

comments on the TIS have been provided in the rezone application CS233.

# Traffic Impact Study

Mayberry Communities

Filing 4 Traffic Impact Study

*PCD File No. CS233 and SF2317*

*El Paso County, Colorado*

*Updated*

August 30, 2023

# Traffic Impact Studies

## **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.

Joshua Hoffmann, P.E. # 0062304

*[Name, P.E. #]*

August 30, 2023

Date

## **Developer's Statement**

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

\_\_\_\_\_  
*[Name, Title]*

*[Business Name]*

*[Address]*

\_\_\_\_\_  
Date

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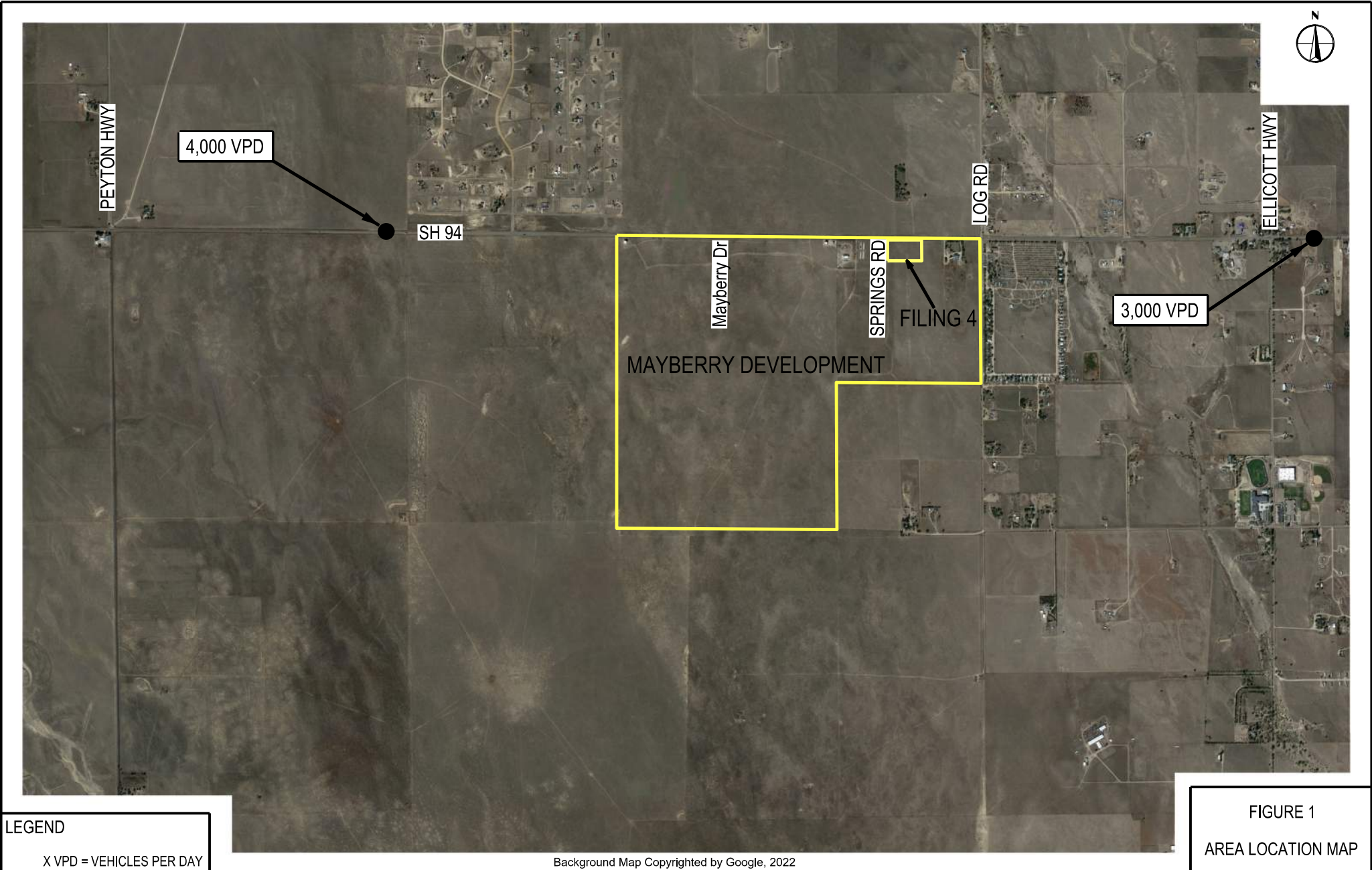
# Introduction

Mayberry Communities have retained HDR Engineering, Inc. to perform a Traffic Impact Study (TIS) for the proposed Filing 4 development located in the southeast quadrant of Springs Road and SH 94, as shown in Figure 1. The development is currently a Planned Unit Development (PUD) and is being rezoned to commercial services (CS). This study serves as part of an update to the approved *2020 - June - Ellicott Town Center Commercial Rezone TIS Report (LSC 194060) (Ref 1)* and uses assumptions and traffic data from the *2022 - September - Mayberry Filing No. 3 (Ref 2)* TIS.

Filing 4 is part of the broader proposed Mayberry Communities Development just west of Ellicott between Peyton Highway and Log Road. This community is being developed in phases, and this report details the traffic impacts only due to the Filing 4 development phase.

The project site is vacant, and the development is expected to be complete by 2026. The development will comprise eight lots totaling 88 thousand square feet of light industrial space. Discussing with the County and Mayberry, light industrial was selected because the type of land use will be warehouse-type facilities that share office/retail space. Typical business includes auto/boat storage, mini-warehouse, repair/rental shop, and recreational vehicle repair. These businesses fall outside manufacturing and closely align with light industrial. Any business that fall outside the anticipated land use type will go through the appropriate approvals to gain county conditional approval before building their business.

