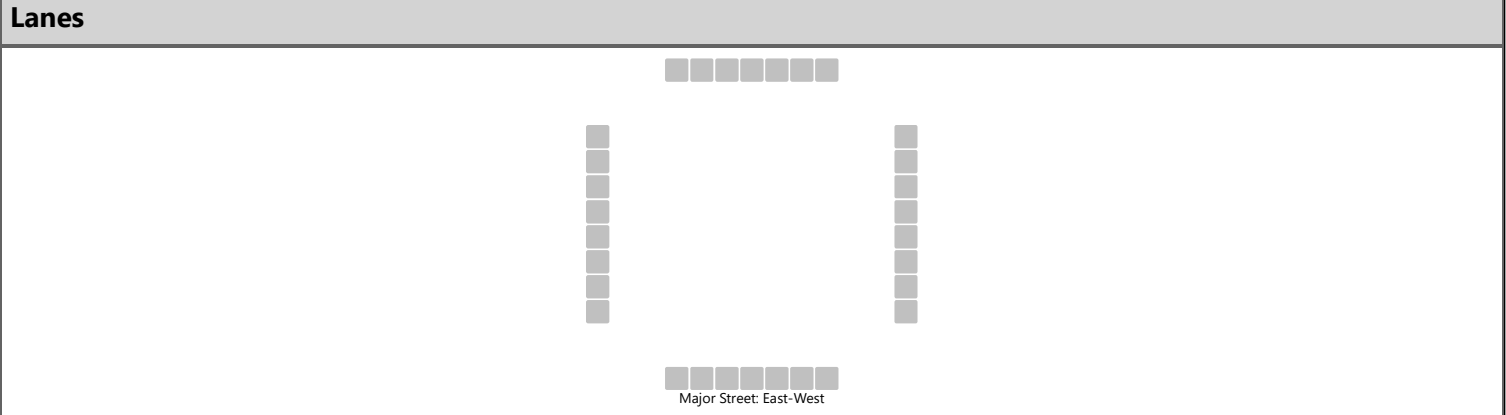
Base Critical Headway (sec)		4.1				4.1								7.1		6.2
Critical Headway (sec)		4.12				4.12								7.12		6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5		3.3
Follow-Up Headway (sec)		2.22				2.22								3.52		3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5				0										6
Capacity, c (veh/h)		1368				1466										736
v/c Ratio		0.00				0.00										0.01
95% Queue Length, Q ₉₅ (veh)		0.0				0.0										0.0
Control Delay (s/veh)		7.6				7.5										9.9
Level of Service (LOS)		A				A										A
Approach Delay (s/veh)	0.3				0.0				9.9							
Approach LOS	A				A				A							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Cherry Spr R & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs Ranch		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.97		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LR	
Volume (veh/h)		0	143	0		0	157	2						3		1
Percent Heavy Vehicles (%)		2				2								2		2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

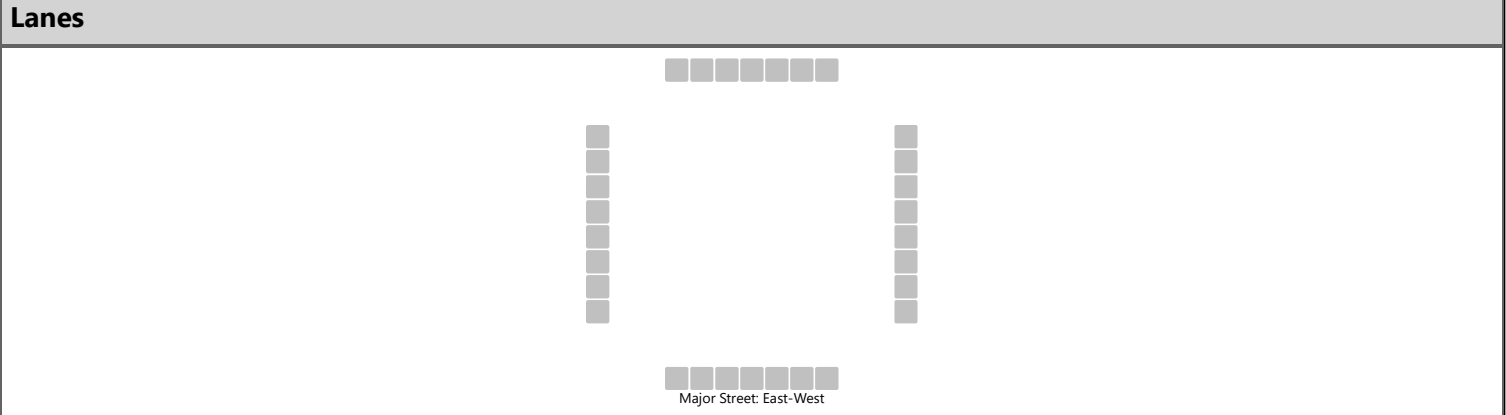
Base Critical Headway (sec)		4.1				4.1								7.1		6.2
Critical Headway (sec)		4.12				4.12								7.12		6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5		3.3
Follow-Up Headway (sec)		2.22				2.22								3.52		3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				0									4	
Capacity, c (veh/h)		1415				1434									689	
v/c Ratio		0.00				0.00									0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		7.5				7.5									10.3	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.0				0.0								10.3		
Approach LOS														B		

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Cherry Spr R & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs Ranch		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.93		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LR	
Volume (veh/h)		7	103	0		0	162	13						4		6
Percent Heavy Vehicles (%)		2				2								2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

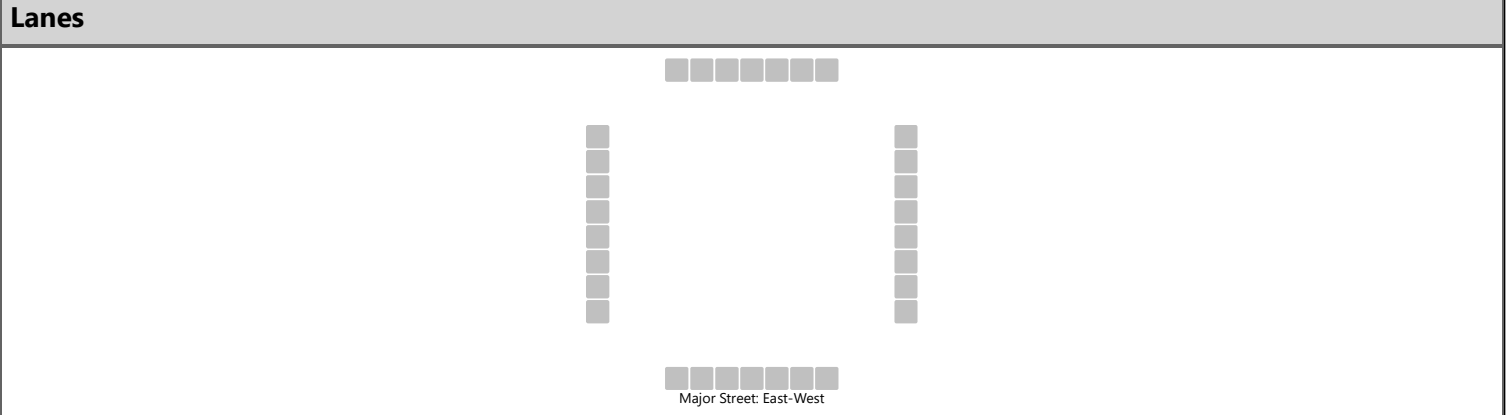
Base Critical Headway (sec)		4.1				4.1								7.1		6.2
Critical Headway (sec)		4.12				4.12								7.12		6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5		3.3
Follow-Up Headway (sec)		2.22				2.22								3.52		3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		8				0									11	
Capacity, c (veh/h)		1386				1479									758	
v/c Ratio		0.01				0.00									0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		7.6				7.4									9.8	
Level of Service (LOS)		A				A									A	
Approach Delay (s/veh)	0.5				0.0				9.8							
Approach LOS	A				A				A							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Brett Louk			Intersection	Cherry Spr R & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	4/4/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs Ranch		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.92		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Pumpkin Patch Temporary Use TIS						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LR	
Volume (veh/h)		0	166	0		0	126	2						1		2
Percent Heavy Vehicles (%)		2				2								2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

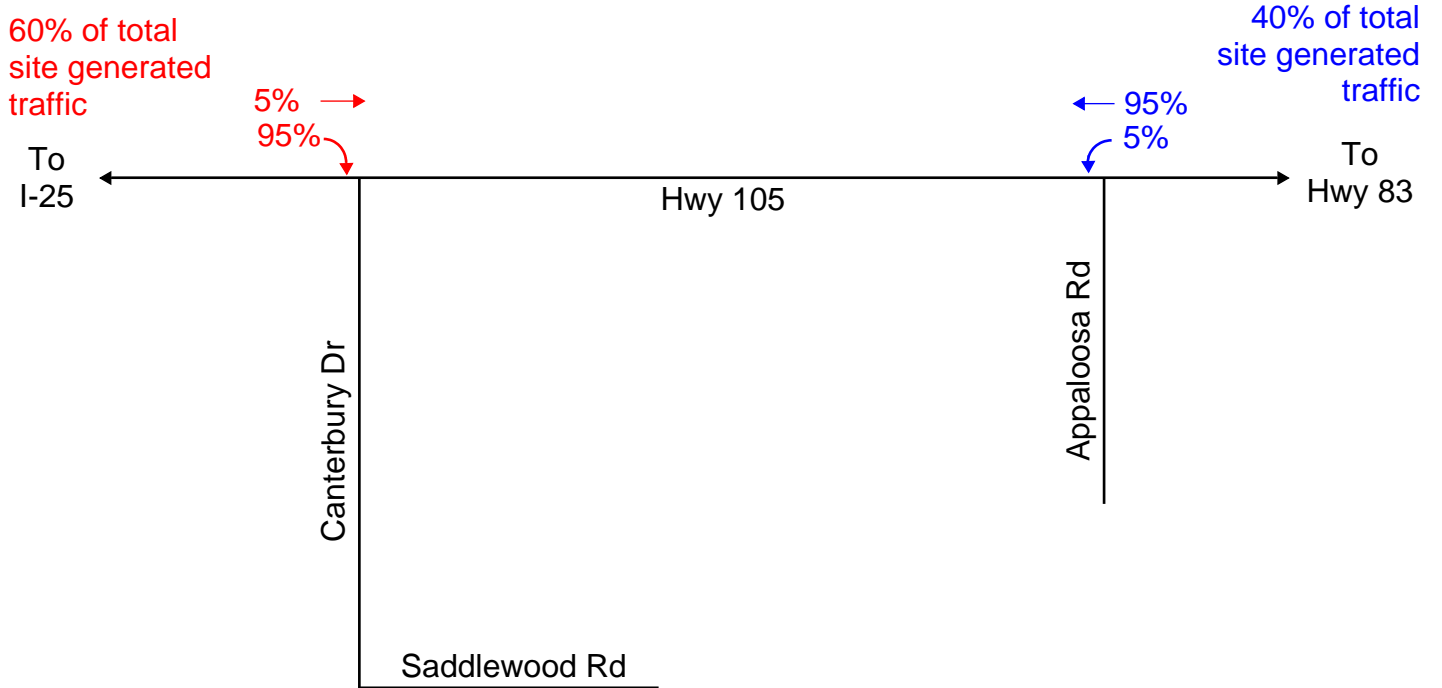
Base Critical Headway (sec)		4.1				4.1								7.1		6.2
Critical Headway (sec)		4.12				4.12								7.12		6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5		3.3
Follow-Up Headway (sec)		2.22				2.22								3.52		3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				0									3	
Capacity, c (veh/h)		1444				1395									795	
v/c Ratio		0.00				0.00									0.00	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		7.5				7.6									9.5	
Level of Service (LOS)		A				A									A	
Approach Delay (s/veh)	0.0				0.0				9.5							
Approach LOS	A				A				A							

