TRANSPORTATION MEMORANDUM

For

Timbers at Black Forest
El Paso County, Colorado
PCD File No. P269

April 2026
Revised September 2026
Revised October 2026

Prepared for:

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Brandon Wilson, PE

25-122556

Traffic 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.

Brandon Wilson

_____ 10/13/2026

Brandon Wilson, P.E. #68282 Date

Developer's Statement

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

_____ _____

Michael Turner *Date*
9220 Arroya Lane
Colorado Springs, Colorado 80908

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I. Introduction

Project Overview

This transportation memorandum is provided as a planning document and addresses the capacity, geometric, and control requirements associated with the development entitled Timbers at Black Forest. This analysis was prepared in accordance with Appendix B of the County's Engineering Criteria Manual (ECM)[1].

This traffic impact study has been revised to address County review comments made to the September 2026 version regarding justification for the study area and provision of a list of traffic studies completed in the area within the last five years.

This proposed residential development consists of 21 single-family detached homes and is located near the northeast corner of Vollmer Road and Arroya Lane in El Paso County, Colorado.

Study Area Boundaries

The study area to be examined in this analysis encompasses the intersections of Vollmer Road with Arroya Lane and Burgess Road and includes the proposed site access.

Consistent with Section B.2.3.D of Appendix B – Transportation Impact Study Guidelines from the County's ECM, the study area did not extend south towards the intersection of Vollmer Road and Poco Road, nor the Vollmer Road and Briargate Parkway intersection, since the development's trip distribution pattern does not anticipate much, if any, site traffic traveling to/from these intersections (contributes less than a five percent impact).

Figure 1 illustrates location of the site and study intersections.

Site Description

Land for the development is currently vacant and the area is surrounded by a mix of open space and residential land uses.

The proposed development is understood to entail the new construction of 21 single-family detached homes.

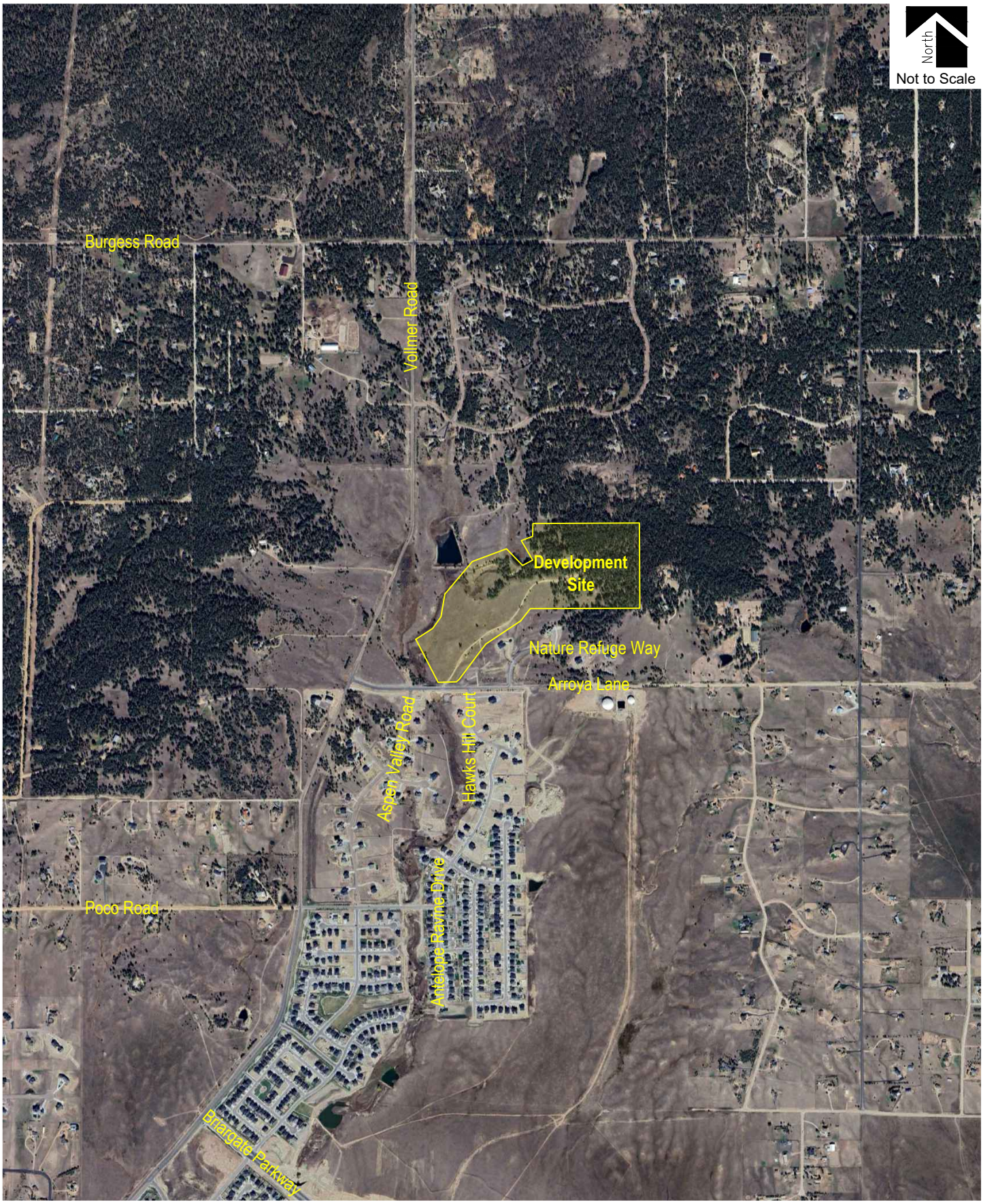
Proposed access to the development is provided via one full-movement access onto Arroya Lane (referred to as Site Access) located approximately 400 feet east of Aspen Valley Road and approximately 310 feet west of Hawks Hill Court.

[1] El Paso County Engineering Criteria Manual, El Paso County, January 9, 2025.

For purposes of this study, it is anticipated that development construction would be completed by end of Year 2028.

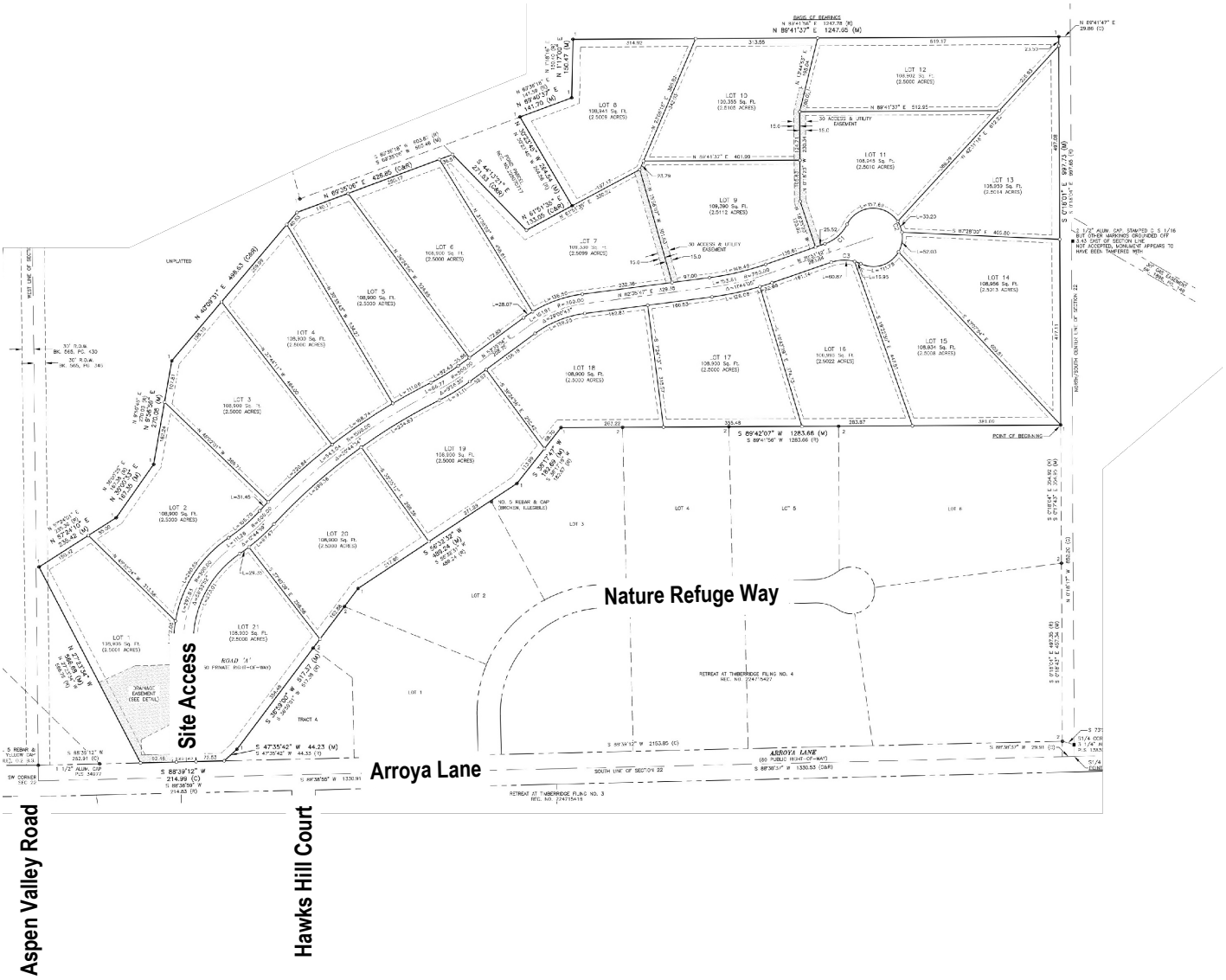
General site and access locations are shown on Figure 1.

A site plan is shown in Figure 2. This plan is provided for illustrative purposes only.