The current connections to the Mayberry Community Development are at Mayberry Drive (formerly New Log Road) and Springs Road. Mayberry Drive is the main entrance to the development, which provides full movement and is located on the west side of the development. Springs Road, located on the east side of the development, is a Right-In Right-Out connection. The impact that Filing 4 will have on the network is anticipated to be negligible and Cattlemen Run will remain as a Local Street.



LEGEND  
X VPD = VEHICLES PER DAY

FIGURE 1  
AREA LOCATION MAP

Background Map Copyrighted by Google, 2022

# Analysis Assumptions

This traffic impact study uses the Highway Capacity Manual 6 (HCM) (see Appendix A for a brief description of the level of service) as a basis for the capacity analysis as well as primary data and engineering judgment, which is required to estimate background traffic, pass-by capture, and internal capture reductions. These assumptions and engineering judgments are further described in the following paragraphs.

## Directional Distribution

Existing traffic projections are based on data collected for the development of the *2022 - September - Mayberry Filing No. 3*. Turning movement counts were collected for the Peyton Highway/SH 94 intersection (west of Mayberry Communities) and the Ellicott Highway/SH 94 intersection (east of Mayberry Communities).

This study follows the assumption established in the *2022 - September - Mayberry Filing No. 3* that 90% of vehicle trips go to and come from points west of the development, while 10% go to and come from points east of the development. Following the 90/10 assumption, future traffic is then assumed to be proportionally to the turning movement counts collected at Peyton Highway and Ellicott Highway intersections. These counts provide the basis for the overall directional distribution of the generated traffic approaching and departing the project site at these two adjacent intersections, as summarized in Table 1.

**Table 1: Forecasted Overall Directional Distribution Site-Oriented Traffic**

Direction/Roadway	AM % Overall Distribution	PM % Overall Distribution
SH 94 W	82.4%	76.6%
SH 94 E	5.3%	6.0%
Peyton Hwy S	2.3%	5.9%
Peyton Hwy N	5.3%	7.5%
Ellicott Hwy S	4.0%	2.3%
Ellicott Hwy N	0.6%	1.7%

Based on current land use at the site, this study takes a careful approach, assuming no use of pass-by, pedestrian, and bicycle reductions. Given the unique nature of the site and the desire to provide a comprehensive understanding of potential impacts, the analysis did not assume internal capture. HDR has not found other studies in the area.

## **Filing 3 Roadway Improvements**

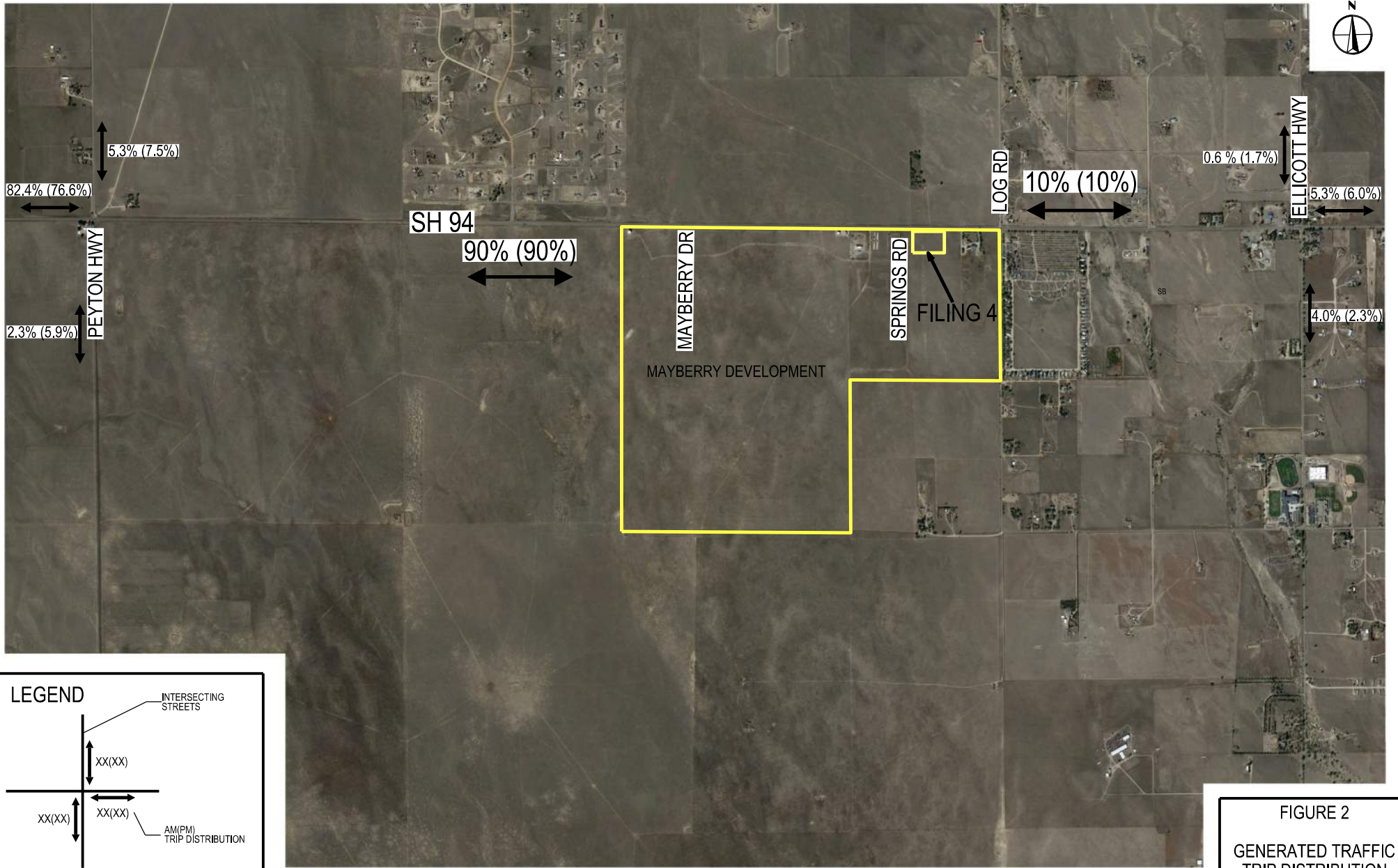
The LOS analysis is based on the proposed improvements from *2022 - September - Mayberry Filing No. 3*. The roadway network proposed in Filing 3 is assumed to be in place at the time of completion for Filing 4.