TRIP DISTRIBUTION EXHIBIT

Project Generated Weekday and Weekend Trip Distribution Percentages Exhibit



EXISTING + DEVELOPMENT PEAK HOUR TURNING MOVEMENTS

Canterbury/Hwy 105 Peak Hour: 9:00 am to 10:00 am Existing + Development Weekend Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	121	90	60	115	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	6	0	16

Peak Hour Volume: 408

Canterbury/Saddlewood Peak Hour: 9:00 am to 10:00 am Existing + Development Weekend Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	0	0	18
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	2	150	1	1	0

Peak Hour Volume: 172

Appaloosa/Hwy 105 Peak Hour: 9:00 am to 10:00 am Existing + Development Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	112	6	4	228	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	4	0	4

Peak Hour Volume: 358

Cherry Springs Ranch/Hwy 105 Peak Hour: 9:00 am to 10:00 am Existing + Development Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
4	116	0	0	226	5
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
3	0	2	0	0	0

Peak Hour Volume: 356

Canterbury/Hwy 105 Peak Hour: 9:00 am to 10:00 am Existing + Development Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	148	78	51	158	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	8	0	11

Peak Hour Volume: 454

Canterbury/Saddlewood Peak Hour: 9:00 am to 10:00 am Existing + Development Weekday Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	1	0	14
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	129	0	0	0

Peak Hour Volume: 144

Appaloosa/Hwy 105 Peak Hour: 9:00 am to 10:00 am Existing + Development Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	112	5	4	229	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	2	0	5

Peak Hour Volume: 357

Cherry Springs Ranch/Hwy 105 Peak Hour: 9:00 am to 10:00 am Existing + Development Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
7	114	0	0	222	13
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
6	0	4	0	0	0

Peak Hour Volume: 366

Canterbury/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Existing + Development Weekend Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	166	97	63	150	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	30	0	48

Peak Hour Volume: 554

Canterbury/Saddlewood Peak Hour: 1:00 pm to 2:00 pm Existing + Development Weekend Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	3	0	69
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	3	157	1	6	0

Peak Hour Volume: 236

Appaloosa/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Existing + Development Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	152	3	6	171	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	5	0	4

Peak Hour Volume: 341

Cherry Springs Ranch/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Existing + Development Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	151	0	0	174	2
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
1	0	3	0	0	0

Peak Hour Volume: 331

Canterbury/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Existing + Development Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	198	32	18	145	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	9	0	17

Peak Hour Volume: 419

Canterbury/Saddlewood Peak Hour: 1:00 pm to 2:00 pm Existing + Development Weekday Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	3	0	22
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	3	43	3	2	0

Peak Hour Volume: 76

Appaloosa/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Existing + Development Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	188	9	6	193	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	2	0	2

Peak Hour Volume: 400

Cherry Springs Ranch/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Existing + Development Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	198	0	0	191	2
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
2	0	1	0	0	0

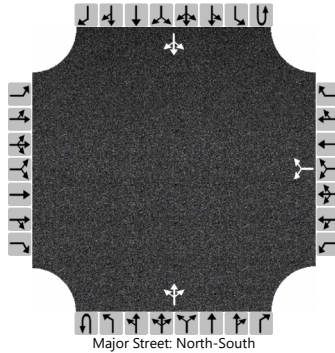
Peak Hour Volume: 394

EXISTING + DEVELOPMENT LEVEL OF SERVICE (LOS)

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						1		14		0	0	0		129	0	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2			4.1				4.1	
Critical Headway (sec)						7.12		6.22			4.12				4.12	
Base Follow-Up Headway (sec)						3.5		3.3			2.2				2.2	
Follow-Up Headway (sec)						3.52		3.32			2.22				2.22	

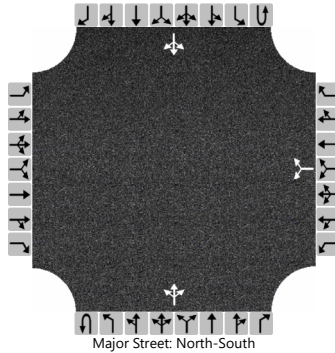
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						18				0				152		
Capacity, c (veh/h)						1030				1623				1623		
v/c Ratio						0.02				0.00				0.09		
95% Queue Length, Q ₉₅ (veh)						0.1				0.0				0.3		
Control Delay (s/veh)						8.6				7.2				7.4		
Level of Service (LOS)						A				A				A		
Approach Delay (s/veh)					8.6								7.4			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						3		22		0	2	3		43	3	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2			4.1				4.1	
Critical Headway (sec)						7.12		6.22			4.12				4.12	
Base Follow-Up Headway (sec)						3.5		3.3			2.2				2.2	
Follow-Up Headway (sec)						3.52		3.32			2.22				2.22	

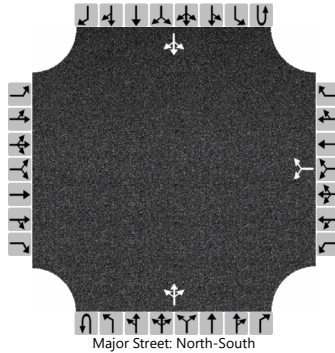
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						29				0				51		
Capacity, c (veh/h)						1045				1618				1615		
v/c Ratio						0.03				0.00				0.03		
95% Queue Length, Q ₉₅ (veh)						0.1				0.0				0.1		
Control Delay (s/veh)						8.5				7.2				7.3		
Level of Service (LOS)						A				A				A		
Approach Delay (s/veh)					8.5				0.0				6.8			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Eric Maxwell	Intersection	Canterbury & Saddlewood
Agency/Co.	SMH Consultants	Jurisdiction	El Paso County
Date Performed	7/13/2023	East/West Street	Saddlewood
Analysis Year	2023	North/South Street	Canterbury
Time Analyzed	9:00-10:00 am Weekend	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Colorado Kids Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						0		18		0	1	1		150	2	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2		4.1				4.1		
Critical Headway (sec)						7.12		6.22		4.12				4.12		
Base Follow-Up Headway (sec)						3.5		3.3		2.2				2.2		
Follow-Up Headway (sec)						3.52		3.32		2.22				2.22		

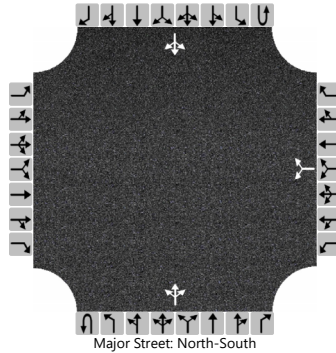
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						21				0				176			
Capacity, c (veh/h)						1083				1620				1620			
v/c Ratio						0.02				0.00				0.11			
95% Queue Length, Q ₉₅ (veh)						0.1				0.0				0.4			
Control Delay (s/veh)						8.4				7.2				7.5			
Level of Service (LOS)						A				A				A			
Approach Delay (s/veh)						8.4				0.0				7.4			
Approach LOS						A											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Eric Maxwell	Intersection	Canterbury & Saddlewood
Agency/Co.	SMH Consultants	Jurisdiction	El Paso County
Date Performed	7/13/2023	East/West Street	Saddlewood
Analysis Year	2023	North/South Street	Canterbury
Time Analyzed	1:00-2:00 pm Weekend	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Colorado Kids Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						0		69		0	6	1		157	3	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2			4.1				4.1	
Critical Headway (sec)						7.12		6.22			4.12				4.12	
Base Follow-Up Headway (sec)						3.5		3.3			2.2				2.2	
Follow-Up Headway (sec)						3.52		3.32			2.22				2.22	

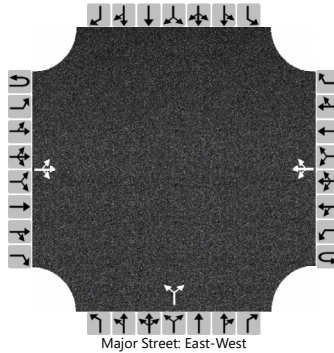
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						81				0				185			
Capacity, c (veh/h)						1075				1618				1612			
v/c Ratio						0.08				0.00				0.11			
95% Queue Length, Q ₉₅ (veh)						0.2				0.0				0.4			
Control Delay (s/veh)						8.6				7.2				7.5			
Level of Service (LOS)						A				A				A			
Approach Delay (s/veh)						8.6				0.0				7.4			
Approach LOS						A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.93		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	148	78		51	158	0		11		8				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

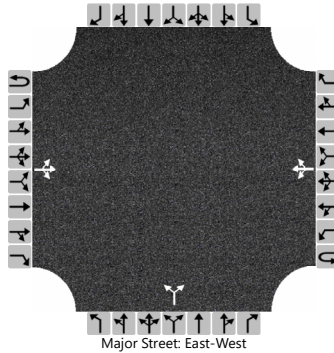
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				55					20					
Capacity, c (veh/h)		1407				1323					584					
v/c Ratio		0.00				0.04					0.03					
95% Queue Length, Q ₉₅ (veh)		0.0				0.1					0.1					
Control Delay (s/veh)		7.6				7.8					11.4					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				2.2				11.4						
Approach LOS		A				A				B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	198	32		18	145	0		17		9				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

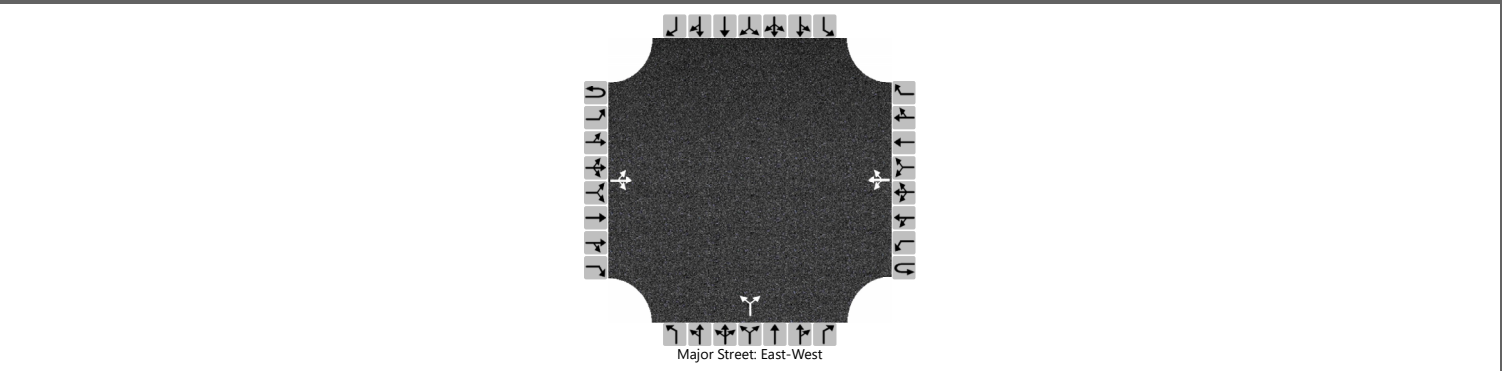
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				20					29					
Capacity, c (veh/h)		1418				1309					593					
v/c Ratio		0.00				0.02					0.05					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.2					
Control Delay (s/veh)		7.5				7.8					11.4					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)	0.0				1.0				11.4							
Approach LOS					A				B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.85		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	121	90		60	115	0		16		6				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