North
Not to Scale
Burgess Road
Vollmer Road
Development Site
Nature Refuge Way
Arroya Lane
Aspen Valley Road
Hawks Hill Court
Antelope Ravine Drive
Poco Road
Briargate Parkway

North

Not to Scale



Existing and Committed Surface Transportation Network

Within the study area, regional access to the proposed development area is provided by way of Vollmer Road and Burgess Road while local access is provided via Arroya Lane. A brief description of each roadway, based on the County's Major Transportation Corridors Plan (MTCP)[2] and the County's ECM is provided below:

> Vollmer Road is generally a north-south roadway. North of Burgess Road, Vollmer Road is classified as a rural major collector roadway while south of Burgess Road, Vollmer Road is classified as an urban major collector roadway. Vollmer Road provides two through lanes (one lane in each direction) with a combination of shared and exclusive turn lanes at the intersections within the study area. Vollmer Road provides a posted speed limit of 45 MPH.
>
> Burgess Road is an east-west rural minor arterial roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Burgess Road provides a posted speed limit of 45 MPH.
>
> Arroya Lane is an east-west rural minor collector roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Arroya Lane provides a posted speed limit of 25 MPH and ends approximately 500 feet east of Nature Refuge Way.

All study intersections operate under a stop-controlled condition. A stop-controlled intersection is defined as a roadway intersection where vehicle rights-of-way are controlled by one or more "STOP" signs.

No regional or specific improvements for the above-described roadways are known to be planned or committed by Year 2028.

[2] El Paso County Major Transportation Corridors Plan, Felsburg Holt & Ullevig, July 18, 2024.

II. Existing Traffic Conditions

Morning (AM) and afternoon (PM) peak hour traffic counts were collected at the intersections of Vollmer Road with Arroya Lane and Burgess Road. Average daily traffic (ADT) volumes were collected over a 24-hour period on Vollmer Road and Arroya Lane. Counts were collected on Tuesday, January 6, 2026, with AM peak hour counts being collected during the period of 7:00 a.m. to 9:00 a.m. and PM peak hour counts being collected during the period of 4:00 p.m. to 6:00 p.m.

It is important to note that as part of this traffic count data collection, the adjacent Retreat at TimberRidge Filing No. 3 development located south of Arroya Lane was assumed to be built-out.

Existing volumes and intersection geometry are shown in Figure 3.

Traffic count data is included for reference in Appendix A.

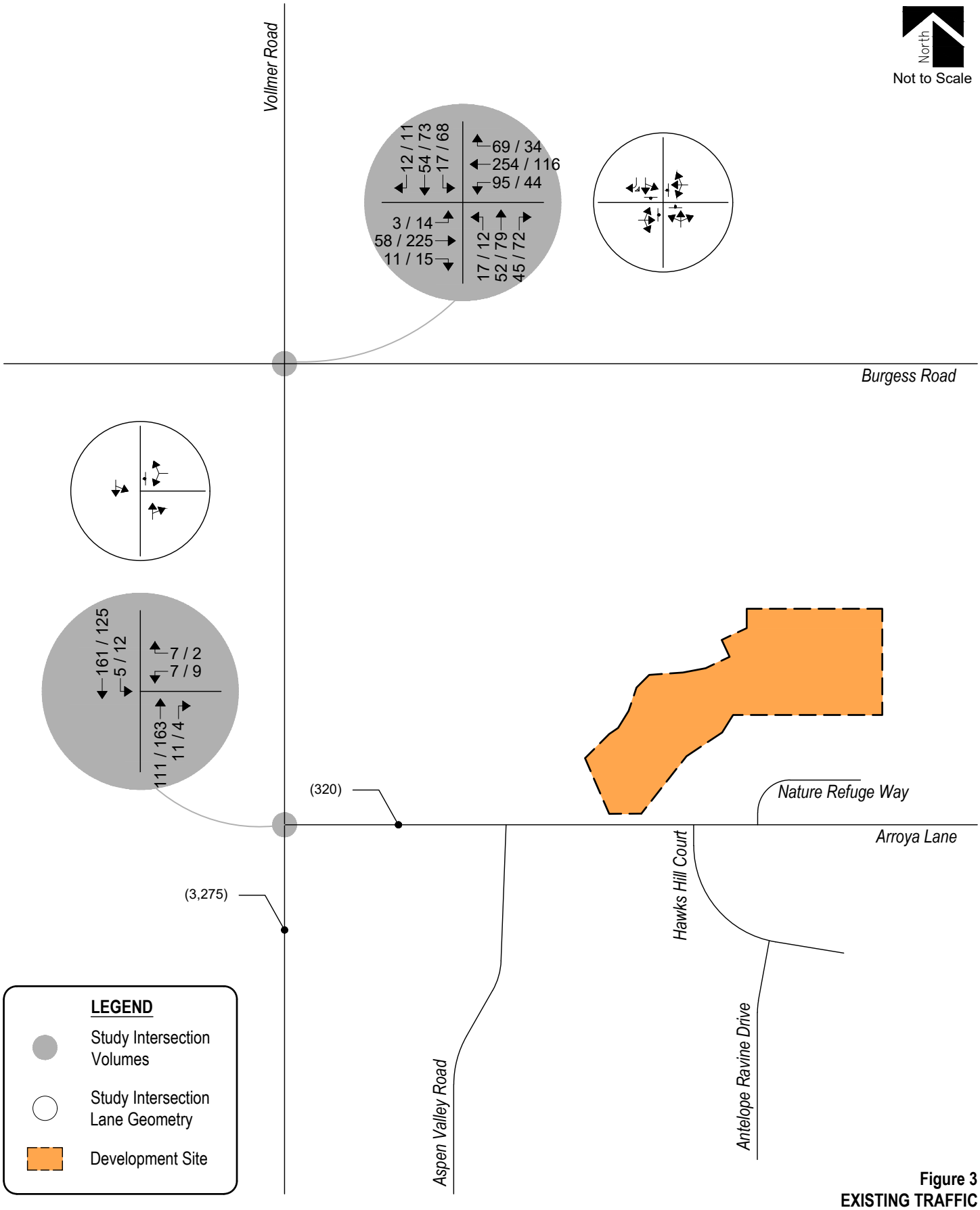


Figure 3
EXISTING TRAFFIC
Volumes & Intersection Geometry
AM / PM Peak Traffic Hour
(ADT) : Average Daily Traffic

Peak Hour Intersection Levels of Service – Existing Traffic

The Unsignalized Intersection Analysis technique, as published in the Highway Capacity Manual (HCM), 7th Edition, by the Transportation Research Board and as incorporated into the SYNCHRO computer program, was used to analyze the study intersections for existing and future traffic conditions. This nationally accepted technique allows for the determination of intersection level of service (LOS) based on the congestion and delay of each traffic movement.

Pursuant to Appendix B of the County's ECM, the design objective for each scenario of this study shall be level of service "D". Level of service is a method of measurement used by transportation professionals to quantify a driver's perception of travel conditions that include travel time, number of stops, and total amount of stopped delay experienced on a roadway network. The HCM categorizes level of service into a range from "A" which indicates little, if any, vehicle delay, to "F" which indicates a level of operation considered unacceptable to most drivers. These levels of service grades with brief descriptions of the operating condition, for unsignalized and signalized intersections, are included for reference in Appendix B and have been used throughout this study.

The level of service analyses results for existing conditions are summarized in Table 1.

Intersection capacity worksheets developed for this study are provided in Appendix C.

Table 1 – Intersection Capacity Analysis Summary – Existing Traffic

INTERSECTION	LEVEL OF SERVICE	
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR
Vollmer Road / Burgess Road		
Eastbound Left, Through, and Right	A	B
Westbound Left, Through, and Right	B	B
Northbound Left, Through, and Right	A	B
Southbound Left, Through, and Right	A	B
Vollmer Road / Arroya Lane		
Westbound Left and Right	A	B
Northbound Through and Right	A	A
Southbound Left and Through	A	A

Key: Stop-Controlled Intersection: Level of Service

Existing Traffic Analysis Results

Under existing conditions, operational analysis shows that the unsignalized intersection of Vollmer Road with Burgess Road has turning movement operations at LOS B or better during the morning and afternoon peak traffic hours.

The unsignalized intersection of Vollmer Road and Arroya Lane provides turning movement operations at LOS A during the morning peak traffic hour and LOS B or better during the afternoon peak traffic hour.

III. Future Traffic Conditions Without Proposed Development

Background traffic is the traffic projected to be on area roadways without consideration of the proposed development. Background traffic includes traffic generated by development of vacant parcels in the area.

To account for projected increases in background traffic for Year 2028, a compounded annual growth rate was determined using historical traffic data provided by the County's MTCP, which anticipates a 10-year growth rate between one and two percent. Therefore, in order to provide for a conservative analysis, a growth rate of two percent was applied to existing traffic volumes.

To account for projected traffic from adjacent developments not yet built, trip generations from the Retreat at TimberRidge Filing No. 4 traffic study[3] were added to background traffic volumes. In review of recent aerial imagery, it is noted that four of the ten planned single-family detached houses for Retreat at TimberRidge Filing No. 4 have already been constructed. Therefore, only six houses were added to background traffic conditions.

Pursuant to the area roadway improvements discussed in Section I, Year 2028 background traffic conditions assume no roadway improvements to accommodate regional transportation demands. This assumption provides for a conservative analysis.

Projected background traffic volumes and intersection geometry for Year 2028 are shown in Figure 4.

[3] Retreat at TimberRidge Filing No. 4, LSC Transportation Consultants, Inc., February 21, 2024.