Mayberry Drive and SH 94 will be an unsignalized intersection with stop control on the northbound approach. The approaches will be constructed according to the following parameters:

- One left-turn lane and one right-turn lane for the northbound approach on Mayberry Drive
- A through lane and a dedicated right-turn turn lane on the eastbound approach of SH 94
- A dedicated left-turn lane and one through lane on the westbound approach of SH 94

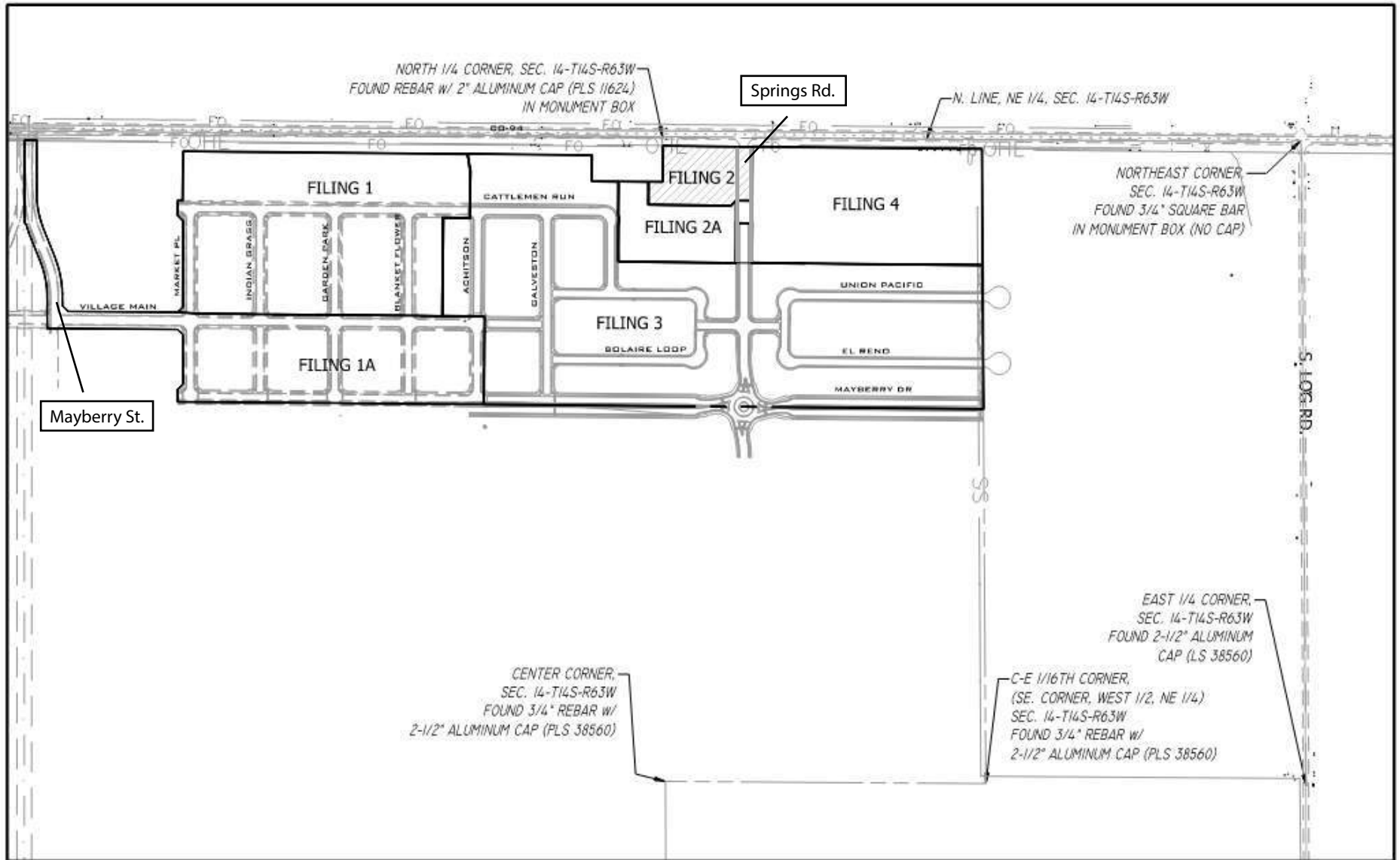
The ability of the roadway network to accommodate the generated traffic of Filing 4 is contingent upon the completion of an internal roadway network comprised of Village Main, Mayberry Drive, and the construction of Mayberry Drive and Springs Road.