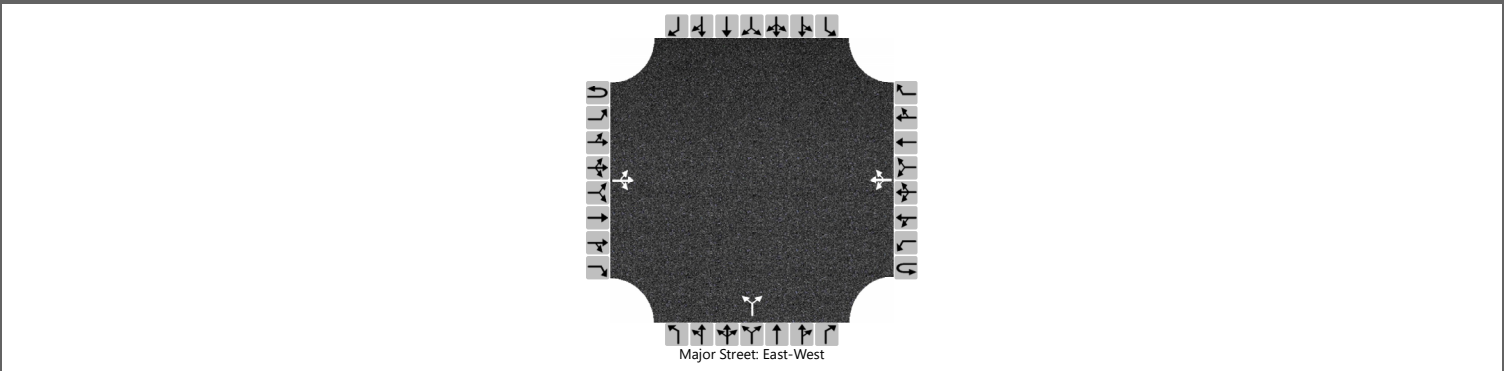
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				71					26					
Capacity, c (veh/h)		1449				1317					544					
v/c Ratio		0.00				0.05					0.05					
95% Queue Length, Q ₉₅ (veh)		0.0				0.2					0.1					
Control Delay (s/veh)		7.5				7.9					11.9					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)	0.0				3.0				11.9							
Approach LOS					A				B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.85		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	166	97		63	150	0		48		30				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

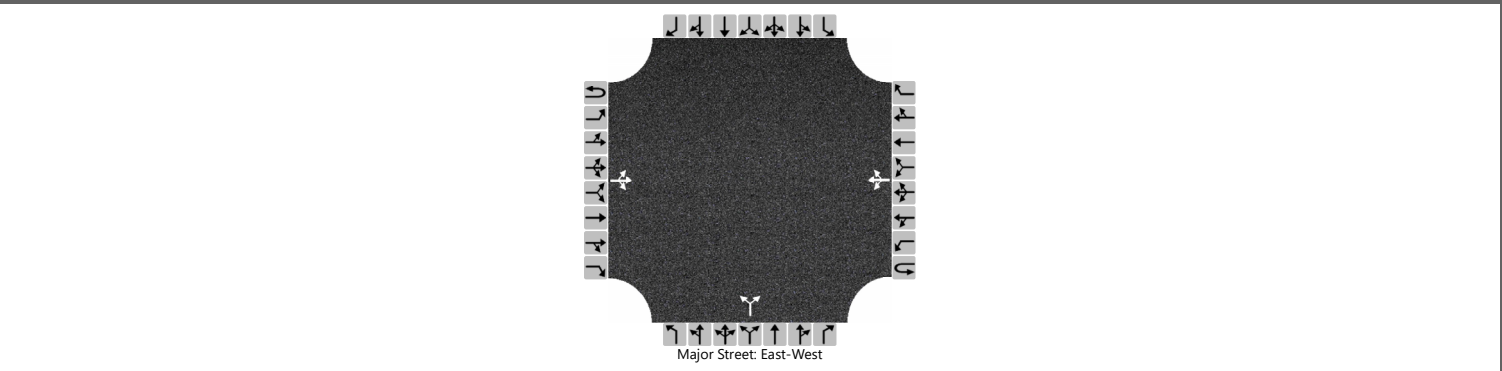
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				74						92				
Capacity, c (veh/h)		1400				1251						499				
v/c Ratio		0.00				0.06						0.18				
95% Queue Length, Q ₉₅ (veh)		0.0				0.2						0.7				
Control Delay (s/veh)		7.6				8.1						13.8				
Level of Service (LOS)		A				A						B				
Approach Delay (s/veh)		0.0				2.8				13.8						
Approach LOS										B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.87		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	112	6		4	228	0		4		4				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

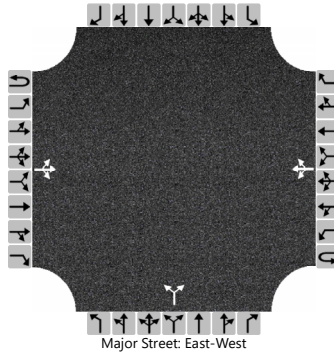
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				5					9					
Capacity, c (veh/h)		1302				1449					692					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.8				7.5					10.3					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)	0.0				0.2				10.3							
Approach LOS					A				B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.98		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	152	3		6	171	0		4		5				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

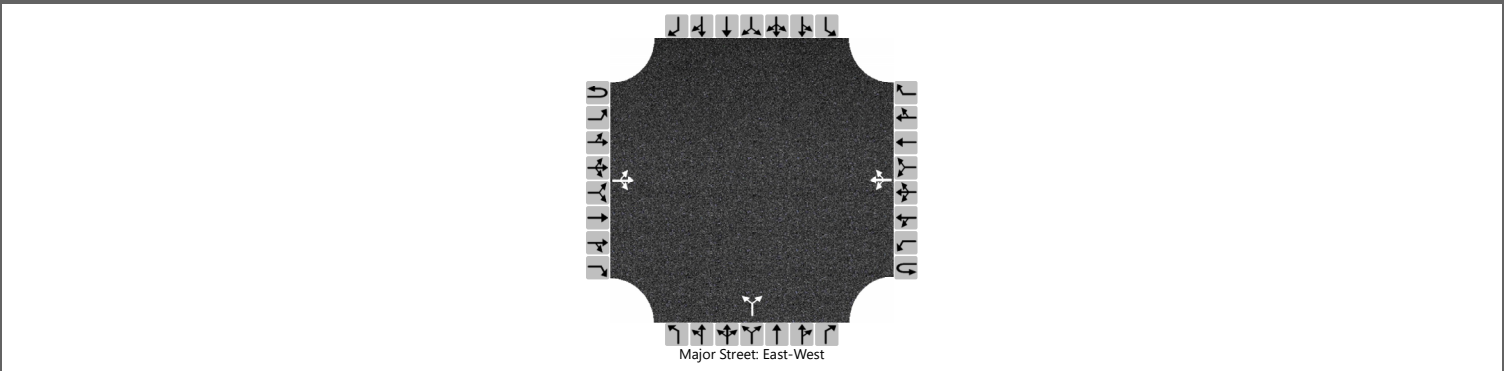
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				6					9					
Capacity, c (veh/h)		1402				1421					738					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.6				7.5					9.9					
Level of Service (LOS)		A				A					A					
Approach Delay (s/veh)	0.0				0.3				9.9							
Approach LOS	A				A				A				A			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	112	5		4	229	0		5		2				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

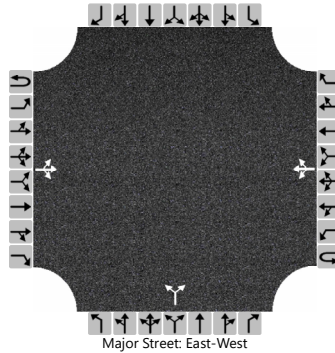
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				4					8					
Capacity, c (veh/h)		1311				1455					637					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.7				7.5					10.7					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				0.2				10.7						
Approach LOS		A				A				B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	188	9		6	193	0		2		2				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

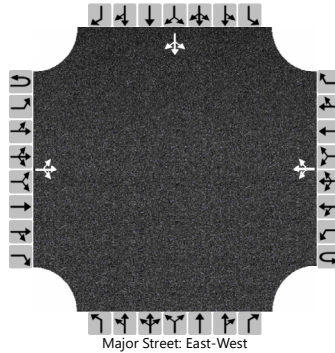
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				7					4					
Capacity, c (veh/h)		1356				1351					641					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.7				7.7					10.7					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				0.3				10.7						
Approach LOS										B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.88		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		4	116	0		0	226	5						2	0	3
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

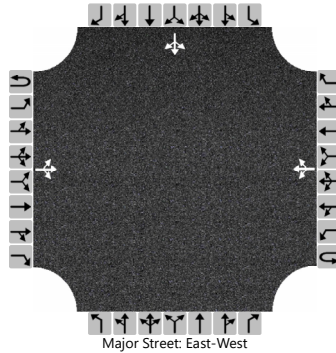
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5				0									6	
Capacity, c (veh/h)		1302				1453									673	
v/c Ratio		0.00				0.00									0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		7.8				7.5									10.4	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)	0.3				0.0								10.4			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.97		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		0	151	0		0	174	2						3	0	1
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

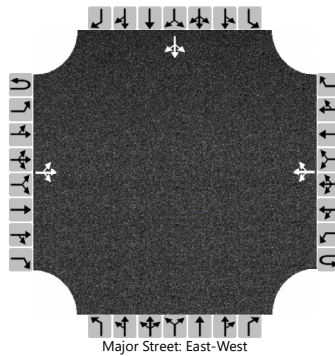
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				0									4	
Capacity, c (veh/h)		1394				1424									665	
v/c Ratio		0.00				0.00									0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		7.6				7.5									10.4	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.0				0.0								10.4		
Approach LOS														B		

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.93		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		7	114	0		0	222	13						4	0	6
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

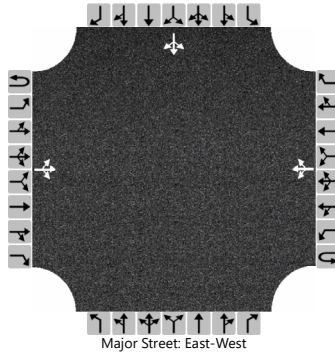
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		8				0									11	
Capacity, c (veh/h)		1313				1465									687	
v/c Ratio		0.01				0.00									0.02	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		7.8				7.5									10.3	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.5				0.0								10.3		
Approach LOS														B		

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.92		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		0	198	0		0	191	2						1	0	2
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				0									3	
Capacity, c (veh/h)		1361				1355									705	
v/c Ratio		0.00				0.00									0.00	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		7.6				7.7									10.1	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.0				0.0								10.1		
Approach LOS														B		

FUTURE TRAFFIC GROWTH

Short Range Growth (2023-2024)

Canterbury & Saddlewood Projected A.M. Weekday Peak Hour			Canterbury & Saddlewood Projected P.M. Weekday Peak Hour			Canterbury & Highway 105 Projected A.M. Weekday Peak Hour			Canterbury & Highway 105 Projected P.M. Weekday Peak Hour			Appaloosa & Highway 105 Projected A.M. Weekday Peak Hour			Appaloosa & Highway 105 Projected P.M. Weekday Peak Hour			Cherry Springs Ranch & Highway 105 Projected A.M. Weekday Peak Hour			Cherry Springs Ranch & Highway 105 Projected P.M. Weekday Peak Hour					
Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV
2023		4	2023		18	2023		309	2023		359	2023		293	2023		314	2023		295	2023		306	2023		306
2024	0.02	5	2024	0.02	19	2024	0.02	316	2024	0.02	367	2024	0.02	299	2024	0.02	321	2024	0.02	301	2024	0.02	313	2024	0.02	313
2025	0.02	6	2025	0.02	20	2025	0.02	323	2025	0.02	375	2025	0.02	305	2025	0.02	328	2025	0.02	308	2025	0.02	320	2025	0.02	320
2026	0.02	7	2026	0.02	21	2026	0.02	330	2026	0.02	383	2026	0.02	312	2026	0.02	335	2026	0.02	315	2026	0.02	327	2026	0.02	327
2027	0.02	8	2027	0.02	22	2027	0.02	337	2027	0.02	391	2027	0.02	319	2027	0.02	342	2027	0.02	322	2027	0.02	334	2027	0.02	334
2028	0.02	9	2028	0.02	23	2028	0.02	344	2028	0.02	399	2028	0.02	326	2028	0.02	349	2028	0.02	329	2028	0.02	341	2028	0.02	341
2029	0.02	10	2029	0.02	24	2029	0.02	351	2029	0.02	407	2029	0.02	333	2029	0.02	356	2029	0.02	336	2029	0.02	348	2029	0.02	348
2030	0.02	11	2030	0.02	25	2030	0.02	359	2030	0.02	416	2030	0.02	340	2030	0.02	364	2030	0.02	343	2030	0.02	355	2030	0.02	355
2031	0.02	12	2031	0.02	26	2031	0.02	367	2031	0.02	425	2031	0.02	347	2031	0.02	372	2031	0.02	350	2031	0.02	363	2031	0.02	363
2032	0.02	13	2032	0.02	27	2032	0.02	375	2032	0.02	434	2032	0.02	354	2032	0.02	380	2032	0.02	357	2032	0.02	371	2032	0.02	371
2033	0.02	14	2033	0.02	28	2033	0.02	383	2033	0.02	443	2033	0.02	362	2033	0.02	388	2033	0.02	365	2033	0.02	379	2033	0.02	379
2034	0.02	15	2034	0.02	29	2034	0.02	391	2034	0.02	452	2034	0.02	370	2034	0.02	396	2034	0.02	373	2034	0.02	387	2034	0.02	387
2035	0.02	16	2035	0.02	30	2035	0.02	399	2035	0.02	462	2035	0.02	378	2035	0.02	404	2035	0.02	381	2035	0.02	395	2035	0.02	395
2036	0.02	17	2036	0.02	31	2036	0.02	407	2036	0.02	472	2036	0.02	386	2036	0.02	413	2036	0.02	389	2036	0.02	403	2036	0.02	403
2037	0.02	18	2037	0.02	32	2037	0.02	416	2037	0.02	482	2037	0.02	394	2037	0.02	422	2037	0.02	397	2037	0.02	412	2037	0.02	412
2038	0.02	19	2038	0.02	33	2038	0.02	425	2038	0.02	492	2038	0.02	402	2038	0.02	431	2038	0.02	405	2038	0.02	421	2038	0.02	421
2039	0.02	20	2039	0.02	34	2039	0.02	434	2039	0.02	502	2039	0.02	411	2039	0.02	440	2039	0.02	414	2039	0.02	430	2039	0.02	430
2040	0.02	21	2040	0.02	35	2040	0.02	443	2040	0.02	513	2040	0.02	420	2040	0.02	449	2040	0.02	423	2040	0.02	439	2040	0.02	439