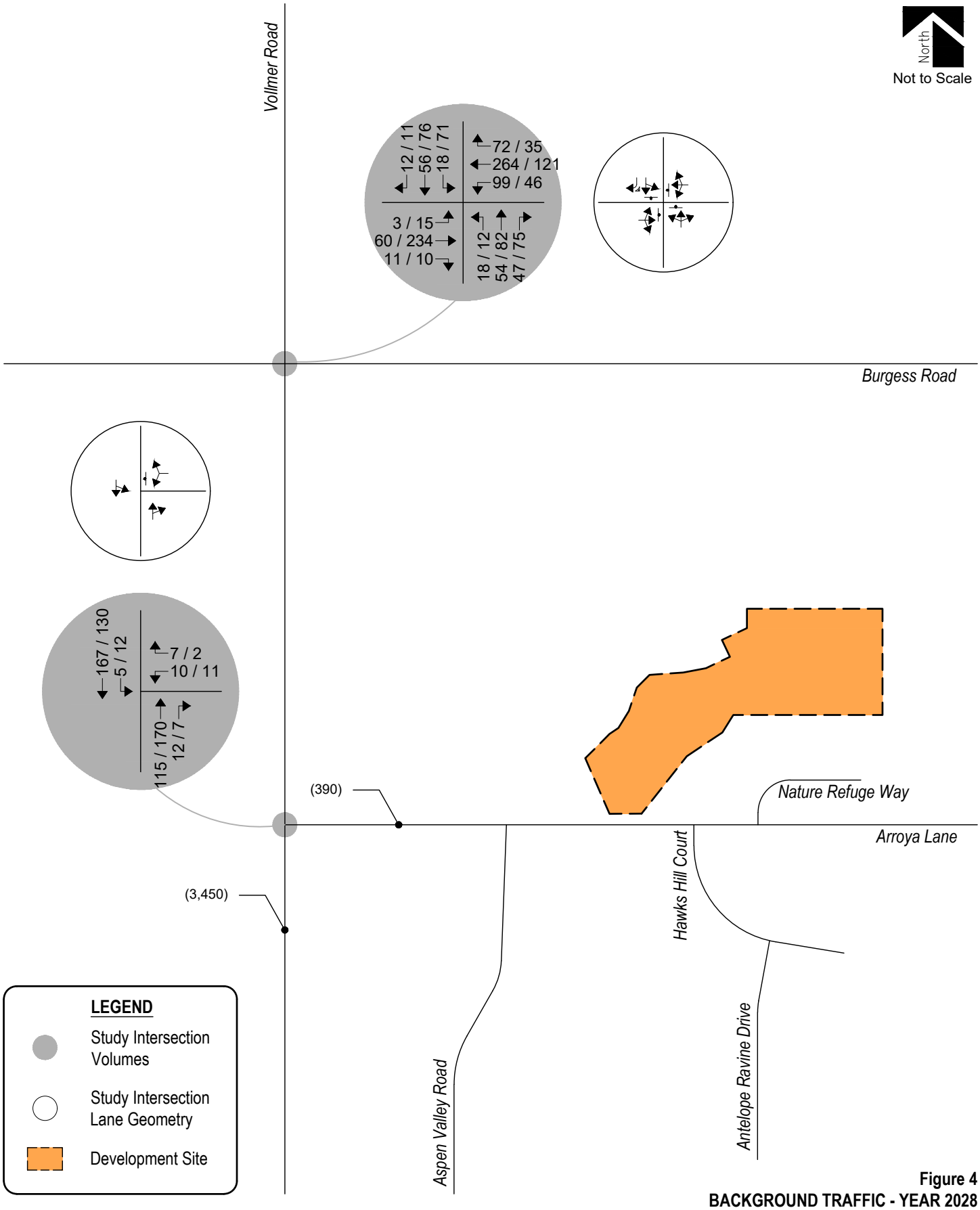


Figure 4
BACKGROUND TRAFFIC - YEAR 2028
Volumes & Intersection Geometry
AM / PM Peak Traffic Hour
(ADT) : Average Daily Traffic

Peak Hour Intersection Levels of Service – Background Traffic

As with existing traffic conditions, the operations of study intersections were analyzed under background conditions, without the proposed development, using the SYNCHRO computer program.

Background traffic level of service analysis results for Year 2028 are listed in Table 2.

Definitions of levels of service are given in Appendix B. Intersection capacity worksheets are provided in Appendix C.

Table 2 – Intersection Capacity Analysis Summary – Background Traffic – Year 2028

INTERSECTION	LEVEL OF SERVICE	
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR
Vollmer Road / Burgess Road (Stop-Controlled)		
Eastbound Left, Through, and Right	A	B
Westbound Left, Through, and Right	B	B
Northbound Left, Through, and Right	A	B
Southbound Left, Through, and Right	A	B
Vollmer Road / Arroya Lane (Stop-Controlled)		
Westbound Left and Right	A	B
Northbound Through and Right	A	A
Southbound Left and Through	A	A

Key: Stop-Controlled Intersection: Level of Service

Background Traffic Analysis Results – Year 2028

Year 2028 background traffic analysis indicates that the unsignalized intersection of Vollmer Road with Burgess Road continues to project overall operations at LOS B or better during the morning and afternoon peak traffic hours.

The unsignalized intersection of Vollmer Road and Arroya Lane continues to anticipate turning overall turning movement operations at LOS A during the morning peak traffic hour and LOS B or better during the afternoon peak traffic hour.

IV. Proposed Project Traffic

Trip Generation

Standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation Manual, 12th Edition, were applied to the proposed land use in order to estimate average daily traffic (ADT), AM Peak Hour, and PM Peak Hour vehicle trips. A vehicle trip is defined as a one-way vehicle movement from a point of origin to a point of destination.

The ITE land use code 210 (Single-Family Detached Housing) was used for estimating trip generation because of its conservative rates and best fit to the proposed land use description.

Table 3 – Trip Generation Rates

			TRIP GENERATION RATES						
ITE			24	AM PEAK HOUR			PM PEAK HOUR		
CODE	LAND USE	UNIT	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	DU	9.09	0.19	0.51	0.70	0.58	0.35	0.93

Key: DU = Dwelling Units.
Note: All data and calculations above are subject to being rounded to nearest value.

Table 4 illustrates projected ADT, AM Peak Hour, and PM Peak Hour traffic volumes likely generated by the proposed development upon build-out.

Table 4 – Trip Generation Summary

			TOTAL TRIPS GENERATED						
ITE			24	AM PEAK HOUR			PM PEAK HOUR		
CODE	LAND USE	SIZE	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	21 DU	191	4	11	15	12	7	20
		Total:	*191*	*4*	*11*	*15*	*12*	*7*	*20*

Key: DU = Dwelling Units.
Note: All data and calculations above are subject to being rounded to nearest value.

Upon build-out, Table 4 illustrates that the proposed development has the potential to generate approximately 191 daily vehicle trips with 15 of those occurring during the morning peak hour and 20 during the afternoon peak hour.

Adjustments to Trip Generation Rates

A development of this type is not likely to attract trips from within area land uses nor pass-by or diverted link trips from the adjacent roadway system, therefore no trip reduction was taken in this analysis.

Trip Distribution

The overall directional distribution of site-generated traffic was determined based on the location of development site within the County, proposed and existing area land uses, allowed turning movements, available roadway network, and in reference to distribution patterns utilized within the Retreat at TimberRidge Filing No. 4 traffic study.

Overall trip distribution patterns for the development are shown on Figure 5.

Trip Assignment

Traffic assignment is how generated and distributed vehicle trips are expected to be loaded onto the available roadway network.

Applying trip distribution patterns to site-generated traffic provides the overall site-generated trip assignments shown on Figure 5.

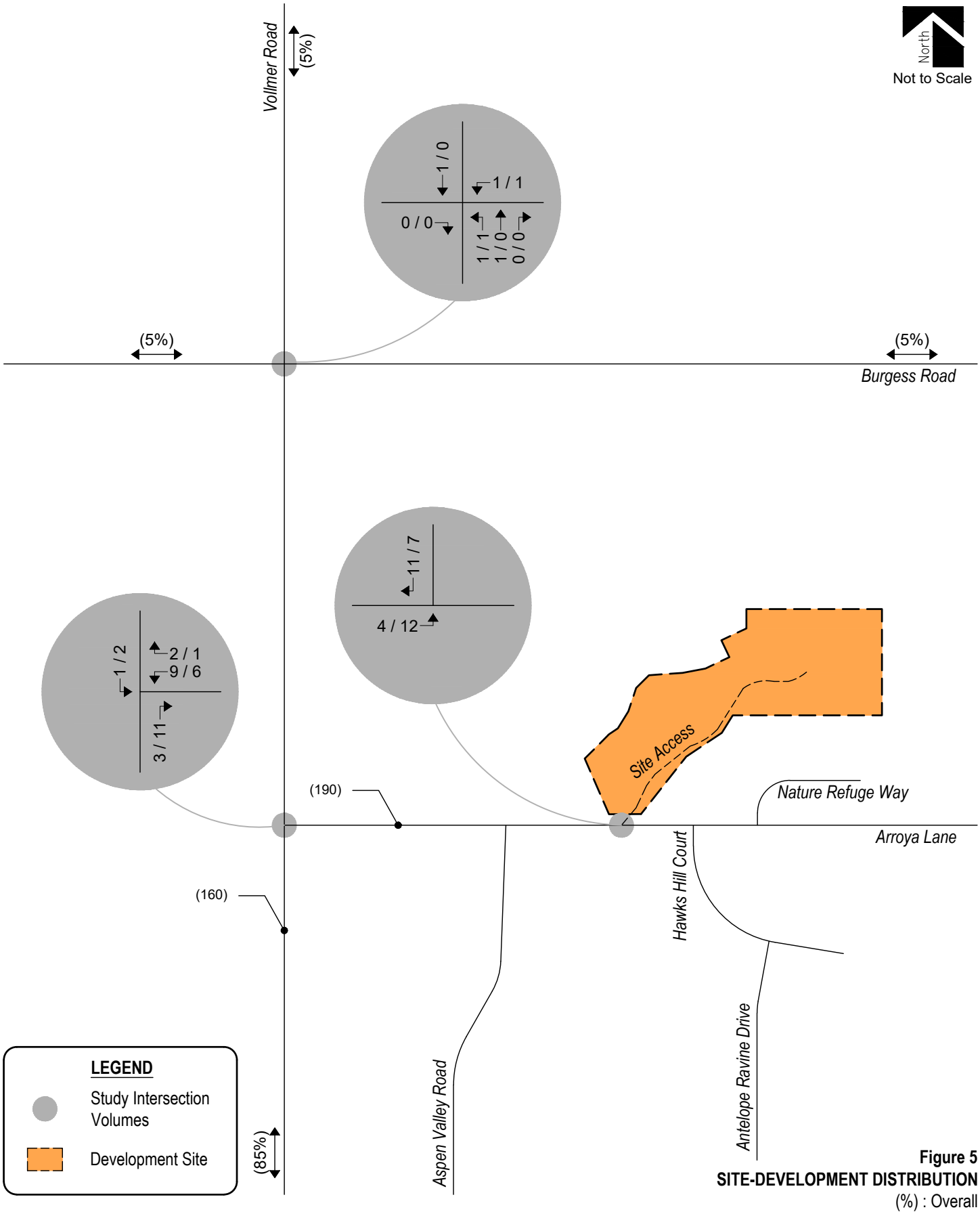


Figure 5
SITE-DEVELOPMENT DISTRIBUTION
(%) : Overall
SITE-GENERATED TRIPS
AM / PM Peak Hour
(ADT) : Average Daily Traffic

V. Future Traffic Conditions With Proposed Development

Total traffic is the traffic projected to be on area roadways with consideration of the proposed development. Total traffic includes background traffic projections for Year 2028 with consideration of site-generated traffic.