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FIGURE 2  
GENERATED TRAFFIC  
TRIP DISTRIBUTION



**SITE MAP**  
SCALE 1" = 500'

FIGURE 3: FILING 4 CONCEPTUAL SITE PLAN

# Existing Thoroughfare System

As indicated on the area location map (Figure 1) and the conceptual site plan (Figure 3), the project is located in the southeast quadrant of Mayberry Drive and SH 94, near Ellicott, CO.

Average daily traffic estimates on SH 94 were obtained from the Colorado Department of Transportation (CDOT) Online Transportation Information System (OTIS) (Ref. 3) and turning movement counts provided in the previous TIAS dated September 2022. To adequately describe these roadways, further characterization is provided for each adjacent major roadway to the development.

## **SH 94**

CDOT classifies SH 94 as a functional type Minor Arterial and an access control type as a Non-Rural Principal Highway (NR-A) west of County Road 493 and a Regional Highway (R-A) east of County Road 493. The posted speed limit is 65 miles per hour near the development. An OTIS straight-line diagram of SH 94 near the project site is provided in Appendix A. According to CDOT's traffic volume database, the existing daily traffic volume on SH 94 is listed below:

- 4,000 vpd between Peyton Highway and Ellicott Highway
- 3,000 vpd east of Ellicott Highway

## **Peyton Highway**

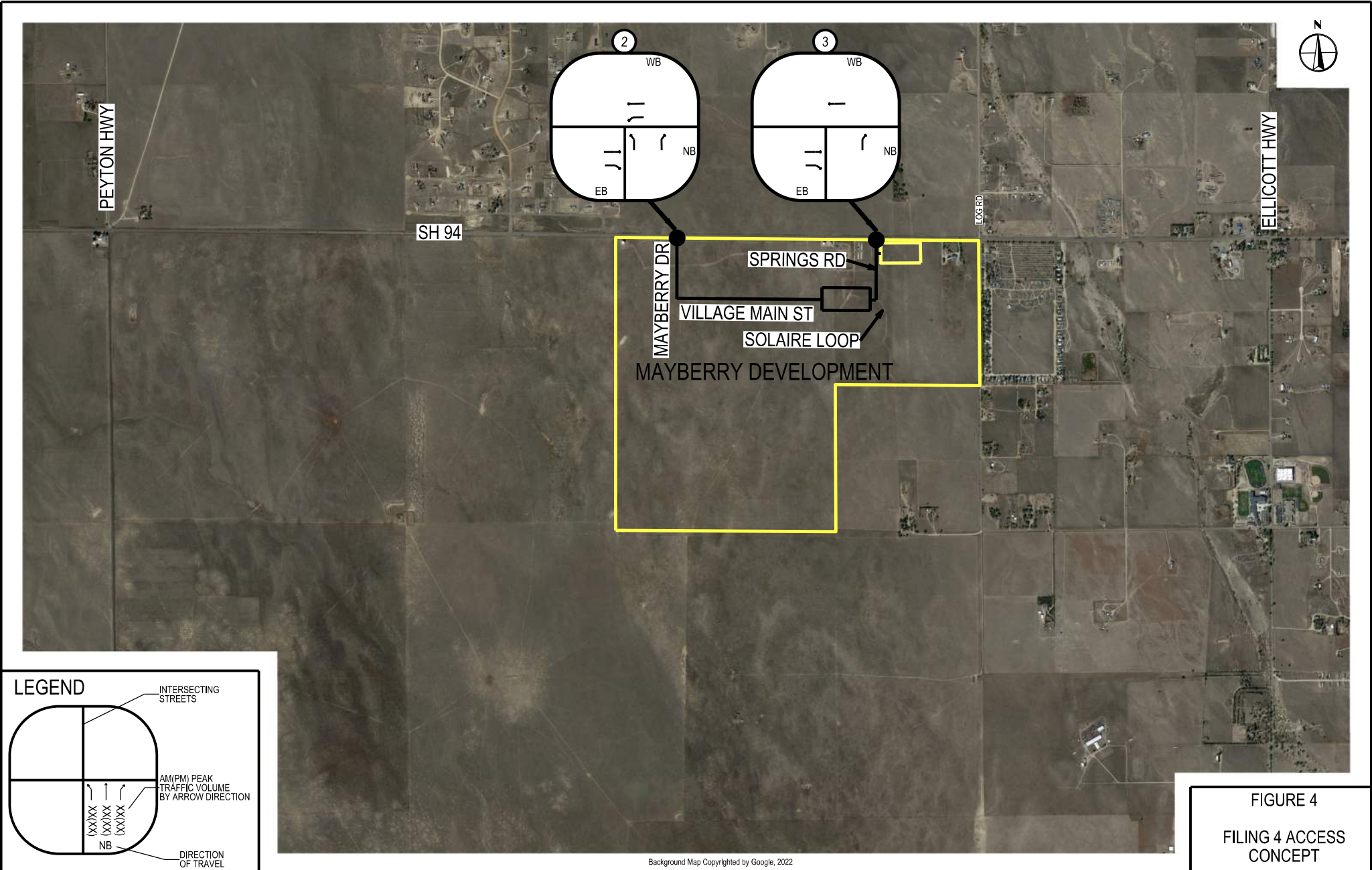
The El Paso County 2040 Major Transportation Corridor Plan (MTCP)(Ref. 4) classifies Peyton Highway as a Minor Arterial and has a speed limit of 55 mph.

## **Ellicott Highway**

The El Paso County MTCP classifies Ellicott Highway as a Minor Arterial and has a speed limit of 55 mph.

# Site and Access Characteristics

As shown in Figure 4, access to Filing 4 will be provided via one full-movement driveway on Springs Road.