Canterbury & Saddlewood Projected A.M. Weekend Peak Hour			Canterbury & Saddlewood Projected P.M. Weekend Peak Hour			Canterbury & Highway 105 Projected A.M. Weekend Peak Hour			Canterbury & Highway 105 Projected P.M. Weekend Peak Hour			Appaloosa & Highway 105 Projected A.M. Weekend Peak Hour			Appaloosa & Highway 105 Projected P.M. Weekend Peak Hour			Cherry Springs Ranch & Highway 105 Projected A.M. Weekend Peak Hour			Cherry Springs Ranch & Highway 105 Projected P.M. Weekend Peak Hour					
Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV
2023		9	2023		11	2023		239	2023		322	2023		282	2023		299	2023		295	2023		297	2023		297
2024	0.02	10	2024	0.02	12	2024	0.02	244	2024	0.02	329	2024	0.02	288	2024	0.02	305	2024	0.02	301	2024	0.02	303	2024	0.02	303
2025	0.02	11	2025	0.02	13	2025	0.02	249	2025	0.02	336	2025	0.02	294	2025	0.02	312	2025	0.02	308	2025	0.02	310	2025	0.02	310
2026	0.02	12	2026	0.02	14	2026	0.02	254	2026	0.02	343	2026	0.02	300	2026	0.02	319	2026	0.02	315	2026	0.02	317	2026	0.02	317
2027	0.02	13	2027	0.02	15	2027	0.02	260	2027	0.02	350	2027	0.02	306	2027	0.02	326	2027	0.02	322	2027	0.02	324	2027	0.02	324
2028	0.02	14	2028	0.02	16	2028	0.02	266	2028	0.02	357	2028	0.02	313	2028	0.02	333	2028	0.02	329	2028	0.02	331	2028	0.02	331
2029	0.02	15	2029	0.02	17	2029	0.02	272	2029	0.02	365	2029	0.02	320	2029	0.02	340	2029	0.02	336	2029	0.02	338	2029	0.02	338
2030	0.02	16	2030	0.02	18	2030	0.02	278	2030	0.02	373	2030	0.02	327	2030	0.02	347	2030	0.02	343	2030	0.02	345	2030	0.02	345
2031	0.02	17	2031	0.02	19	2031	0.02	284	2031	0.02	381	2031	0.02	334	2031	0.02	354	2031	0.02	350	2031	0.02	352	2031	0.02	352
2032	0.02	18	2032	0.02	20	2032	0.02	290	2032	0.02	389	2032	0.02	341	2032	0.02	362	2032	0.02	357	2032	0.02	360	2032	0.02	360
2033	0.02	19	2033	0.02	21	2033	0.02	296	2033	0.02	397	2033	0.02	348	2033	0.02	370	2033	0.02	365	2033	0.02	368	2033	0.02	368
2034	0.02	20	2034	0.02	22	2034	0.02	302	2034	0.02	405	2034	0.02	355	2034	0.02	378	2034	0.02	373	2034	0.02	376	2034	0.02	376
2035	0.02	21	2035	0.02	23	2035	0.02	309	2035	0.02	414	2035	0.02	363	2035	0.02	386	2035	0.02	381	2035	0.02	384	2035	0.02	384
2036	0.02	22	2036	0.02	24	2036	0.02	316	2036	0.02	423	2036	0.02	371	2036	0.02	394	2036	0.02	389	2036	0.02	392	2036	0.02	392
2037	0.02	23	2037	0.02	25	2037	0.02	323	2037	0.02	432	2037	0.02	379	2037	0.02	402	2037	0.02	397	2037	0.02	400	2037	0.02	400
2038	0.02	24	2038	0.02	26	2038	0.02	330	2038	0.02	441	2038	0.02	387	2038	0.02	411	2038	0.02	405	2038	0.02	408	2038	0.02	408
2039	0.02	25	2039	0.02	27	2039	0.02	337	2039	0.02	450	2039	0.02	395	2039	0.02	420	2039	0.02	414	2039	0.02	417	2039	0.02	417
2040	0.02	26	2040	0.02	28	2040	0.02	344	2040	0.02	459	2040	0.02	403	2040	0.02	429	2040	0.02	423	2040	0.02	426	2040	0.02	426

Long Range Growth (2023-2040)

Canterbury & Saddlewood Projected A.M. Weekday Peak Hour			Canterbury & Saddlewood Projected P.M. Weekday Peak Hour			Canterbury & Highway 105 Projected A.M. Weekday Peak Hour			Canterbury & Highway 105 Projected P.M. Weekday Peak Hour			Appaloosa & Highway 105 Projected A.M. Weekday Peak Hour			Appaloosa & Highway 105 Projected P.M. Weekday Peak Hour			Cherry Springs Ranch & Highway 105 Projected A.M. Weekday Peak Hour			Cherry Springs Ranch & Highway 105 Projected P.M. Weekday Peak Hour					
Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV
2023		4	2023		18	2023		309	2023		359	2023		293	2023		314	2023		295	2023		306	2023		306
2024	0.044	5	2024	0.044	19	2024	0.044	323	2024	0.044	375	2024	0.044	306	2024	0.044	328	2024	0.044	308	2024	0.044	320	2024	0.044	320
2025	0.044	6	2025	0.044	20	2025	0.044	338	2025	0.044	392	2025	0.044	320	2025	0.044	343	2025	0.044	322	2025	0.044	335	2025	0.044	335
2026	0.044	7	2026	0.044	21	2026	0.044	353	2026	0.044	410	2026	0.044	335	2026	0.044	359	2026	0.044	337	2026	0.044	350	2026	0.044	350
2027	0.044	8	2027	0.044	22	2027	0.044	369	2027	0.044	429	2027	0.044	350	2027	0.044	375	2027	0.044	352	2027	0.044	366	2027	0.044	366
2028	0.044	9	2028	0.044	23	2028	0.044	386	2028	0.044	448	2028	0.044	366	2028	0.044	392	2028	0.044	368	2028	0.044	383	2028	0.044	383
2029	0.044	10	2029	0.044	24	2029	0.044	403	2029	0.044	468	2029	0.044	383	2029	0.044	410	2029	0.044	385	2029	0.044	400	2029	0.044	400
2030	0.044	11	2030	0.044	25	2030	0.044	421	2030	0.044	489	2030	0.044	402	2030	0.044	429	2030	0.044	402	2030	0.044	418	2030	0.044	418
2031	0.044	12	2031	0.044	26	2031	0.044	440	2031	0.044	511	2031	0.044	418	2031	0.044	448	2031	0.044	420	2031	0.044	437	2031	0.044	437
2032	0.044	13	2032	0.044	27	2032	0.044	460	2032	0.044	534	2032	0.044	437	2032	0.044	468	2032	0.044	439	2032	0.044	457	2032	0.044	457
2033	0.044	14	2033	0.044	28	2033	0.044	481	2033	0.044	558	2033	0.044	457	2033	0.044	489	2033	0.044	459	2033	0.044	478	2033	0.044	478
2034	0.044	15	2034	0.044	29	2034	0.044	503	2034	0.044	583	2034	0.044	478	2034	0.044	511	2034	0.044	480	2034	0.044	500	2034	0.044	500
2035	0.044	16	2035	0.044	30	2035	0.044	526	2035	0.044	609	2035	0.044	500	2035	0.044	534	2035	0.044	502	2035	0.044	522	2035	0.044	522
2036	0.044	17	2036	0.044	31	2036	0.044	550	2036	0.044	636	2036	0.044	522	2036	0.044	558	2036	0.044	525	2036	0.044	545	2036	0.044	545
2037	0.044	18	2037	0.044	32	2037	0.044	575	2037	0.044	664	2037	0.044	545	2037	0.044	583	2037	0.044	549	2037	0.044	569	2037	0.044	569
2038	0.044	19	2038	0.044	33	2038	0.044	601	2038	0.044	694	2038	0.044	569	2038	0.044	609	2038	0.044	574	2038	0.044	595	2038	0.044	595
2039	0.044	20	2039	0.044	34	2039	0.044	628	2039	0.044	725	2039	0.044	595	2039	0.044	636	2039	0.044	600	2039	0.044	622	2039	0.044	622
2040	0.044	21	2040	0.044	35	2040	0.044	656	2040	0.044	757	2040	0.044	622	2040	0.044	664	2040	0.044	627	2040	0.044	650	2040	0.044	650