Pursuant to area roadway improvement discussions provided in Section III, Year 2028 total traffic conditions assume no roadway improvements to accommodate regional transportation demands. Roadway improvements associated with site development are expected to be limited to site access and frontage as required by the governing agency.

Total Traffic Auxiliary Lane Analysis

Auxiliary lanes for the site development access drive were evaluated and are to be based on the County's ECM.

Considering development build-out, an evaluation of auxiliary lane requirements, pursuant to Section 2.3.7.D of the County's ECM, reveals that an eastbound left turn deceleration lane at the site access along Arroya Lane is not required since the development's projected peak hour left turn ingress volume does not exceed the County's threshold of 25 vehicles per hour. Similarly, a westbound right turn deceleration lane is not required as the right turn ingress volume does not exceed the County's threshold of 50 vehicles per hour.

Projected Year 2028 total traffic volumes and intersection geometry are shown in Figure 6.

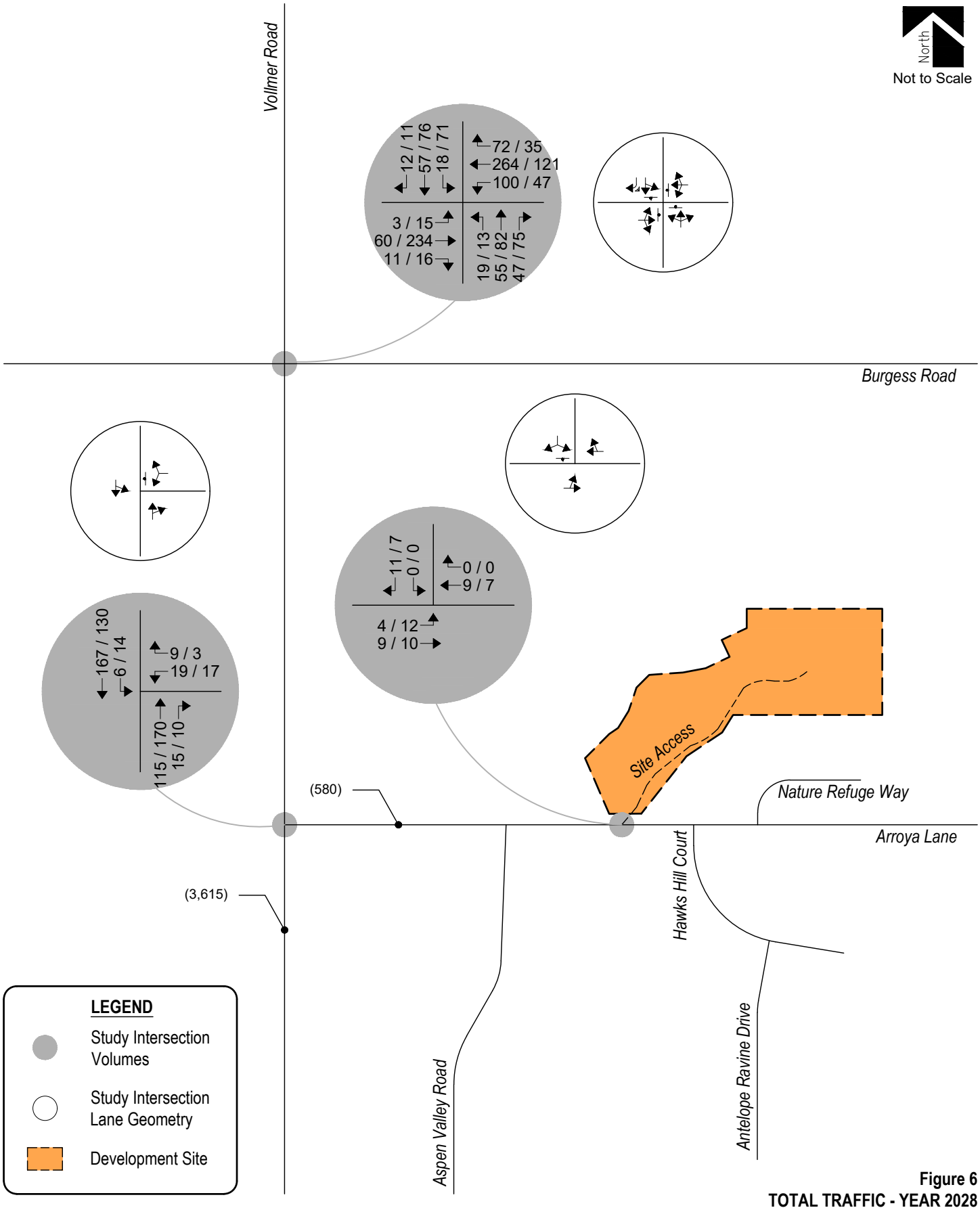


Figure 6
TOTAL TRAFFIC - YEAR 2028
Volumes & Intersection Geometry
AM / PM Peak Traffic Hour
(ADT) : Average Daily Traffic

Peak Hour Intersection Levels of Service – Total Traffic

As with background traffic, the operations of the study intersections were analyzed under projected total traffic conditions using the SYNCHRO computer program. The analyses and procedures were performed in accordance with the latest HCM and are based upon the worst-case conditions that occur during a typical weekday upon build-out of site development and analyzed land uses. Therefore, study intersections are likely to operate with traffic conditions better than those described within this study, which represent the peak hours of weekday operations only.

Total traffic level of service analysis results for Year 2028 are summarized in Table 5.

Definitions of levels of service are given in Appendix B. Intersection capacity worksheets are provided in Appendix C.

Table 5 – Intersection Capacity Analysis Summary – Total Traffic – Year 2028

INTERSECTION	LEVEL OF SERVICE	
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR
Vollmer Road / Burgess Road (Stop-Controlled)		
Eastbound Left, Through, and Right	A	B
Westbound Left, Through, and Right	B	B
Northbound Left, Through, and Right	A	B
Southbound Left, Through, and Right	A	B
Vollmer Road / Arroya Lane (Stop-Controlled)		
Westbound Left and Right	B	B
Northbound Through and Right	A	A
Southbound Left and Through	A	A
Arroya Lane / Site Access (Stop-Controlled)		
Eastbound Left and Through	A	A
Westbound Through and Right	A	A
Southbound Left and Right	A	A

Key: Stop-Controlled Intersection: Level of Service

Total Traffic Analysis Results Upon Development Build-Out

Table 5 illustrates how, by Year 2028 and upon development build-out, the stop-controlled intersection of Vollmer Road with Burgess Road is projected to have turning movement operations at LOS B for the morning and afternoon peak traffic hours.

The stop-controlled intersection of Vollmer Road and Arroya Lane continues to anticipate turning movement operations at LOS B or better during the morning and afternoon peak traffic hours.

The stop-controlled intersection of Arroya Lane and Site Access is projected to have turning movement operations at LOS A during the morning and afternoon peak traffic hours.

These intersection operations are similar to existing conditions.

VI. Project Impacts

It is emphasized that the analyses and procedures described in this study were performed in accordance with the latest HCM and are based upon the worst-case conditions that occur during a typical weekday upon build-out of site development and analyzed land uses. Therefore, study intersections are likely to operate with traffic conditions better than those described within this study, which represent the peak hours of weekday operations only.

Queue Length Analysis

Queue lengths for the study intersections were analyzed using Year 2028 background and total traffic conditions. The analysis yields estimate of 95th percentile queue lengths, which have only a five percent probability of being exceeded during the analysis time period. An average vehicle length of 25 feet was assumed. Queue lengths were modeled and are included with the Synchro worksheets in Appendix C.

In general, auxiliary lane lengths are recommended to accommodate the County's minimum turn lane lengths or accommodate long-term 95th percentile vehicle queues, whichever is greater.

Table 6 summarizes the 95th percentile queue results in comparison to the projected storage requirements for turn movements within study area for Year 2028.

Table 6 – Turn Lane Queues and Storage Requirements – Total Traffic – Year 2028

Intersection	Turn Movement		Existing Turn Lane Length (feet)	Background 2028		Total 2028		Recommended Turn Lane Length (feet)
				AM Peak Hour (feet)	PM Peak Hour (feet)	AM Peak Hour (feet)	PM Peak Hour (feet)	
Stop-Controlled Intersections								
Vollmer Road / Burgess Road	EB	L,T,R	-	10'	53'	10'	53'	-
	WB	L,T,R	-	100'	35'	103'	35'	-
	NB	L,T,R	-	18'	28'	18'	28'	-
	SB	L,T,R	-	13'	28'	13'	28'	-
Vollmer Road / Arroya Lane	WB	L,R	-	3'	3'	3'	3'	-
	NB	T,R	-	0'	0'	0'	0'	-
	SB	L,T	-	0'	0'	0'	0'	-
Arroya Lane / Site Access	EB	T,R	-	-	-	0'	0'	-
	WB	L,T	-	-	-	0'	0'	-
	SB	L,R	-	-	-	0'	0'	-

Note: Turn Lane Length does not include taper length.

As Table 6 shows, all turn lane lengths at stop-controlled intersections have sufficient storage to accommodate future traffic volumes.

Development Impacts

Analysis of future traffic conditions indicates that the addition of site-generated traffic is expected to create no negative impact to traffic operations for the existing and surrounding roadway system upon roadway and intersection control improvements assumed within this analysis. With all conservative assumptions defined in this analysis, the study intersections are projected to operate at future levels of service comparable to existing traffic conditions.

Recommended Improvements

Roadway and intersection improvement recommendations were assessed pursuant to roadway descriptions discussed in Section I, projected peak hour traffic volumes, level of service results, projected 95th percentile queue lengths, and per requirements defined within the County's ECM.