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FIGURE 4  
 FILING 4 ACCESS  
 CONCEPT



# Traffic Analysis

To assess the traffic impacts of the proposed development, two (2) time periods (AM Peak Hour and PM Peak Hour) and three (3) travel conditions were evaluated:

- 2026 Opening Year
- 2026 Forecasted plus Previous Filing 3 Background Traffic Conditions
- 2026 Background plus Site-Generated Traffic Conditions

Intersections in the vicinity of the site are considered to be the locations of principal concern because they are the locations of the highest traffic conflict and delay. The standard used to evaluate traffic conditions at intersections is level of service (LOS), which is a qualitative measure of the effect of a number of factors such as speed, the volume of traffic, geometric features, traffic interruptions, freedom to maneuver, safety, driving comfort, convenience, and operating cost.

## 2026 Forecasted Traffic Conditions

The analysis of existing traffic conditions required the collection of data on the major roadways and intersections. Traffic counts for the following study area intersections were collected in March and August 2022 on a typical weekday while schools were in session unless otherwise noted:

- Peyton Highway and SH 94
- Ellicott Highway and SH 94

The existing TMC values were grown by a one (1) percent growth rate provided by OTIS to reach a 2026 forecast year. This process used trends established by prior data for the major roadways and intersections near the project site. The adjusted 2026 existing turning movement counts are provided in Figure 5. Descriptions of existing study intersections are discussed in the following sections as well as the forecasted LOS for the Year 2026. Table 2 provides the summary of both LOS and delay.

### **Peyton Highway and SH 94**

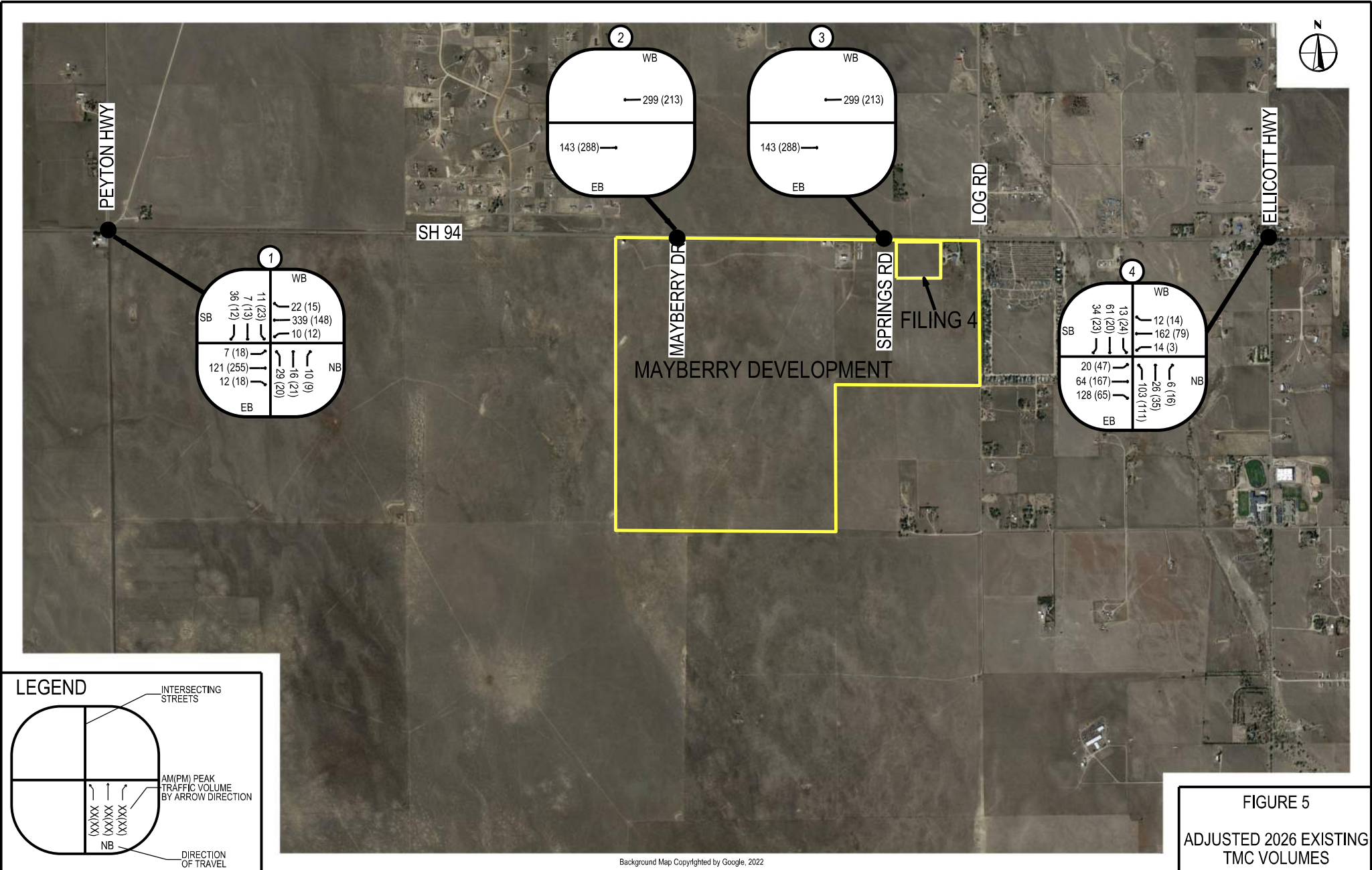
Peyton Highway and SH 94 is currently an unsignalized intersection with stop controls on the northbound and southbound approaches. The northbound and southbound approaches of Peyton Highway provide one left-turn/through/right-turn shared lane. The eastbound and westbound approaches of SH 94 provide one left-turn lane and a through/right-turn shared lane. The northbound leg of the intersection currently operates at LOS B under the existing traffic conditions during both the AM and PM peak periods.