Canterbury & Saddlewood Projected A.M. Weekend Peak Hour			Canterbury & Saddlewood Projected P.M. Weekend Peak Hour			Canterbury & Highway 105 Projected A.M. Weekend Peak Hour			Canterbury & Highway 105 Projected P.M. Weekend Peak Hour			Appaloosa & Highway 105 Projected A.M. Weekend Peak Hour			Appaloosa & Highway 105 Projected P.M. Weekend Peak Hour			Cherry Springs Ranch & Highway 105 Projected A.M. Weekend Peak Hour			Cherry Springs Ranch & Highway 105 Projected P.M. Weekend Peak Hour					
Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV	Year	Growth	Expected PHV
2023		9	2023		11	2023		239	2023		322	2023		282	2023		299	2023		295	2023		297	2023		297
2024	0.044	10	2024	0.044	12	2024	0.044	250	2024	0.044	337	2024	0.044	295	2024	0.044	313	2024	0.044	308	2024	0.044	311	2024	0.044	311
2025	0.044	11	2025	0.044	13	2025	0.044	261	2025	0.044	352	2025	0.044	308	2025	0.044	327	2025	0.044	322	2025	0.044	325	2025	0.044	325
2026	0.044	12	2026	0.044	14	2026	0.044	273	2026	0.044	368	2026	0.044	322	2026	0.044	342	2026	0.044	337	2026	0.044	340	2026	0.044	340
2027	0.044	13	2027	0.044	15	2027	0.044	286	2027	0.044	385	2027	0.044	337	2027	0.044	358	2027	0.044	352	2027	0.044	355	2027	0.044	355
2028	0.044	14	2028	0.044	16	2028	0.044	299	2028	0.044	402	2028	0.044	352	2028	0.044	374	2028	0.044	368	2028	0.044	371	2028	0.044	371
2029	0.044	15	2029	0.044	17	2029	0.044	313	2029	0.044	420	2029	0.044	368	2029	0.044	391	2029	0.044	385	2029	0.044	388	2029	0.044	388
2030	0.044	16	2030	0.044	18	2030	0.044	327	2030	0.044	439	2030	0.044	385	2030	0.044	409	2030	0.044	402	2030	0.044	406	2030	0.044	406
2031	0.044	17	2031	0.044	19	2031	0.044	342	2031	0.044	459	2031	0.044	402	2031	0.044	427	2031	0.044	420	2031	0.044	424	2031	0.044	424
2032	0.044	18	2032	0.044	20	2032	0.044	358	2032	0.044	480	2032	0.044	420	2032	0.044	446	2032	0.044	439	2032	0.044	443	2032	0.044	443
2033	0.044	19	2033	0.044	21	2033	0.044	374	2033	0.044	502	2033	0.044	439	2033	0.044	466	2033	0.044	459	2033	0.044	463	2033	0.044	463
2034	0.044	20	2034	0.044	22	2034	0.044	391	2034	0.044	525	2034	0.044	459	2034	0.044	487	2034	0.044	480	2034	0.044	484	2034	0.044	484
2035	0.044	21	2035	0.044	23	2035	0.044	409	2035	0.044	549	2035	0.044	480	2035	0.044	509	2035	0.044	502	2035	0.044	506	2035	0.044	506
2036	0.044	22	2036	0.044	25	2036	0.044	427	2036	0.044	574	2036	0.044	502	2036	0.044	532	2036	0.044	525	2036	0.044	529	2036	0.044	529
2037	0.044	23	2037	0.044	27	2037	0.044	446	2037	0.044	600	2037	0.044	525	2037	0.044	556	2037	0.044	549	2037	0.044	553	2037	0.044	553
2038	0.044	25	2038	0.044	29	2038	0.044	466	2038	0.044	627	2038	0.044	549	2038	0.044	581	2038	0.044	574	2038	0.044	578	2038	0.044	578
2039	0.044	27	2039	0.044	31	2039	0.044	487	2039	0.044	655	2039	0.044	574	2039	0.044	607	2039	0.044	600	2039	0.044	604	2039	0.044	604
2040	0.044	29	2040	0.044	33	2040	0.044	509	2040	0.044	684	2040	0.044	600	2040	0.044	634	2040	0.044	627	2040	0.044	631	2040	0.044	631

SHORT RANGE HORIZON PEAK HOUR TURNING MOVEMENTS

Canterbury/Hwy 105 Peak Hour: 9:00 am to 10:00 am Short Range Weekend Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	124	90	60	117	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	6	0	16

Peak Hour Volume: 413

Canterbury/Saddlewood Peak Hour: 9:00 am to 10:00 am Short Range Weekend Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	0	0	19
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	2	150	1	1	0

Peak Hour Volume: 173

Appaloosa/Hwy 105 Peak Hour: 9:00 am to 10:00 am Short Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	114	6	4	232	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	4	0	4

Peak Hour Volume: 364

Cherry Springs Ranch/Hwy 105 Peak Hour: 9:00 am to 10:00 am Short Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
4	118	0	0	230	5
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
3	0	2	0	0	0

Peak Hour Volume: 362

Canterbury/Hwy 105 Peak Hour: 9:00 am to 10:00 am Short Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	151	78	51	162	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	8	0	11

Peak Hour Volume: 461

Canterbury/Saddlewood Peak Hour: 9:00 am to 10:00 am Short Range Weekday Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	1	0	14
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	130	0	0	0

Peak Hour Volume: 145

Appaloosa/Hwy 105 Peak Hour: 9:00 am to 10:00 am Short Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	114	5	4	233	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	2	0	5

Peak Hour Volume: 363

Cherry Springs Ranch/Hwy 105 Peak Hour: 9:00 am to 10:00 am Short Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
7	116	0	0	226	13
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
6	0	4	0	0	0

Peak Hour Volume: 372

Canterbury/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Short Range Weekend Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	170	97	63	153	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	30	0	48

Peak Hour Volume: 561

Canterbury/Saddlewood Peak Hour: 1:00 pm to 2:00 pm Short Range Weekend Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	0	0	69
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	3	157	1	7	0

Peak Hour Volume: 237

Appaloosa/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Short Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	155	3	6	175	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	5	0	4

Peak Hour Volume: 348

Cherry Springs Ranch/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Short Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	154	0	0	178	2
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
1	0	3	0	0	0

Peak Hour Volume: 338

Canterbury/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Short Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	203	32	18	148	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	9	0	17

Peak Hour Volume: 427

Canterbury/Saddlewood Peak Hour: 1:00 pm to 2:00 pm Short Range Weekday Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	3	0	23
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	3	43	3	2	0

Peak Hour Volume: 77

Appaloosa/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Short Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	191	9	6	196	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	2	0	2

Peak Hour Volume: 406

Cherry Springs Ranch/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Short Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	201	0	0	194	2
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
2	0	1	0	0	0

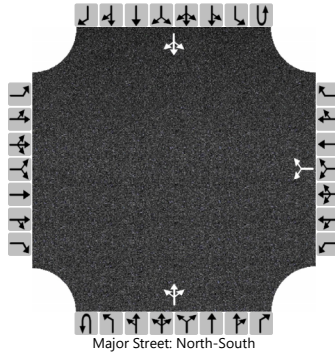
Peak Hour Volume: 400

SHORT RANGE HORIZON LEVEL OF SERVICE (LOS)

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						1		14		0	0	0		130	0	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2			4.1				4.1	
Critical Headway (sec)						7.12		6.22			4.12				4.12	
Base Follow-Up Headway (sec)						3.5		3.3			2.2				2.2	
Follow-Up Headway (sec)						3.52		3.32			2.22				2.22	

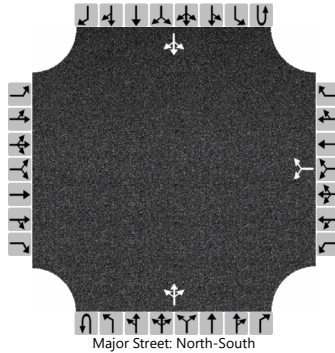
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						18				0					153	
Capacity, c (veh/h)						1029				1623					1623	
v/c Ratio						0.02				0.00					0.09	
95% Queue Length, Q ₉₅ (veh)						0.1				0.0					0.3	
Control Delay (s/veh)						8.6				7.2					7.4	
Level of Service (LOS)						A				A					A	
Approach Delay (s/veh)					8.6								7.4			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						3		23		0	2	3		43	3	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2		4.1				4.1		
Critical Headway (sec)						7.12		6.22		4.12				4.12		
Base Follow-Up Headway (sec)						3.5		3.3		2.2				2.2		
Follow-Up Headway (sec)						3.52		3.32		2.22				2.22		

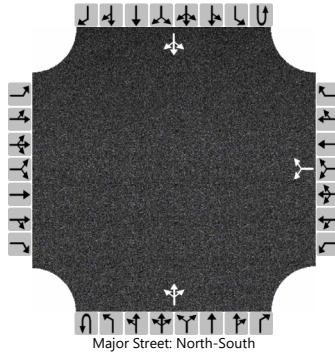
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						31				0				51			
Capacity, c (veh/h)						1047				1618				1615			
v/c Ratio						0.03				0.00				0.03			
95% Queue Length, Q ₉₅ (veh)						0.1				0.0				0.1			
Control Delay (s/veh)						8.5				7.2				7.3			
Level of Service (LOS)						A				A				A			
Approach Delay (s/veh)						8.5				0.0				6.8			
Approach LOS						A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						0		19		0	1	1		150	2	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2		4.1				4.1		
Critical Headway (sec)						7.12		6.22		4.12				4.12		
Base Follow-Up Headway (sec)						3.5		3.3		2.2				2.2		
Follow-Up Headway (sec)						3.52		3.32		2.22				2.22		

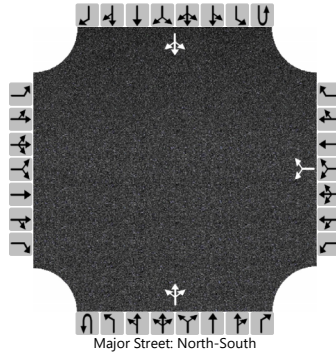
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						22				0				176			
Capacity, c (veh/h)						1083				1620				1620			
v/c Ratio						0.02				0.00				0.11			
95% Queue Length, Q ₉₅ (veh)						0.1				0.0				0.4			
Control Delay (s/veh)						8.4				7.2				7.5			
Level of Service (LOS)						A				A				A			
Approach Delay (s/veh)						8.4				0.0				7.4			
Approach LOS						A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						0		69		0	7	1		157	3	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2			4.1				4.1	
Critical Headway (sec)						7.12		6.22			4.12				4.12	
Base Follow-Up Headway (sec)						3.5		3.3			2.2				2.2	
Follow-Up Headway (sec)						3.52		3.32			2.22				2.22	

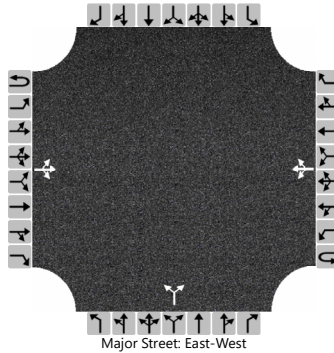
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						81				0				185		
Capacity, c (veh/h)						1073				1618				1610		
v/c Ratio						0.08				0.00				0.11		
95% Queue Length, Q ₉₅ (veh)						0.2				0.0				0.4		
Control Delay (s/veh)						8.6				7.2				7.5		
Level of Service (LOS)						A				A				A		
Approach Delay (s/veh)					8.6				0.0				7.4			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.93		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	151	78		51	162	0		11		8				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

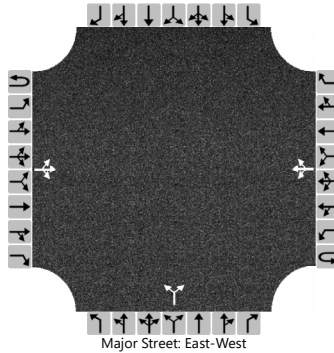
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				55				20						
Capacity, c (veh/h)		1402				1320				579						
v/c Ratio		0.00				0.04				0.04						
95% Queue Length, Q ₉₅ (veh)		0.0				0.1				0.1						
Control Delay (s/veh)		7.6				7.8				11.4						
Level of Service (LOS)		A				A				B						
Approach Delay (s/veh)	0.0				2.2				11.4							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	203	32		18	148	0		17		9				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

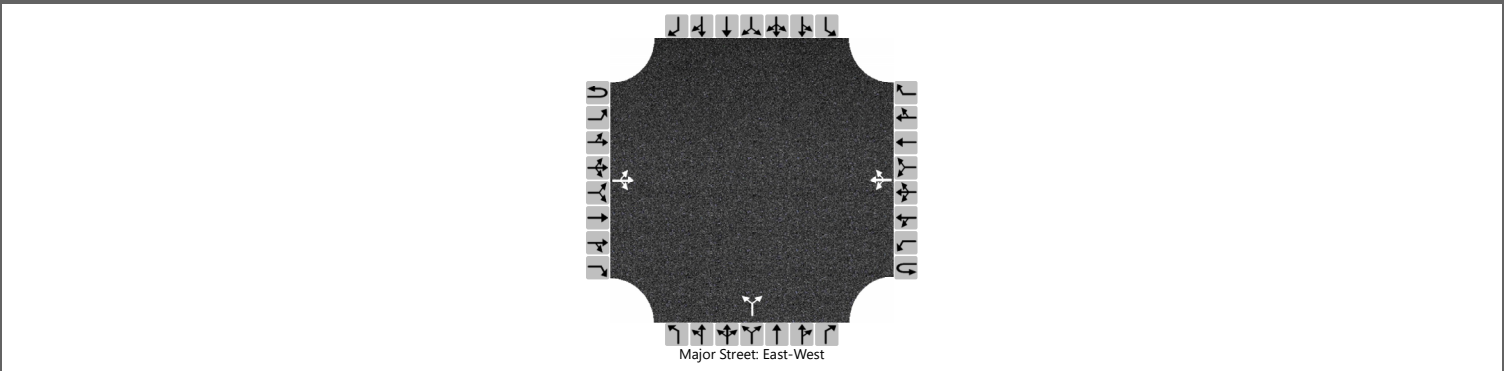
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				20					29					
Capacity, c (veh/h)		1414				1303					586					
v/c Ratio		0.00				0.02					0.05					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.2					
Control Delay (s/veh)		7.5				7.8					11.5					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				1.0				11.5						
Approach LOS		A				A				B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.85		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	124	90		60	117	0		16		6				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