Pursuant to operational analysis results illustrated and described throughout this study, no roadway nor intersection improvements are recommended.

VII. Conclusion

This transportation memorandum addressed the capacity, geometric, and control requirements associated with the development entitled Timbers at Black Forest. This proposed residential development consists of 21 single-family detached homes. The development is located near the northeast corner of Vollmer Road and Arroya Lane in El Paso County, Colorado.

The study area examined in this analysis encompassed the intersections of Vollmer Road with Arroya Lane and Burgess Road and includes the proposed site access.

Analysis was conducted for critical AM Peak Hour and PM Peak Hour traffic operations for existing traffic conditions, Year 2028 background traffic conditions, and Year 2028 total traffic conditions.

Analysis of existing traffic conditions indicates that all stop-controlled intersections operate with turn movements at or better than LOS B during their respective peak traffic periods.

Under Year 2028 background traffic conditions, operational analysis shows that all stop-controlled intersections anticipate turn movement operations at or better than LOS B during their respective peak traffic periods.

Analysis of future traffic conditions indicates that the addition of site-generated traffic is expected to create no negative impact to traffic operations for the existing and surrounding roadway system. With all conservative assumptions defined in this analysis, the study intersections are projected to operate at future levels of service comparable to Year 2028 background traffic conditions. The proposed site access has operations at LOS B or better during peak traffic periods and upon build-out.

This site is subject to the El Paso County Road Impact Fee Program (Resolution 25-337), as amended. An option for payment will be selected at the final land use approval stage.

A list of all known traffic studies in the area over the last five years is included for reference in Appendix D. All assumptions made throughout this study are generally consistent with those made in adjacent traffic studies.

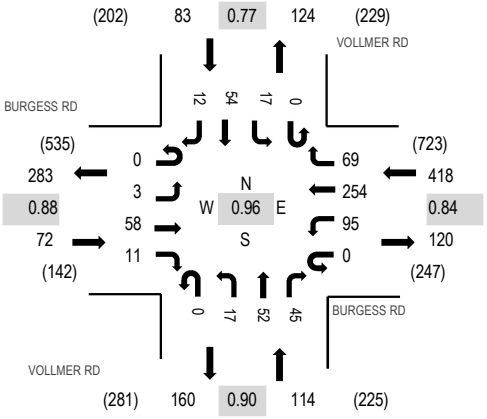
APPENDIX A

Traffic Count Data

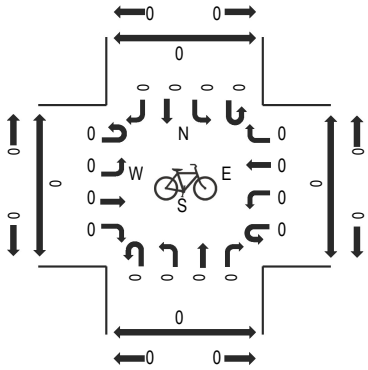
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 VOLLMER RD & BURGESS RD AM
Date: Tuesday, January 6, 2026
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

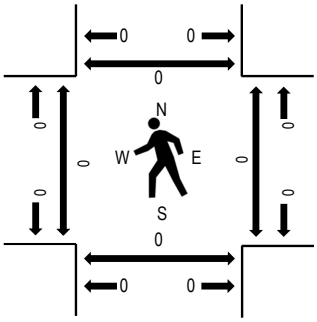
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

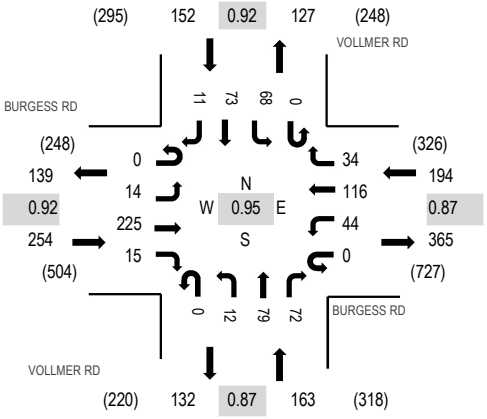
Traffic Counts - Motorized Vehicles

Interval Start Time	BURGESS RD Eastbound				BURGESS RD Westbound				VOLLMER RD Northbound				VOLLMER RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	13	0	0	13	61	16	0	3	9	5	0	4	16	4	144	672	0	0	0	0
7:15 AM	0	0	11	1	0	29	74	21	0	3	6	14	0	6	10	4	179	687	0	0	0	0
7:30 AM	0	1	11	3	0	25	72	19	0	4	13	7	0	4	15	5	179	668	0	0	0	0
7:45 AM	0	1	20	4	0	21	49	19	0	8	15	13	0	4	15	1	170	648	0	0	0	0
8:00 AM	0	1	16	3	0	20	59	10	0	2	18	11	0	3	14	2	159	620	0	0	0	0
8:15 AM	0	4	15	3	0	13	53	7	0	3	21	11	0	8	16	6	160		0	0	0	0
8:30 AM	0	1	19	1	0	11	52	11	0	4	12	11	0	9	21	7	159		0	0	0	0
8:45 AM	0	1	13	0	0	11	49	8	0	7	15	10	0	9	16	3	142		0	0	0	0
Count Total	0	9	118	15	0	143	469	111	0	34	109	82	0	47	123	32	1,292		0	0	0	0
Peak Hour	0	3	58	11	0	95	254	69	0	17	52	45	0	17	54	12	687		0	0	0	0

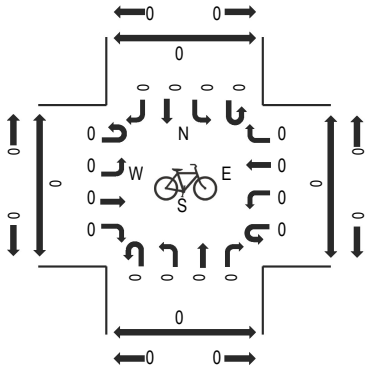
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 VOLLMER RD & BURGESS RD PM
Date: Tuesday, January 6, 2026
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

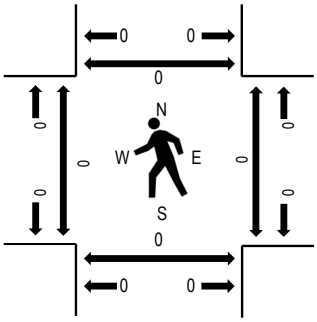
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

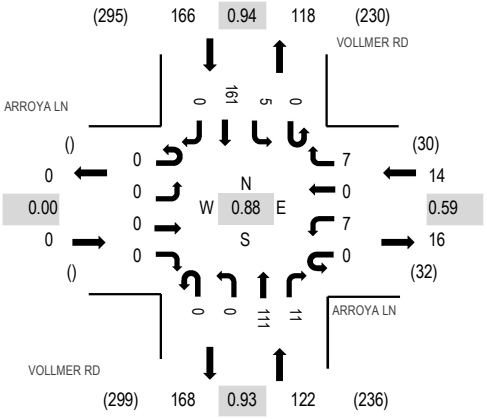
Traffic Counts - Motorized Vehicles

Interval Start Time	BURGESS RD Eastbound				BURGESS RD Westbound				VOLLMER RD Northbound				VOLLMER RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	2	50	4	0	13	34	9	0	4	23	19	0	16	17	2	193	763	0	0	0	0
4:15 PM	0	4	60	4	0	14	28	6	0	2	19	19	0	20	21	4	201	747	0	0	0	0
4:30 PM	0	4	56	3	0	10	28	8	0	2	16	14	0	13	15	1	170	736	0	0	0	0
4:45 PM	0	4	59	4	0	7	26	11	0	4	21	20	0	19	20	4	199	735	0	0	0	0
5:00 PM	0	2	49	5	0	9	29	6	0	4	26	13	0	16	13	5	177	680	0	0	0	0
5:15 PM	0	1	67	2	0	8	18	5	0	6	33	10	0	26	11	3	190		0	0	0	0
5:30 PM	0	5	54	6	0	3	18	8	0	2	11	21	0	24	15	2	169		0	0	0	0
5:45 PM	0	1	56	2	0	4	16	8	0	3	15	11	0	15	10	3	144		0	0	0	0
Count Total	0	23	451	30	0	68	197	61	0	27	164	127	0	149	122	24	1,443		0	0	0	0
Peak Hour	0	14	225	15	0	44	116	34	0	12	79	72	0	68	73	11	763		0	0	0	0

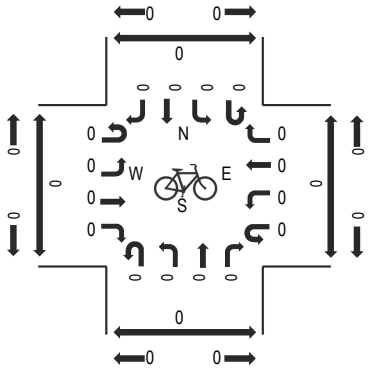
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 VOLLMER RD & ARROYA LN AM
Date: Tuesday, January 6, 2026
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

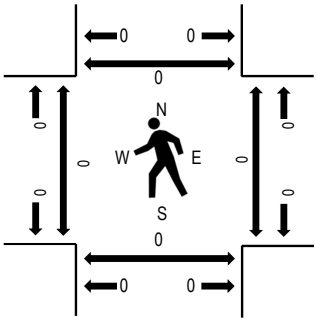
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