### **Ellicott Highway and SH 94**

Ellicott Highway and SH 94 is currently an unsignalized intersection with stop controls on the northbound and southbound approaches. The northbound and southbound approaches of Ellicott Highway provide one left-turn/through/right-turn shared lane. The eastbound and westbound approaches of SH 94 provide one left-turn lane and a through/right-turn shared lane. The northbound leg of the intersection currently operates at LOS C under the existing traffic conditions during both the AM and PM peak periods.

**Table 2: 2026 Existing Forecasted Level of Service Summary**

Intersection	2026 Existing	
	AM	PM
Peyton Highway and SH 94	B (14.2)	B (13.6)
Ellicott Highway and SH 94	C (16.4)	C (15.5)



**FIGURE 5**  
ADJUSTED 2026 EXISTING  
TMC VOLUMES

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# 2026 Existing plus Previous Filing Background Traffic Conditions

The generated traffic from the previous Filings 1, 2, and 3 are assumed to be part of the background traffic. The proposed access roads that will accommodate this traffic are studied for the background traffic and the development traffic to follow. The additional intersections that will be built as part of Mayberry Filing 3 are listed below:

- Mayberry Drive and SH 94
- Spring Road and SH 94

## Filings 1, 2, and 3 Site-Generated Traffic

Determining the site-generated traffic, or the traffic generated due to the development of the previous Filings is the goal of this analysis. Unadjusted daily trips and the peak hour traffic associated with these Filings were estimated using recommendations and data contained in the Institute of Transportation Engineers Trip Generation, 11th Edition (Ref. 6).

These previous Filings generate approximately 2,420 unadjusted daily trips upon build-out. Table 3 provides a detailed traffic generation summary related to the assumed land use plan.

**Table 3: Summary of Unadjusted Daily and Peak Hour Trip Generation from Previous Filings**

Site	Land Use	Land Use Code	Size	Trip Generation Method <sup>1</sup>	24-Hour Two-Way Volume	AM Peak Hour		PM Peak Hour	
						Enter	Exit	Enter	Exit
Filing 1/1A/3	Single Family Detached Housing	210	240 DU	Fitted Curve	2,257	43	123	143	84
Filing 2	General Light Industrial	110	30 KSF	Fitted Curve	163	21	3	2	15
Total					2,420	64	126	145	99

<sup>1</sup>Trip Generation is based on the higher of the ITE's average rate and fitted curve method for all land uses.

The LOS summary for the trips generated from the previous Filings are discussed below. Table 4 provides the summary of both LOS and delay. Background plus Filing 3 volumes are shown in Figure 5.

## Peyton Highway and SH 94

The intersection will operate at LOS C under 2026 Forecasted plus Previous Filing 3 Background Traffic Conditions during the AM and PM peak periods.



**Mayberry Drive and SH 94**

Mayberry Drive and SH 94 will be an unsignalized intersection with stop controls on the northbound approach. The northbound approach of Mayberry Drive will provide one left-turn lane and one right-turn lane. The eastbound approach of SH 94 will provide a through lane and a dedicated right-turn lane. The westbound approach of SH 94 will provide a dedicated left-turn lane and one through lane. These improvements will be built concurrently with Filings 1, 2, and 3 and will be in place by the time Filing 4 is occupied. The intersection will operate at LOS B under 2026 Forecasted plus the full build out of Filing 3 Background Traffic Conditions during the AM and PM peak periods.