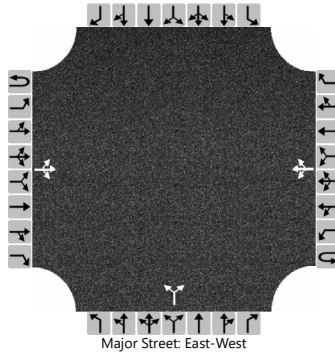
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				71					26					
Capacity, c (veh/h)		1446				1314					540					
v/c Ratio		0.00				0.05					0.05					
95% Queue Length, Q ₉₅ (veh)		0.0				0.2					0.2					
Control Delay (s/veh)		7.5				7.9					12.0					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)	0.0				3.0				12.0							
Approach LOS					A				B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.85		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	170	97		63	153	0		48		30				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

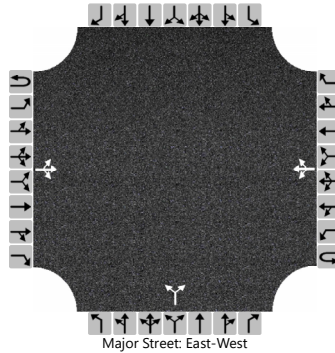
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				74					92					
Capacity, c (veh/h)		1396				1246					493					
v/c Ratio		0.00				0.06					0.19					
95% Queue Length, Q ₉₅ (veh)		0.0				0.2					0.7					
Control Delay (s/veh)		7.6				8.1					14.0					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				2.7				14.0						
Approach LOS										B						

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Eric Maxwell	Intersection	Appaloosa & Hwy 105
Agency/Co.	SMH Consultants	Jurisdiction	El Paso County
Date Performed	7/13/2023	East/West Street	Hwy 105
Analysis Year	2023	North/South Street	Appaloosa
Time Analyzed	9:00-10:00 am Weekday	Peak Hour Factor	0.87
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Colorado Kids Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	114	6		4	232	0		4		4				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

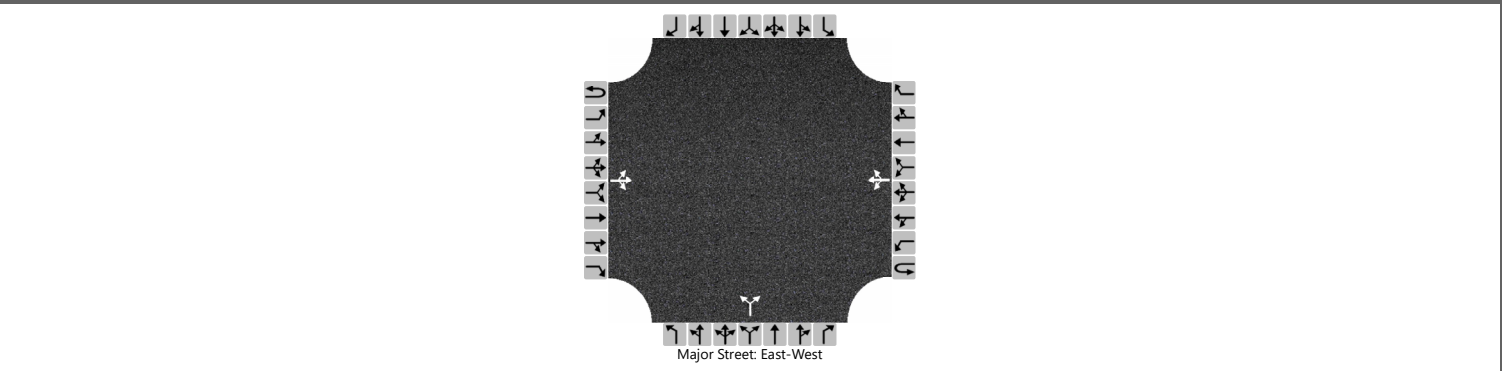
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				5					9					
Capacity, c (veh/h)		1297				1446					687					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.8				7.5					10.3					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)	0.0				0.2				10.3							
Approach LOS	A				A				B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.98		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	155	3		6	175	0		4		5				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

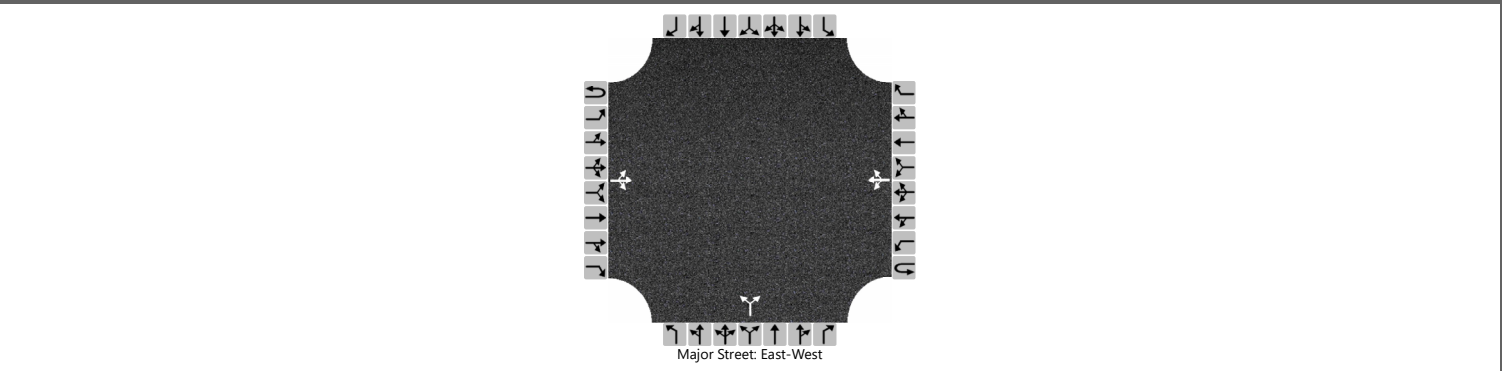
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				6					9					
Capacity, c (veh/h)		1397				1418					732					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.6				7.6					10.0					
Level of Service (LOS)		A				A					A					
Approach Delay (s/veh)		0.0				0.3				10.0						
Approach LOS		A				A				A						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	114	5		4	233	0		5		2				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1					7.1		6.2			
Critical Headway (sec)		4.12				4.12					7.12		6.22			
Base Follow-Up Headway (sec)		2.2				2.2					3.5		3.3			
Follow-Up Headway (sec)		2.22				2.22					3.52		3.32			

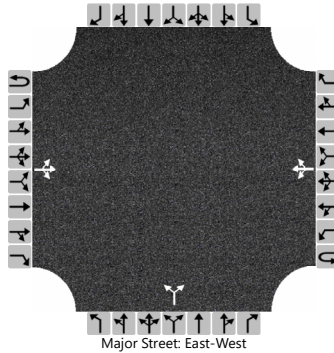
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				4					8					
Capacity, c (veh/h)		1306				1453					632					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.8				7.5					10.8					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)	0.0				0.2				10.8							
Approach LOS					A				B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	191	9		6	196	0		2		2				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

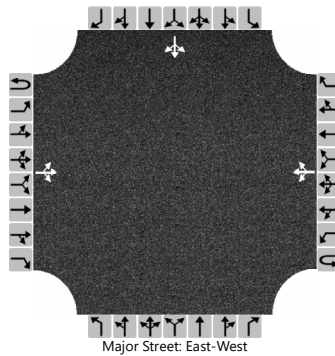
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				7					4					
Capacity, c (veh/h)		1352				1347					636					
v/c Ratio		0.00				0.00					0.01					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					
Control Delay (s/veh)		7.7				7.7					10.7					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				0.3				10.7						
Approach LOS										B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.88		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		4	118	0		0	230	5						2	0	3
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

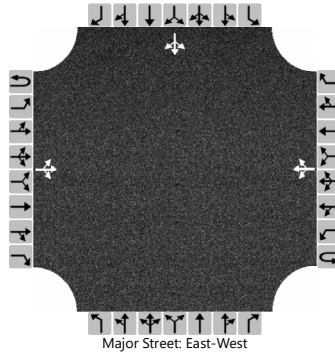
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5				0									6	
Capacity, c (veh/h)		1297				1450									667	
v/c Ratio		0.00				0.00									0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		7.8				7.5									10.4	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.3				0.0								10.4		
Approach LOS														B		

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.97		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		0	154	0		0	178	2						3	0	1
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

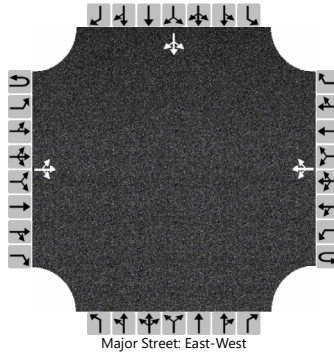
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				0									4	
Capacity, c (veh/h)		1389				1421									658	
v/c Ratio		0.00				0.00									0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		7.6				7.5									10.5	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.0				0.0								10.5		
Approach LOS														B		

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.93		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		7	116	0		0	226	13						4	0	6
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

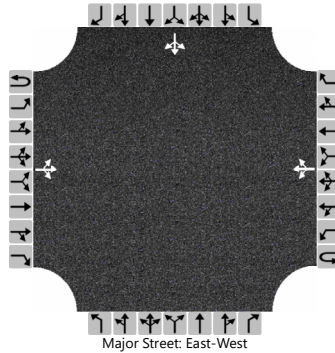
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		8				0									11	
Capacity, c (veh/h)		1308				1462									682	
v/c Ratio		0.01				0.00									0.02	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		7.8				7.5									10.4	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.5				0.0								10.4		
Approach LOS														B		

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.92		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		0	201	0		0	194	2						1	0	2
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				0									3	
Capacity, c (veh/h)		1357				1351									700	
v/c Ratio		0.00				0.00									0.00	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		7.7				7.7									10.2	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.0				0.0								10.2		
Approach LOS														B		

LONG RANGE HORIZON PEAK HOUR TURNING MOVEMENTS

Canterbury/Hwy 105 Peak Hour: 9:00 am to 10:00 am Long Range Weekend Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	252	91	61	244	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	6	0	24

Peak Hour Volume: 678

Canterbury/Saddlewood Peak Hour: 9:00 am to 10:00 am Long Range Weekend Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	0	0	26
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	6	154	3	3	0

Peak Hour Volume: 192

Appaloosa/Hwy 105 Peak Hour: 9:00 am to 10:00 am Long Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	233	8	5	427	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	7	0	7

Peak Hour Volume: 687

Cherry Springs Ranch/Hwy 105 Peak Hour: 9:00 am to 10:00 am Long Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
9	236	0	0	422	11
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
6	0	4	0	0	0

Peak Hour Volume: 688

Canterbury/Hwy 105 Peak Hour: 9:00 am to 10:00 am Long Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	310	80	51	335	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	11	0	14

Peak Hour Volume: 801

Canterbury/Saddlewood Peak Hour: 9:00 am to 10:00 am Long Range Weekday Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	5	0	18
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	138	0	0	0

Peak Hour Volume: 161

Appaloosa/Hwy 105 Peak Hour: 9:00 am to 10:00 am Long Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	232	5	5	421	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	3	0	9