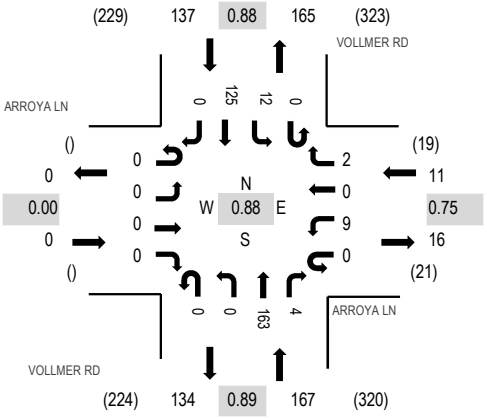
Traffic Counts - Motorized Vehicles

Interval Start Time	ARROYA LN Eastbound				ARROYA LN Westbound				VOLLMER RD Northbound				VOLLMER RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	3	0	3	0	0	11	3	0	0	31	0	51	281	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	2	0	0	23	2	0	1	42	0	71	302	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	1	0	0	24	5	0	0	42	0	73	301	0	0	0	0
7:45 AM	0	0	0	0	0	4	0	4	0	0	32	2	0	2	42	0	86	295	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0	0	0	32	2	0	2	35	0	72	280	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	36	0	0	2	31	0	70		0	0	0	0
8:30 AM	0	0	0	0	0	2	0	2	0	0	25	4	0	2	32	0	67		0	0	0	0
8:45 AM	0	0	0	0	0	3	0	2	0	0	32	3	0	2	29	0	71		0	0	0	0
Count Total	0	0	0	0	0	15	0	15	0	0	215	21	0	11	284	0	561		0	0	0	0
Peak Hour	0	0	0	0	0	7	0	7	0	0	111	11	0	5	161	0	302		0	0	0	0

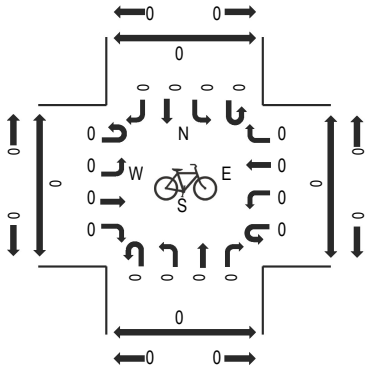
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 VOLLMER RD & ARROYA LN PM
Date: Tuesday, January 6, 2026
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

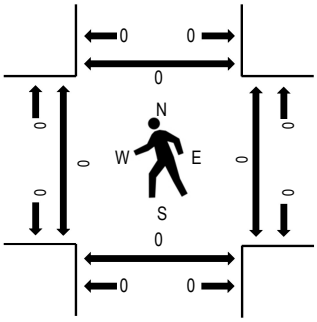
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ARROYA LN Eastbound				ARROYA LN Westbound				VOLLMER RD Northbound				VOLLMER RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	4	0	1	0	0	46	0	0	5	34	0	90	315	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	36	1	0	3	31	0	71	301	0	0	0	0
4:30 PM	0	0	0	0	0	3	0	1	0	0	35	0	0	3	29	0	71	304	0	0	0	0
4:45 PM	0	0	0	0	0	2	0	0	0	0	46	3	0	1	31	0	83	289	0	0	0	0
5:00 PM	0	0	0	0	0	2	0	2	0	0	44	0	0	1	27	0	76	253	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	1	0	0	50	0	0	2	20	0	74		0	0	0	0
5:30 PM	0	0	0	0	0	0	0	2	0	0	32	0	0	0	22	0	56		0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	27	0	0	2	18	0	47		0	0	0	0
Count Total	0	0	0	0	0	12	0	7	0	0	316	4	0	17	212	0	568		0	0	0	0
Peak Hour	0	0	0	0	0	9	0	2	0	0	163	4	0	12	125	0	315		0	0	0	0

All Traffic Data Services

SITE 2_E - ARROYA LN EAST OF VOLLMER RD

Time	EB	WB	Total
1/6/2026	0	0	0
1/6/2026 12:15:00 AM	0	0	0
1/6/2026 12:30:00 AM	0	0	0
1/6/2026 12:45:00 AM	0	0	0
1/6/2026 1:00:00 AM	0	1	1
1/6/2026 1:15:00 AM	0	0	0
1/6/2026 1:30:00 AM	0	0	0
1/6/2026 1:45:00 AM	0	0	0
1/6/2026 2:00:00 AM	0	0	0
1/6/2026 2:15:00 AM	0	0	0
1/6/2026 2:30:00 AM	0	0	0
1/6/2026 2:45:00 AM	0	0	0
1/6/2026 3:00:00 AM	0	0	0
1/6/2026 3:15:00 AM	0	0	0
1/6/2026 3:30:00 AM	0	0	0
1/6/2026 3:45:00 AM	0	0	0
1/6/2026 4:00:00 AM	0	0	0
1/6/2026 4:15:00 AM	1	0	1
1/6/2026 4:30:00 AM	0	0	0
1/6/2026 4:45:00 AM	0	1	1
1/6/2026 5:00:00 AM	0	0	0
1/6/2026 5:15:00 AM	0	0	0
1/6/2026 5:30:00 AM	1	0	1
1/6/2026 5:45:00 AM	1	1	2
1/6/2026 6:00:00 AM	0	0	0
1/6/2026 6:15:00 AM	0	0	0
1/6/2026 6:30:00 AM	2	1	3
1/6/2026 6:45:00 AM	1	2	3
1/6/2026 7:00:00 AM	3	6	9
1/6/2026 7:15:00 AM	3	3	6
1/6/2026 7:30:00 AM	5	2	7
1/6/2026 7:45:00 AM	4	8	12
1/6/2026 8:00:00 AM	4	1	5
1/6/2026 8:15:00 AM	2	1	3
1/6/2026 8:30:00 AM	6	4	10
1/6/2026 8:45:00 AM	5	5	10
1/6/2026 9:00:00 AM	1	3	4
1/6/2026 9:15:00 AM	4	4	8
1/6/2026 9:30:00 AM	2	5	7
1/6/2026 9:45:00 AM	1	2	3
1/6/2026 10:00:00 AM	5	4	9
1/6/2026 10:15:00 AM	6	3	9
1/6/2026 10:30:00 AM	2	4	6
1/6/2026 10:45:00 AM	0	6	6
1/6/2026 11:00:00 AM	3	2	5
1/6/2026 11:15:00 AM	3	3	6
1/6/2026 11:30:00 AM	2	3	5
1/6/2026 11:45:00 AM	5	1	6
Total	72	76	148
Percentage	48.6%	51.4%	
Peak Hour	8:00 AM	7:00 AM	7:00 AM
Volume	17	19	34
PHF	0.708	0.594	0.708

All Traffic Data Services

SITE 2_E - ARROYA LN EAST OF VOLLMER RD

Time	EB	WB	Total
1/6/2026 12:00:00 PM	1	6	7
1/6/2026 12:15:00 PM	6	4	10
1/6/2026 12:30:00 PM	5	3	8
1/6/2026 12:45:00 PM	2	8	10
1/6/2026 1:00:00 PM	2	4	6
1/6/2026 1:15:00 PM	1	2	3
1/6/2026 1:30:00 PM	2	1	3
1/6/2026 1:45:00 PM	3	1	4
1/6/2026 2:00:00 PM	8	3	11
1/6/2026 2:15:00 PM	3	3	6
1/6/2026 2:30:00 PM	1	6	7
1/6/2026 2:45:00 PM	2	3	5
1/6/2026 3:00:00 PM	7	6	13
1/6/2026 3:15:00 PM	2	6	8
1/6/2026 3:30:00 PM	7	4	11
1/6/2026 3:45:00 PM	1	1	2
1/6/2026 4:00:00 PM	5	5	10
1/6/2026 4:15:00 PM	4	0	4
1/6/2026 4:30:00 PM	3	4	7
1/6/2026 4:45:00 PM	4	2	6
1/6/2026 5:00:00 PM	1	4	5
1/6/2026 5:15:00 PM	2	2	4
1/6/2026 5:30:00 PM	0	2	2
1/6/2026 5:45:00 PM	2	0	2
1/6/2026 6:00:00 PM	3	1	4
1/6/2026 6:15:00 PM	2	1	3
1/6/2026 6:30:00 PM	1	0	1
1/6/2026 6:45:00 PM	1	0	1
1/6/2026 7:00:00 PM	1	0	1
1/6/2026 7:15:00 PM	0	1	1
1/6/2026 7:30:00 PM	0	0	0
1/6/2026 7:45:00 PM	1	2	3
1/6/2026 8:00:00 PM	1	0	1
1/6/2026 8:15:00 PM	1	1	2
1/6/2026 8:30:00 PM	0	0	0
1/6/2026 8:45:00 PM	0	0	0
1/6/2026 9:00:00 PM	0	0	0
1/6/2026 9:15:00 PM	1	0	1
1/6/2026 9:30:00 PM	0	0	0
1/6/2026 9:45:00 PM	0	0	0
1/6/2026 10:00:00 PM	0	1	1
1/6/2026 10:15:00 PM	1	0	1
1/6/2026 10:30:00 PM	0	0	0
1/6/2026 10:45:00 PM	0	0	0
1/6/2026 11:00:00 PM	0	0	0
1/6/2026 11:15:00 PM	0	0	0
1/6/2026 11:30:00 PM	0	0	0
1/6/2026 11:45:00 PM	0	0	0
Total	87	87	174
Percentage	50.0%	50.0%	
Peak Hour	2:45 PM	12:00 PM	2:45 PM
Volume	18	21	37
PHF	0.643	0.656	0.712
Grand Total	159	163	322
Percentage	49.4%	50.6%	