**Springs Road and SH 94**

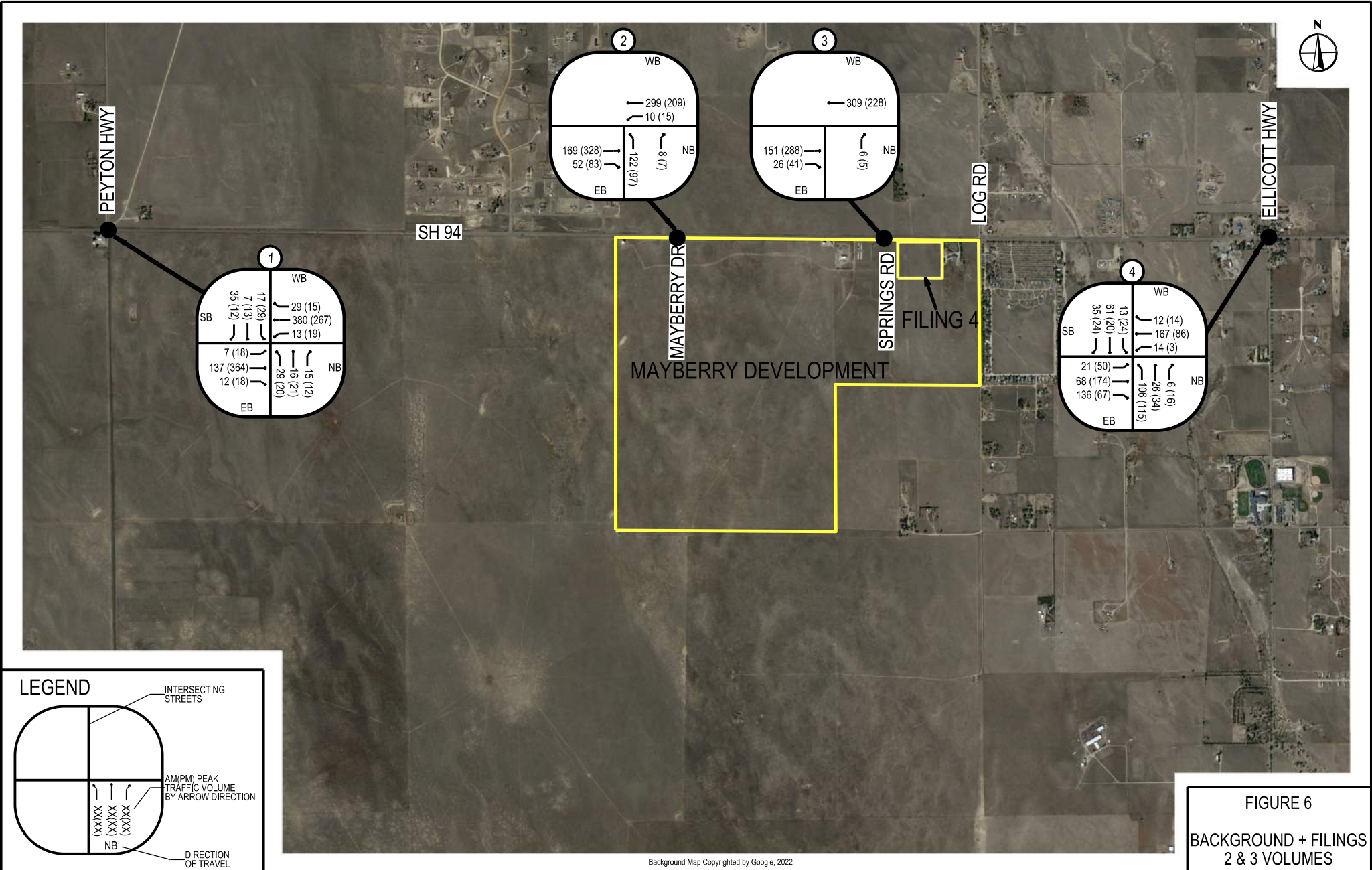
Under CDOT's permitting requirements, a right-turn deceleration lane was constructed in 2022. Concurrently, CDOT has prohibited the left-turn movement from westbound SH 94 to Spring Road. With this intersection only being a RIRO type facility, the intersection is anticipated to operate at LOS A and B under 2026 Forecasted plus Previous Filing 3 Background Traffic Conditions during the AM and PM peak periods, respectively.

**Ellicott Highway and SH 94**

The intersection will operate at LOS C under 2026 Forecasted plus Previous Filing 3 Background Traffic Conditions during the AM and PM peak periods.

**Table 4: Filing 1, 2 and 3 Level of Service Summary**

Intersection	2026 Background + Filings 1,2 & ,3	
	AM	PM
Peyton Highway and SH 94	C (15.1)	C (18.4)
Mayberry Drive and SH 94	B (14.6)	C (15.6)
Springs Road and SH 94	A (9.1)	B (10.0)
Ellicott Highway and SH 94	C (17.0)	C (16.7)



**FIGURE 6**  
**BACKGROUND + FILINGS**  
**2 & 3 VOLUMES**

PEYTON HWY

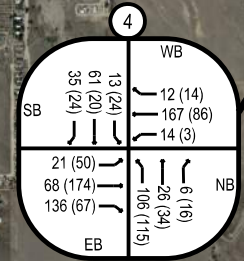
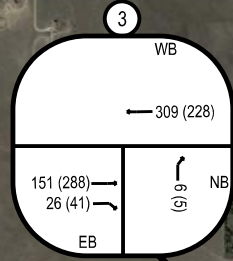
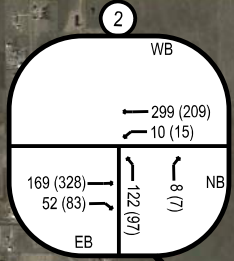
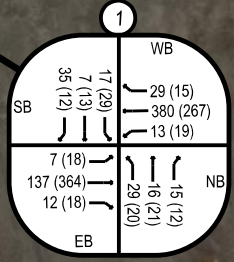
SH 94

MAYBERRY DR

SPRINGS RD

LOG RD

ELLICOTT HWY



# 2026 Conditions with Filing 4 Site-Generated Traffic

The proposed Filing 4 is anticipated to be completed in 2026. The forecasted traffic was projected using available information and was used to assess the major roadway impacts and evaluate potential improvements. All analysis assumes the completion of Mayberry Drive and Springs Road improvements upon which previous filings are contingent.

## Filing 4 Site Generated Traffic

Unadjusted total trips per day and the peak hour traffic associated with the project were estimated using recommendations and data contained in the Institute of Transportation Engineers Trip Generation, 11th Edition.

Filing 4 is anticipated to consist of general light industrial development, which according to ITE, “has an emphasis on activities other than manufacturing” and supports activities such as “printing, material testing, and assembly of data processing equipment.” Light industrial development generates more trips per floor area than related uses such as Industrial Park and Manufacturing, so light industrial is chosen as the most conservative choice given uncertainty about the commercial uses of Filing 4 land.

The proposed Filing 4 development will generate approximately 381 unadjusted daily trips upon build-out. Table 5 provides a detailed trip generation summary based on the land use plan.

**Table 5: Summary of Unadjusted Daily and Peak Hour Trip Generation from Filing 4**

Site	Land Use	Land Use Code	Size	Trip Generation Method <sup>1</sup>	24-Hour Two-Way Volume	AM Peak Hour		PM Peak Hour	
						Enter	Exit	Enter	Exit
Filing 4	General Light Industrial	110	88 KSF	Fitted Curve	381	56	8	5	32

<sup>1</sup>Trip Generation is based on the higher of the ITE’s average rate and fitted curve method for all land uses.