Peak Hour Volume: 675

Cherry Springs Ranch/Hwy 105 Peak Hour: 9:00 am to 10:00 am Long Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
15	230	0	0	404	28
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
13	0	8	0	0	0

Peak Hour Volume: 698

Canterbury/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Long Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	347	100	63	317	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	33	0	56

Peak Hour Volume: 916

Canterbury/Saddlewood Peak Hour: 1:00 pm to 2:00 pm Long Range Weekday Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	0	0	71
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	9	157	3	18	0

Peak Hour Volume: 258

Appaloosa/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Long Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	314	5	12	344	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	9	0	7

Peak Hour Volume: 691

Cherry Springs Ranch/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Long Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	312	0	0	351	4
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
2	0	6	0	0	0

Peak Hour Volume: 675

Canterbury/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Long Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	416	40	20	305	0
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	11	0	25

Peak Hour Volume: 817

Canterbury/Saddlewood Peak Hour: 1:00 pm to 2:00 pm Long Range Weekday Saddlewood					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	0	0	6	0	26
Canterbury					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	6	45	6	4	0

Peak Hour Volume: 93

Appaloosa/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Long Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	368	14	9	339	0
Appaloosa					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
0	0	0	3	0	2

Peak Hour Volume: 735

Cherry Springs Ranch/Hwy 105 Peak Hour: 1:00 pm to 2:00 pm Long Range Weekday Hwy 105					
EB LT	EB Thru	EB RT	WB LT	WB Thru	WB RT
0	385	0	0	333	4
Cherry Springs Ranch					
SB RT	SB Thru	SB LT	NB RT	NB Thru	NB LT
4	0	2	0	0	0

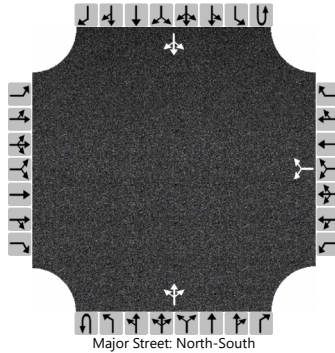
Peak Hour Volume: 728

LONG RANGE HORIZON LEVEL OF SERVICE (LOS)

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						5		18		0	0	0		138	0	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2			4.1				4.1	
Critical Headway (sec)						7.12		6.22			4.12				4.12	
Base Follow-Up Headway (sec)						3.5		3.3			2.2				2.2	
Follow-Up Headway (sec)						3.52		3.32			2.22				2.22	

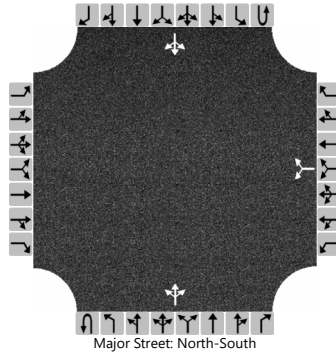
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						27				0					162	
Capacity, c (veh/h)						912				1623					1623	
v/c Ratio						0.03				0.00					0.10	
95% Queue Length, Q ₉₅ (veh)						0.1				0.0					0.3	
Control Delay (s/veh)						9.1				7.2					7.5	
Level of Service (LOS)						A				A					A	
Approach Delay (s/veh)					9.1								7.5			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						6		26		0	4	6		45	6	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2			4.1				4.1	
Critical Headway (sec)						7.12		6.22			4.12				4.12	
Base Follow-Up Headway (sec)						3.5		3.3			2.2				2.2	
Follow-Up Headway (sec)						3.52		3.32			2.22				2.22	

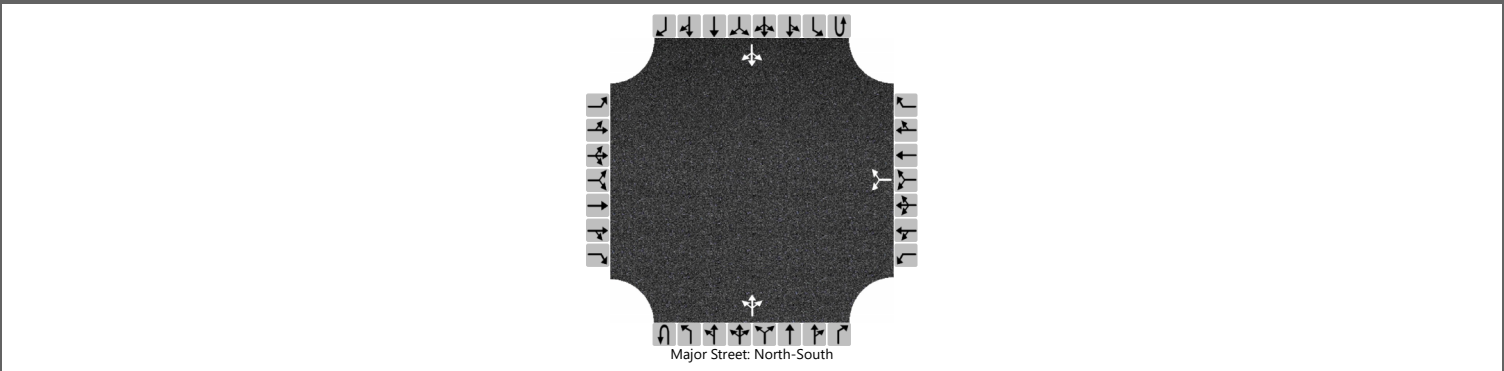
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						38				0				53		
Capacity, c (veh/h)						1018				1614				1607		
v/c Ratio						0.04				0.00				0.03		
95% Queue Length, Q ₉₅ (veh)						0.1				0.0				0.1		
Control Delay (s/veh)						8.7				7.2				7.3		
Level of Service (LOS)						A				A				A		
Approach Delay (s/veh)					8.7				0.0				6.5			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Saddlewood		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Saddlewood		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						0		26		0	3	3		154	6	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2		4.1				4.1		
Critical Headway (sec)						7.12		6.22		4.12				4.12		
Base Follow-Up Headway (sec)						3.5		3.3		2.2				2.2		
Follow-Up Headway (sec)						3.52		3.32		2.22				2.22		

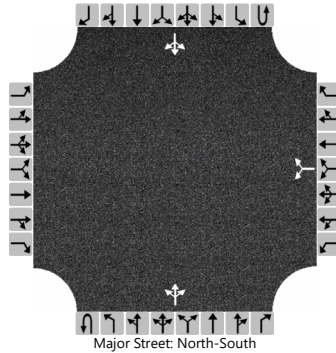
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						31				0				181		
Capacity, c (veh/h)						1078				1614				1614		
v/c Ratio						0.03				0.00				0.11		
95% Queue Length, Q ₉₅ (veh)						0.1				0.0				0.4		
Control Delay (s/veh)						8.4				7.2				7.5		
Level of Service (LOS)						A				A				A		
Approach Delay (s/veh)					8.4				0.0				7.3			
Approach LOS					A											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Eric Maxwell	Intersection	Canterbury & Saddlewood
Agency/Co.	SMH Consultants	Jurisdiction	El Paso County
Date Performed	7/13/2023	East/West Street	Saddlewood
Analysis Year	2023	North/South Street	Canterbury
Time Analyzed	1:00-2:00 pm Weekend	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Colorado Kids Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	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	0	1	0	0	0	1	0
Configuration							LR				LTR				LTR	
Volume (veh/h)						0		71		0	18	3		157	9	0
Percent Heavy Vehicles (%)						2		2		2				2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2		4.1				4.1		
Critical Headway (sec)						7.12		6.22		4.12				4.12		
Base Follow-Up Headway (sec)						3.5		3.3		2.2				2.2		
Follow-Up Headway (sec)						3.52		3.32		2.22				2.22		

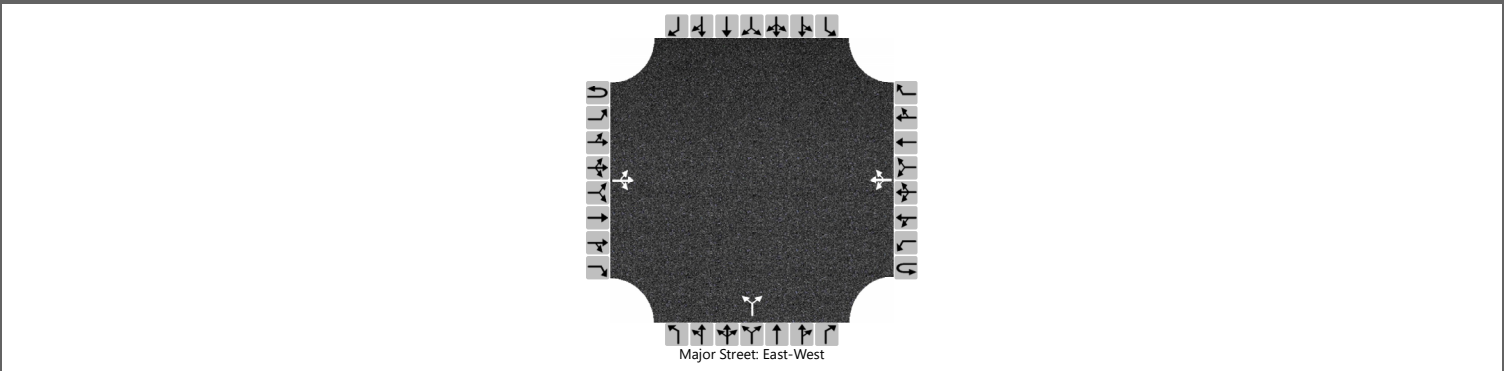
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						84				0				185			
Capacity, c (veh/h)						1054				1609				1590			
v/c Ratio						0.08				0.00				0.12			
95% Queue Length, Q ₉₅ (veh)						0.3				0.0				0.4			
Control Delay (s/veh)						8.7				7.2				7.6			
Level of Service (LOS)						A				A				A			
Approach Delay (s/veh)						8.7				0.0				7.2			
Approach LOS						A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.93		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	310	80		51	335	0		14		11				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

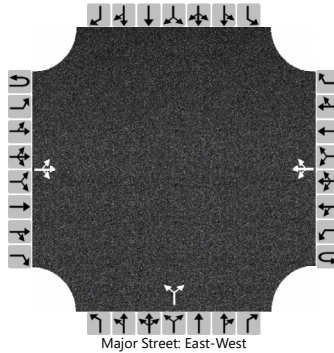
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				55					27					
Capacity, c (veh/h)		1198				1140					365					
v/c Ratio		0.00				0.05					0.07					
95% Queue Length, Q ₉₅ (veh)		0.0				0.2					0.2					
Control Delay (s/veh)		8.0				8.3					15.6					
Level of Service (LOS)		A				A					C					
Approach Delay (s/veh)	0.0				1.5				15.6							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	416	40		20	305	0		25		11				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage							Undivided									

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

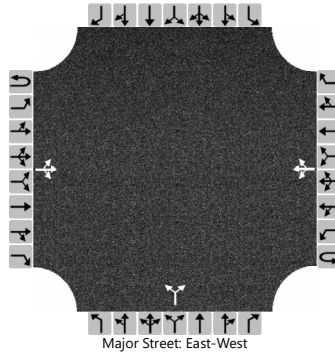
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				22					40					
Capacity, c (veh/h)		1220				1058					320					
v/c Ratio		0.00				0.02					0.12					
95% Queue Length, Q ₉₅ (veh)		0.0				0.1					0.4					
Control Delay (s/veh)		8.0				8.5					17.8					
Level of Service (LOS)		A				A					C					
Approach Delay (s/veh)		0.0				0.7				17.8						
Approach LOS										C						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.85		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	252	91		61	244	0		24		6				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

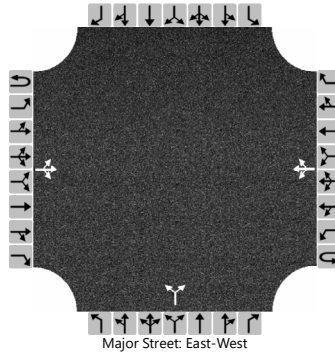
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				72					35					
Capacity, c (veh/h)		1275				1155					333					
v/c Ratio		0.00				0.06					0.11					
95% Queue Length, Q ₉₅ (veh)		0.0				0.2					0.4					
Control Delay (s/veh)		7.8				8.3					17.1					
Level of Service (LOS)		A				A					C					
Approach Delay (s/veh)	0.0				2.2				17.1							
Approach LOS					A				C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Canterbury & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Canterbury		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.85		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	347	100		63	317	0		56		33				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