All Traffic Data Services

SITE 2_S - VOLLMER RD SOUTH OF ARROYA LN

Time	NB	SB	Total
1/6/2026	0	1	1
1/6/2026 12:15:00 AM	0	1	1
1/6/2026 12:30:00 AM	1	1	2
1/6/2026 12:45:00 AM	1	1	2
1/6/2026 1:00:00 AM	0	2	2
1/6/2026 1:15:00 AM	0	1	1
1/6/2026 1:30:00 AM	1	0	1
1/6/2026 1:45:00 AM	0	0	0
1/6/2026 2:00:00 AM	0	0	0
1/6/2026 2:15:00 AM	0	0	0
1/6/2026 2:30:00 AM	0	0	0
1/6/2026 2:45:00 AM	0	0	0
1/6/2026 3:00:00 AM	0	1	1
1/6/2026 3:15:00 AM	0	0	0
1/6/2026 3:30:00 AM	1	0	1
1/6/2026 3:45:00 AM	0	1	1
1/6/2026 4:00:00 AM	1	2	3
1/6/2026 4:15:00 AM	2	0	2
1/6/2026 4:30:00 AM	2	6	8
1/6/2026 4:45:00 AM	0	3	3
1/6/2026 5:00:00 AM	5	5	10
1/6/2026 5:15:00 AM	2	3	5
1/6/2026 5:30:00 AM	5	9	14
1/6/2026 5:45:00 AM	4	12	16
1/6/2026 6:00:00 AM	3	10	13
1/6/2026 6:15:00 AM	5	19	24
1/6/2026 6:30:00 AM	13	22	35
1/6/2026 6:45:00 AM	15	20	35
1/6/2026 7:00:00 AM	14	34	48
1/6/2026 7:15:00 AM	25	43	68
1/6/2026 7:30:00 AM	29	43	72
1/6/2026 7:45:00 AM	34	46	80
1/6/2026 8:00:00 AM	34	36	70
1/6/2026 8:15:00 AM	36	31	67
1/6/2026 8:30:00 AM	29	34	63
1/6/2026 8:45:00 AM	35	32	67
1/6/2026 9:00:00 AM	17	30	47
1/6/2026 9:15:00 AM	27	32	59
1/6/2026 9:30:00 AM	19	33	52
1/6/2026 9:45:00 AM	15	34	49
1/6/2026 10:00:00 AM	22	26	48
1/6/2026 10:15:00 AM	29	28	57
1/6/2026 10:30:00 AM	24	32	56
1/6/2026 10:45:00 AM	18	33	51
1/6/2026 11:00:00 AM	17	18	35
1/6/2026 11:15:00 AM	27	21	48
1/6/2026 11:30:00 AM	21	29	50
1/6/2026 11:45:00 AM	29	17	46
Total	562	752	1,314
Percentage	42.8%	57.2%	
Peak Hour	8:00 AM	7:15 AM	7:15 AM
Volume	134	168	290
PHF	0.931	0.913	0.906

All Traffic Data Services

SITE 2_S - VOLLMER RD SOUTH OF ARROYA LN

Time	NB	SB	Total
1/6/2026 12:00:00 PM	29	31	60
1/6/2026 12:15:00 PM	33	22	55
1/6/2026 12:30:00 PM	38	33	71
1/6/2026 12:45:00 PM	24	37	61
1/6/2026 1:00:00 PM	27	22	49
1/6/2026 1:15:00 PM	27	34	61
1/6/2026 1:30:00 PM	32	26	58
1/6/2026 1:45:00 PM	29	21	50
1/6/2026 2:00:00 PM	32	26	58
1/6/2026 2:15:00 PM	35	35	70
1/6/2026 2:30:00 PM	22	39	61
1/6/2026 2:45:00 PM	46	36	82
1/6/2026 3:00:00 PM	42	37	79
1/6/2026 3:15:00 PM	40	30	70
1/6/2026 3:30:00 PM	41	30	71
1/6/2026 3:45:00 PM	45	30	75
1/6/2026 4:00:00 PM	46	38	84
1/6/2026 4:15:00 PM	37	31	68
1/6/2026 4:30:00 PM	35	32	67
1/6/2026 4:45:00 PM	49	33	82
1/6/2026 5:00:00 PM	44	29	73
1/6/2026 5:15:00 PM	50	21	71
1/6/2026 5:30:00 PM	32	22	54
1/6/2026 5:45:00 PM	27	18	45
1/6/2026 6:00:00 PM	31	10	41
1/6/2026 6:15:00 PM	17	18	35
1/6/2026 6:30:00 PM	21	10	31
1/6/2026 6:45:00 PM	23	8	31
1/6/2026 7:00:00 PM	22	15	37
1/6/2026 7:15:00 PM	9	12	21
1/6/2026 7:30:00 PM	12	15	27
1/6/2026 7:45:00 PM	17	5	22
1/6/2026 8:00:00 PM	7	6	13
1/6/2026 8:15:00 PM	13	11	24
1/6/2026 8:30:00 PM	7	3	10
1/6/2026 8:45:00 PM	11	2	13
1/6/2026 9:00:00 PM	7	2	9
1/6/2026 9:15:00 PM	10	6	16
1/6/2026 9:30:00 PM	3	5	8
1/6/2026 9:45:00 PM	5	3	8
1/6/2026 10:00:00 PM	5	3	8
1/6/2026 10:15:00 PM	8	2	10
1/6/2026 10:30:00 PM	5	2	7
1/6/2026 10:45:00 PM	1	0	1
1/6/2026 11:00:00 PM	2	2	4
1/6/2026 11:15:00 PM	0	3	3
1/6/2026 11:30:00 PM	1	2	3
1/6/2026 11:45:00 PM	1	1	2
Total	1,100	859	1,959
Percentage	56.2%	43.8%	
Peak Hour	4:30 PM	2:15 PM	2:45 PM
Volume	178	147	302
PHF	0.890	0.942	0.921
Grand Total	1,662	1,611	3,273
Percentage	50.8%	49.2%	

APPENDIX B

Level of Service Definitions

The following information is referenced from the Highway Capacity Manual: A Guide for Multimodal Mobility Analysis, 7th Edition, Transportation Research Board, 2022: Chapter 19 – Signalized Intersections.

Motorized Vehicle Level of Service (LOS) for Signalized Intersections

Levels of service are defined to represent reasonable ranges in control delay.

LOS A Describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B Describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C Describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual *cycle failures* (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.

LOS D Describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

LOS E Describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

LOS F Describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[a]	
	$v/c \leq 1.0$	$v/c > 1.0$
≤ 10	A	F
> 10 – 20	B	F
> 20 – 35	C	F
> 35 – 55	D	F
> 55 – 80	E	F
> 80	F	F

Note: [a] For approach-based and intersectionwide assessments, LOS is defined solely by control delay.

The following information is referenced from the Highway Capacity Manual: A Guide for Multimodal Mobility Analysis, 7th Edition, Transportation Research Board, 2022: Chapter 20 – Two-Way Stop-Controlled Intersections, Chapter 21 – All-Way Stop-Controlled Intersections, and Chapter 22 - Roundabouts.

Motorized Vehicle Level of Service (LOS) for Unsignalized & Roundabout Intersections

LOS is a quantitative stratification of performance measure(s) representing quality of service. Quality of service describes how well a transportation facility or service operates from a traveler's perspective. LOS is measured on an A – F scale, with LOS A representing the best operating conditions from a traveler's perspective.

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[a]	
	$v/c \leq 1.0$	$v/c > 1.0$
0 – 10	A	F
> 10 – 15	B	F
> 15 – 25	C	F
> 25 – 35	D	F
> 35 – 50	E	F
> 50	F	F

Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

[a] For approaches and intersectionwide assessment, LOS is defined solely by control delay.

APPENDIX C

Capacity Worksheets

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	58	11	95	254	69	17	52	45	17	54	12
Future Vol, veh/h	3	58	11	95	254	69	17	52	45	17	54	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	63	12	103	276	75	18	57	49	18	59	13
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.6	13.5	9.3	9.2
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	4%	23%	20%
Vol Thru, %	46%	81%	61%	65%
Vol Right, %	39%	15%	17%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	114	72	418	83
LT Vol	17	3	95	17
Through Vol	52	58	254	54
RT Vol	45	11	69	12
Lane Flow Rate	124	78	454	90
Geometry Grp	1	1	1	1
Degree of Util (X)	0.175	0.107	0.571	0.133
Departure Headway (Hd)	5.093	4.926	4.523	5.302
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	699	721	795	670
Service Time	3.169	3.003	2.574	3.383
HCM Lane V/C Ratio	0.177	0.108	0.571	0.134
HCM Control Delay, s/veh	9.3	8.6	13.5	9.2
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.6	0.4	3.7	0.5

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	7	111	11	5	161
Future Vol, veh/h	7	7	111	11	5	161
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	8	121	12	5	175

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	313	127	0	0	133	0
Stage 1	127	-	-	-	-	-
Stage 2	186	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	680	924	-	-	1452	-
Stage 1	899	-	-	-	-	-
Stage 2	846	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	677	924	-	-	1452	-
Mov Cap-2 Maneuver	677	-	-	-	-	-
Stage 1	899	-	-	-	-	-
Stage 2	842	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.7	0	0.23
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	782	54	-
HCM Lane V/C Ratio	-	-	0.019	0.004	-
HCM Ctrl Dly (s/v)	-	-	9.7	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	225	15	44	116	34	12	79	72	68	73	11
Future Vol, veh/h	14	225	15	44	116	34	12	79	72	68	73	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	245	16	48	126	37	13	86	78	74	79	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	11.6	10.6	10.1	10.5
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	6%	23%	45%
Vol Thru, %	48%	89%	60%	48%
Vol Right, %	44%	6%	18%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	163	254	194	152
LT Vol	12	14	44	68
Through Vol	79	225	116	73
RT Vol	72	15	34	11
Lane Flow Rate	177	276	211	165
Geometry Grp	1	1	1	1
Degree of Util (X)	0.259	0.397	0.307	0.255
Departure Headway (Hd)	5.26	5.182	5.245	5.565
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	682	696	685	644
Service Time	3.297	3.215	3.28	3.602
HCM Lane V/C Ratio	0.26	0.397	0.308	0.256
HCM Control Delay, s/veh	10.1	11.6	10.6	10.5
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1	1.9	1.3	1

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	7	163	4	12	125
Future Vol, veh/h	9	7	163	4	12	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	8	177	4	13	136

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	341	179	0	0	182	0
Stage 1	179	-	-	-	-	-
Stage 2	162	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	655	863	-	-	1394	-
Stage 1	852	-	-	-	-	-
Stage 2	867	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	648	863	-	-	1394	-
Mov Cap-2 Maneuver	648	-	-	-	-	-
Stage 1	852	-	-	-	-	-
Stage 2	858	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.07	0	0.67
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	728	158	-
HCM Lane V/C Ratio	-	-	0.024	0.009	-
HCM Ctrl Dly (s/v)	-	-	10.1	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	60	11	99	264	72	18	54	47	18	56	12
Future Vol, veh/h	3	60	11	99	264	72	18	54	47	18	56	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	65	12	108	287	78	20	59	51	20	61	13
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.7	14.2	9.4	9.3
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	4%	23%	21%
Vol Thru, %	45%	81%	61%	65%
Vol Right, %	39%	15%	17%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	119	74	435	86
LT Vol	18	3	99	18
Through Vol	54	60	264	56
RT Vol	47	11	72	12
Lane Flow Rate	129	80	473	93
Geometry Grp	1	1	1	1
Degree of Util (X)	0.185	0.111	0.598	0.139
Departure Headway (Hd)	5.152	4.984	4.554	5.369
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	689	712	790	661
Service Time	3.236	3.067	2.608	3.459
HCM Lane V/C Ratio	0.187	0.112	0.599	0.141
HCM Control Delay, s/veh	9.4	8.7	14.2	9.3
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.7	0.4	4	0.5