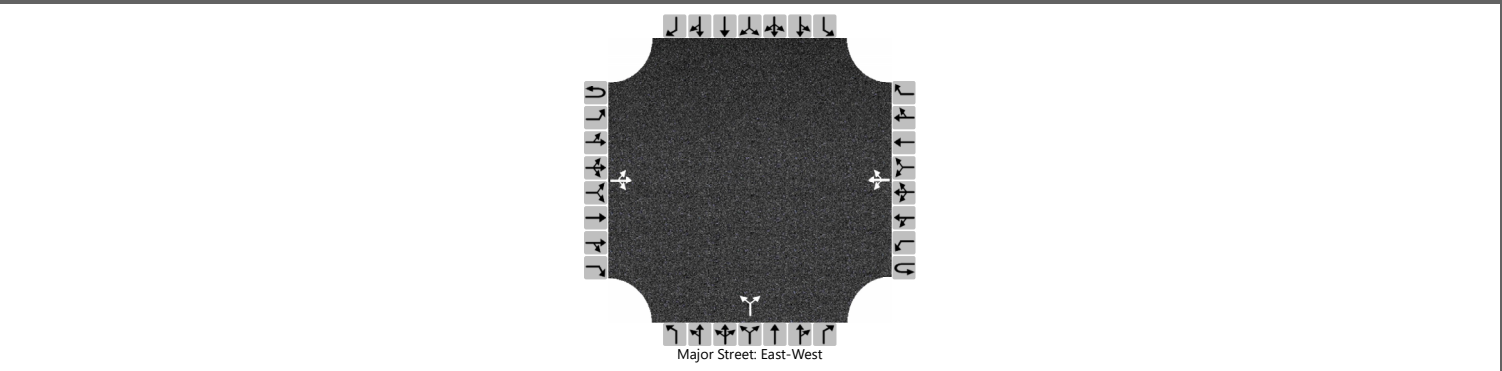
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				74				105						
Capacity, c (veh/h)		1186				1041				277						
v/c Ratio		0.00				0.07				0.38						
95% Queue Length, Q ₉₅ (veh)		0.0				0.2				1.7						
Control Delay (s/veh)		8.0				8.7				25.7						
Level of Service (LOS)		A				A				D						
Approach Delay (s/veh)	0.0				2.1				25.7							
Approach LOS									D							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.87		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	233	8		5	427	0		7		7				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

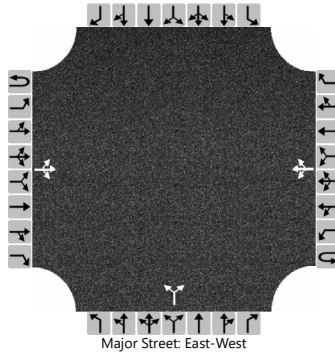
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				6					16					
Capacity, c (veh/h)		1073				1286					445					
v/c Ratio		0.00				0.00					0.04					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.1					
Control Delay (s/veh)		8.4				7.8					13.4					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				0.1				13.4						
Approach LOS		A				A				B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.98		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	314	5		12	344	0		7		9				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

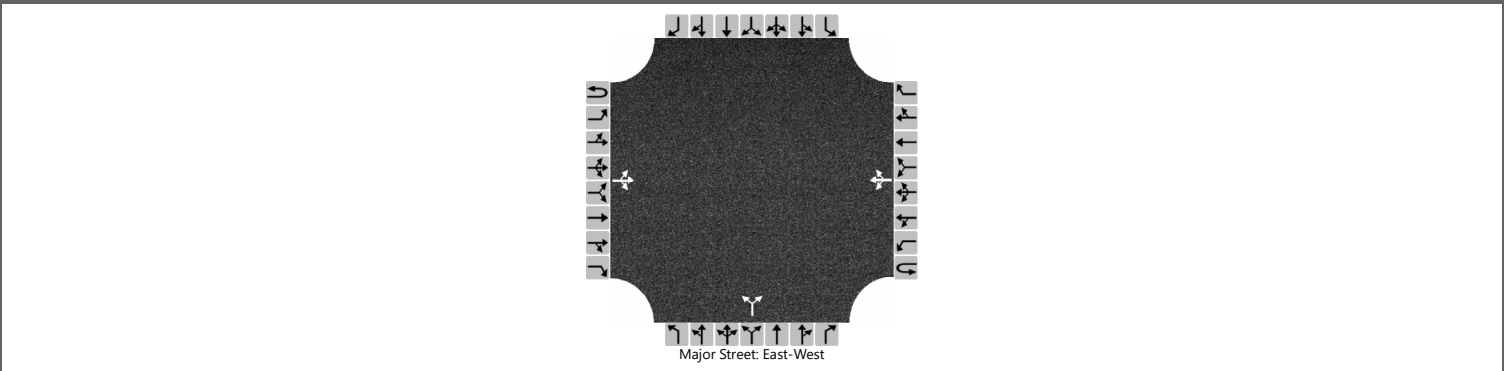
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				12					16					
Capacity, c (veh/h)		1208				1234					493					
v/c Ratio		0.00				0.01					0.03					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.1					
Control Delay (s/veh)		8.0				7.9					12.6					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				0.4				12.6						
Approach LOS						A				B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			LTR				LTR				LR					
Volume (veh/h)		0	232	5		5	421	0		9		3				
Percent Heavy Vehicles (%)		2				2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

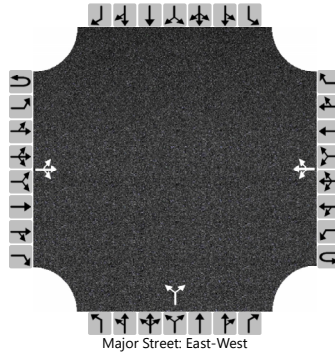
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				6					13					
Capacity, c (veh/h)		1094				1301					387					
v/c Ratio		0.00				0.00					0.03					
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.1					
Control Delay (s/veh)		8.3				7.8					14.6					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				0.1				14.6						
Approach LOS		A				A				B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Appaloosa & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/13/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Appaloosa		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12	
Priority																	
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0	
Configuration			LTR				LTR				LR						
Volume (veh/h)		0	368	14		9	339	0		2		3					
Percent Heavy Vehicles (%)		2				2				2		2					
Proportion Time Blocked																	
Percent Grade (%)										0							
Right Turn Channelized																	
Median Type Storage	Undivided																

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1		6.2				
Critical Headway (sec)		4.12				4.12				7.12		6.22				
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3				
Follow-Up Headway (sec)		2.22				2.22				3.52		3.32				

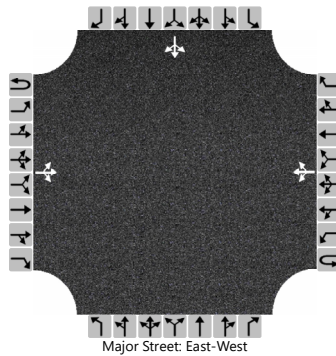
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				10					6					
Capacity, c (veh/h)		1182				1135					434					
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)		8.0				8.2					13.4					
Level of Service (LOS)		A				A					B					
Approach Delay (s/veh)		0.0				0.3				13.4						
Approach LOS										B						

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	9:00-10:00 am Weekday			Peak Hour Factor	0.88		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		9	236	0		0	422	11						4	0	6
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

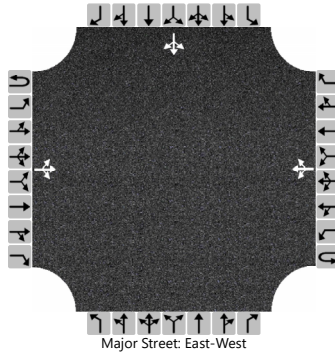
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10				0									11	
Capacity, c (veh/h)		1071				1295									433	
v/c Ratio		0.01				0.00									0.03	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.1	
Control Delay (s/veh)		8.4				7.8									13.5	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.4				0.0						13.5				
Approach LOS												B				

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	1:00-2:00 pm Weekday			Peak Hour Factor	0.97		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		0	312	0		0	351	4						6	0	2
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

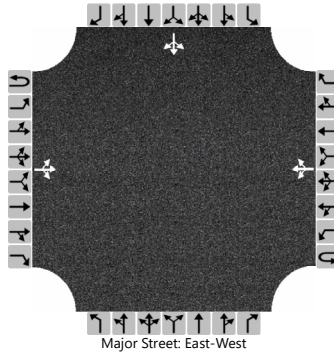
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				0									8	
Capacity, c (veh/h)		1193				1238									410	
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)		8.0				7.9									14.0	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.0				0.0								14.0		
Approach LOS		A				A								B		

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	9:00-10:00 am Weekend			Peak Hour Factor	0.93		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		15	230	0		0	404	28						8	0	13
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

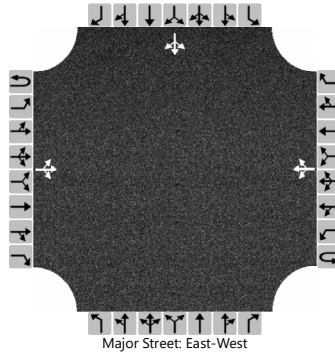
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		16				0									23	
Capacity, c (veh/h)		1097				1319									464	
v/c Ratio		0.01				0.00									0.05	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.2	
Control Delay (s/veh)		8.3				7.7									13.2	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.6				0.0								13.2		
Approach LOS														B		

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Eric Maxwell			Intersection	Cherry Springs & Hwy 105		
Agency/Co.	SMH Consultants			Jurisdiction	El Paso County		
Date Performed	7/20/2023			East/West Street	Hwy 105		
Analysis Year	2023			North/South Street	Cherry Springs		
Time Analyzed	1:00-2:00 pm Weekend			Peak Hour Factor	0.92		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Colorado Kids Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration			LTR				LTR								LTR	
Volume (veh/h)		0	385	0		0	333	4						2	0	4
Percent Heavy Vehicles (%)		2				2								2	2	2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1								7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12								7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2								3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22								3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				0									7	
Capacity, c (veh/h)		1192				1141									488	
v/c Ratio		0.00				0.00									0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.0	
Control Delay (s/veh)		8.0				8.2									12.5	
Level of Service (LOS)		A				A									B	
Approach Delay (s/veh)		0.0				0.0								12.5		
Approach LOS														B		

ROAD IMPACT TRAFFIC FEE

Road Impact Fees

Pumpkin Patch

250 weekday trips

1250 weekend trips

$$ADT = \frac{(250*5)+(1250*2)}{7} = 536$$

$$AADT = \frac{536*7}{52} = 73$$

$$RF = 1 - \frac{50}{325} = 0.85$$

$$FEE = 73 * 398.55 * 0.85 = \$24,370$$

*ADT = event average daily
trips for period open*

$$AADT = \frac{(ADT)*(\#of\ weeks\ open)}{52\ weeks}$$

$$RF = 1 - \frac{50\ initial\ spaces}{total\ parking\ spaces}$$

$$FEE = AADT * \$398.55 * RF$$

Tulip Festival

204 weekday trips

428 weekend trips

$$ADT = \frac{(204*5)+(428*2)}{7} = 268$$

$$AADT = \frac{536*2}{52} = 11$$

$$RF = 1 - \frac{50}{325} = 0.85$$

$$FEE = 11 * 398.55 * 0.85 = \$3,727$$

*ADT = event average daily
trips for period open*

$$AADT = \frac{(ADT)*(\#of\ weeks\ open)}{52\ weeks}$$

$$RF = 1 - \frac{50\ initial\ spaces}{total\ parking\ spaces}$$

$$FEE = AADT * \$398.55 * RF$$

fix error in the text.