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	7	115	12	5	167
Future Vol, veh/h	10	7	115	12	5	167
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	8	125	13	5	182

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	324	132	0	0	138	0
Stage 1	132	-	-	-	-	-
Stage 2	192	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	670	918	-	-	1446	-
Stage 1	895	-	-	-	-	-
Stage 2	840	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	667	918	-	-	1446	-
Mov Cap-2 Maneuver	667	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	837	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.91	0	0.22
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	752	52	-
HCM Lane V/C Ratio	-	-	0.025	0.004	-
HCM Ctrl Dly (s/v)	-	-	9.9	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	11.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	234	16	46	121	35	12	82	75	71	76	11
Future Vol, veh/h	15	234	16	46	121	35	12	82	75	71	76	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	254	17	50	132	38	13	89	82	77	83	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	12.1	10.9	10.4	10.8
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	6%	23%	45%
Vol Thru, %	49%	88%	60%	48%
Vol Right, %	44%	6%	17%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	169	265	202	158
LT Vol	12	15	46	71
Through Vol	82	234	121	76
RT Vol	75	16	35	11
Lane Flow Rate	184	288	220	172
Geometry Grp	1	1	1	1
Degree of Util (X)	0.273	0.42	0.325	0.27
Departure Headway (Hd)	5.347	5.253	5.325	5.654
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	670	686	674	634
Service Time	3.392	3.293	3.368	3.701
HCM Lane V/C Ratio	0.275	0.42	0.326	0.271
HCM Control Delay, s/veh	10.4	12.1	10.9	10.8
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.1	2.1	1.4	1.1

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	2	170	7	12	130
Future Vol, veh/h	11	2	170	7	12	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	2	185	8	13	141

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	356	189	0	0	192	0
Stage 1	189	-	-	-	-	-
Stage 2	167	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	642	853	-	-	1381	-
Stage 1	844	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	636	853	-	-	1381	-
Mov Cap-2 Maneuver	636	-	-	-	-	-
Stage 1	844	-	-	-	-	-
Stage 2	853	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.56	0	0.64
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	662	152	-
HCM Lane V/C Ratio	-	-	0.021	0.009	-
HCM Ctrl Dly (s/v)	-	-	10.6	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	60	11	100	264	72	19	55	47	18	57	12
Future Vol, veh/h	3	60	11	100	264	72	19	55	47	18	57	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	65	12	109	287	78	21	60	51	20	62	13
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.7	14.3	9.5	9.4
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	4%	23%	21%
Vol Thru, %	45%	81%	61%	66%
Vol Right, %	39%	15%	17%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	121	74	436	87
LT Vol	19	3	100	18
Through Vol	55	60	264	57
RT Vol	47	11	72	12
Lane Flow Rate	132	80	474	95
Geometry Grp	1	1	1	1
Degree of Util (X)	0.189	0.112	0.601	0.141
Departure Headway (Hd)	5.164	4.996	4.563	5.379
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	688	709	787	659
Service Time	3.251	3.083	2.621	3.472
HCM Lane V/C Ratio	0.192	0.113	0.602	0.144
HCM Control Delay, s/veh	9.5	8.7	14.3	9.4
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.7	0.4	4.1	0.5

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	9	115	15	6	167
Future Vol, veh/h	19	9	115	15	6	167
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	10	125	16	7	182

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	328	133	0	0	141	0
Stage 1	133	-	-	-	-	-
Stage 2	195	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	667	916	-	-	1442	-
Stage 1	893	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	663	916	-	-	1442	-
Mov Cap-2 Maneuver	663	-	-	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	834	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.16	0	0.26
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	728	62	-
HCM Lane V/C Ratio	-	-	0.042	0.005	-
HCM Ctrl Dly (s/v)	-	-	10.2	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	9	9	0	0	11
Future Vol, veh/h	4	9	9	0	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	10	10	0	0	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	10	0	-	0	28	10
Stage 1	-	-	-	-	10	-
Stage 2	-	-	-	-	18	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1610	-	-	-	987	1072
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	1004	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1610	-	-	-	984	1072
Mov Cap-2 Maneuver	-	-	-	-	984	-
Stage 1	-	-	-	-	1010	-
Stage 2	-	-	-	-	1004	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	2.23	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	554	-	-	-	1072
HCM Lane V/C Ratio	0.003	-	-	-	0.011
HCM Ctrl Dly (s/v)	7.2	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	234	16	47	121	35	13	82	70	71	76	11
Future Vol, veh/h	15	234	16	47	121	35	13	82	70	71	76	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	254	17	51	132	38	14	89	76	77	83	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	12	10.9	10.4	10.8
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	6%	23%	45%
Vol Thru, %	50%	88%	60%	48%
Vol Right, %	42%	6%	17%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	165	265	203	158
LT Vol	13	15	47	71
Through Vol	82	234	121	76
RT Vol	70	16	35	11
Lane Flow Rate	179	288	221	172
Geometry Grp	1	1	1	1
Degree of Util (X)	0.267	0.419	0.326	0.269
Departure Headway (Hd)	5.359	5.242	5.313	5.648
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	669	686	675	635
Service Time	3.405	3.28	3.353	3.693
HCM Lane V/C Ratio	0.268	0.42	0.327	0.271
HCM Control Delay, s/veh	10.4	12	10.9	10.8
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.1	2.1	1.4	1.1

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	3	170	10	14	130
Future Vol, veh/h	17	3	170	10	14	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	3	185	11	15	141

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	362	190	0	0	196	0
Stage 1	190	-	-	-	-	-
Stage 2	172	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	637	852	-	-	1377	-
Stage 1	842	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	629	852	-	-	1377	-
Mov Cap-2 Maneuver	629	-	-	-	-	-
Stage 1	842	-	-	-	-	-
Stage 2	848	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.68	0	0.74
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	655	175	-
HCM Lane V/C Ratio	-	-	0.033	0.011	-
HCM Ctrl Dly (s/v)	-	-	10.7	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	10	7	0	0	7
Future Vol, veh/h	12	10	7	0	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	11	8	0	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	8	0	-	0	45	8
Stage 1	-	-	-	-	8	-
Stage 2	-	-	-	-	37	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1613	-	-	-	966	1075
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	986	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1613	-	-	-	958	1075
Mov Cap-2 Maneuver	-	-	-	-	958	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	986	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	3.95	0	8.37
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	982	-	-	-	1075
HCM Lane V/C Ratio	0.008	-	-	-	0.007
HCM Ctrl Dly (s/v)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

APPENDIX D

List of Adjacent Traffic Studies

Pursuant to Section B.8 of the El Paso County Engineering Criteria Manual, there are zero (0) known traffic studies for the area of study completed by SM Rocha, LLC and other traffic engineering consultants over the last five (5) years.

However, below is a list of all traffic studies completed by SM Rocha, LLC (and known traffic studies completed by other traffic engineering consultants) within the last five (5) years approximately one (1) mile south of the area of study;

- Foursquare at Sterling Ranch East: Traffic Technical Memorandum (PCD File No. PUDSP227), LSC Transportation Consultants, Inc., April 20, 2023.
- Percheron Master Plan Amendment: Traffic Impact Study (PDZL-25-0004), SM ROCHA, LLC, October 22, 2025.
- Retreat at PrairieRidge Filings 1-3 Preliminary Plan & Rezones: Traffic Impact Study (PCD File No. P2313, P2314, P2316, & SP239), SM ROCHA, LLC, June 6, 2024.
- Retreat at PrairieRidge Filing 1: Transportation Memorandum (PCD File No. 257), SM ROCHA, LLC, December 10, 2025.
- Retreat at PrairieRidge Filing 2: Transportation Memorandum (PCD File No. 259), SM ROCHA, LLC, January 15, 2026.
- Retreat at PrairieRidge Filing 3: Traffic Generation Analysis (PCD File No. SF2520), SM ROCHA, LLC, August 15, 2025.
- Retreat at PrairieRidge Filing No. 4 Final Plat: Transportation Memorandum, SM ROCHA, LLC, August 11, 2025.
- Schmidt Property Preliminary Plan: Traffic Impact Study, SM ROCHA, LLC, June 11, 2026.
- Sterling Ranch East Community Park: Transportation Memorandum, LSC Transportation Consultants, Inc., November 3, 2025.
- Sterling Ranch Filing No. 5: Traffic Impact Study, LSC Transportation Consultants, Inc., November 15, 2023.
- Sterling Ranch East – Filing 5 Rezone & Preliminary Plan: Traffic Impact Study (PCD File No. P237 & SP235), LSC Transportation Consultants, Inc., January 15, 2024.
- Sterling Ranch East Filing No. 6: Traffic Impact Study (PCD Filing No. P2414), LSC Transportation Consultants, Inc., November 12, 2024.
- Sterling Ranch East Filing No. 7 Site Rezone: Master Traffic Impact Study Addendum/Technical Memorandum (PCD File No. SKP241 & P2415), LSC Transportation Consultants, Inc., November 18, 2024.
- Sterling Ranch East, Filing 7: Traffic Impact Study, SM ROCHA, LLC, August 28, 2026.
- Sterling Ranch East Filing No. 8: Traffic Impact Study (PCD File No. SF2526 & PUDSP256), LSC Transportation Consultants, Inc., October 28, 2025.
- Sterling Ranch Townhomes: Traffic Impact Study, SM ROCHA, LLC, April 21, 2026.
- Villages at Sterling Ranch: Traffic Impact Study (PCD File No. PUDSP226), LSC Transportation Consultants, Inc., August 21, 2024.
- Retreat at TimberRidge Filing No. 3: Traffic Technical Memorandum (PCD File No. SF2241), LSC Transportation Consultants, Inc., September 28, 2023.
- Retreat at TimberRidge Filing No. 4: Traffic Technical Memorandum, LSC Transportation Consultants, Inc., February 21, 2024.