The LOS summary for the trips generated from Filing 4 are discussed below. Table 6 provides the summary of both LOS and delay. Filing 4 generated volumes are shown in Figure 7, and Background + Filing 3 + Filing 4 volumes are shown in Figure 8.

### Mayberry ADT Threshold

The 2020 - June - Ellicott Town Center Commercial Rezone TIS Report (LSC 194060) stated that a volume of over 3,000 vehicles per day on Mayberry Drive would require the couplet southbound lanes built. Traffic generated from the previous Filing plus Filing 4 would remain under that threshold.

**Peyton Highway and SH 94**

The intersection will operate at LOS C under 2026 site plus forecasted traffic conditions during the AM and PM peak periods. There are no improvements recommended at this intersection as part of this TIS.

**Mayberry Drive and SH 94**

The intersection will operate at LOS C under 2026 site plus forecasted traffic conditions during the AM and PM peak periods with the improvements identified in the previous section. Assuming the connections at both Mayberry Drive and Springs Road are provided, there are no improvements recommended at this intersection as part of this TIS.

**Springs Road and SH 94**

The intersection will operate at LOS A and B under 2026 site plus forecasted traffic conditions during the AM and PM peak periods, respectively. Assuming the connections at both Mayberry Drive and Springs Road are provided, there are no improvements recommended at this intersection as part of this TIS.

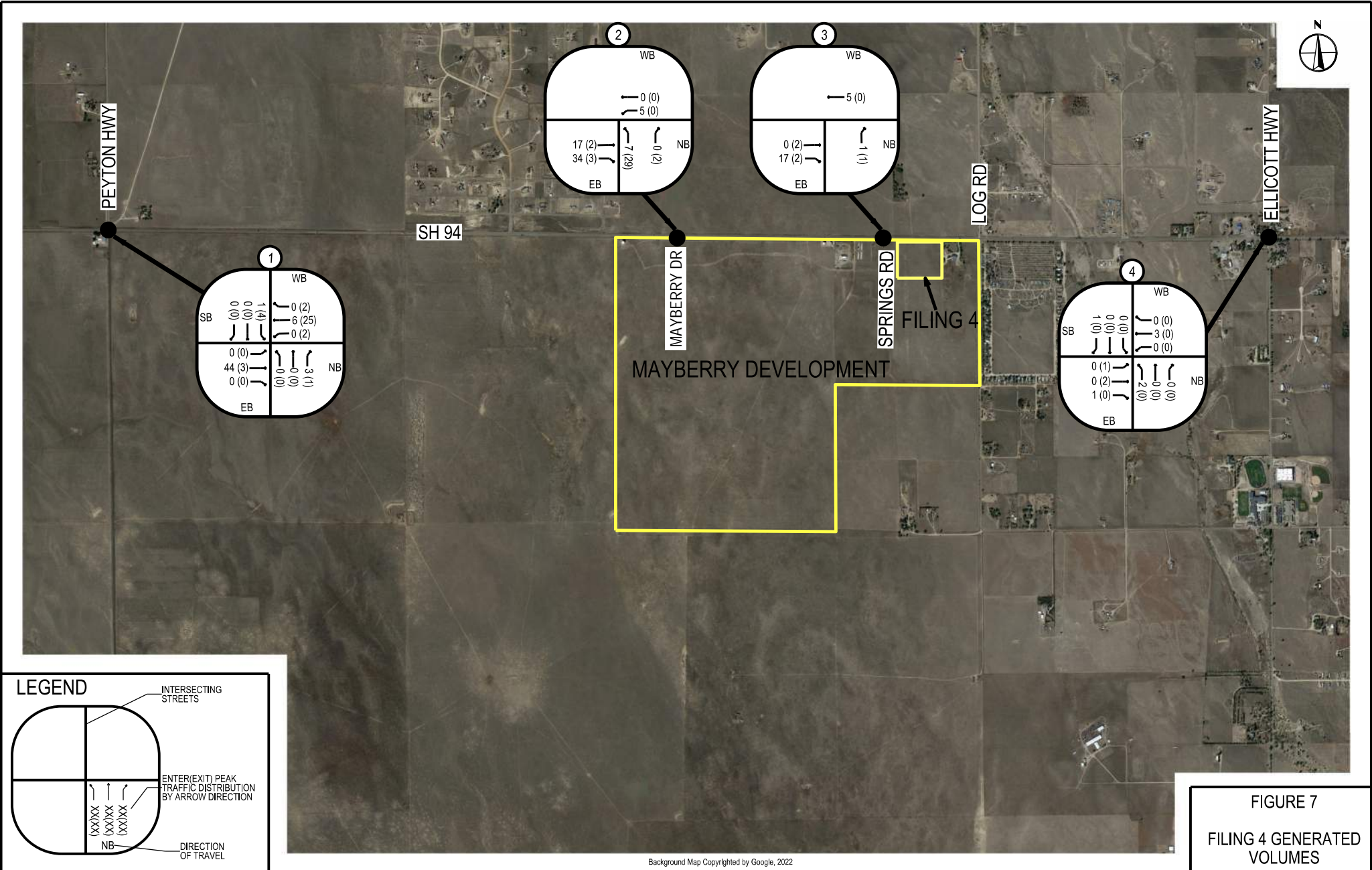
**Ellicott Highway and SH 94**

The intersection will operate at LOS C under 2026 site plus forecasted traffic conditions during the AM and PM peak periods. There are no improvements recommended at this intersection as part of this TIS.

**Table 6: Filing 4 Level of Service Summary**

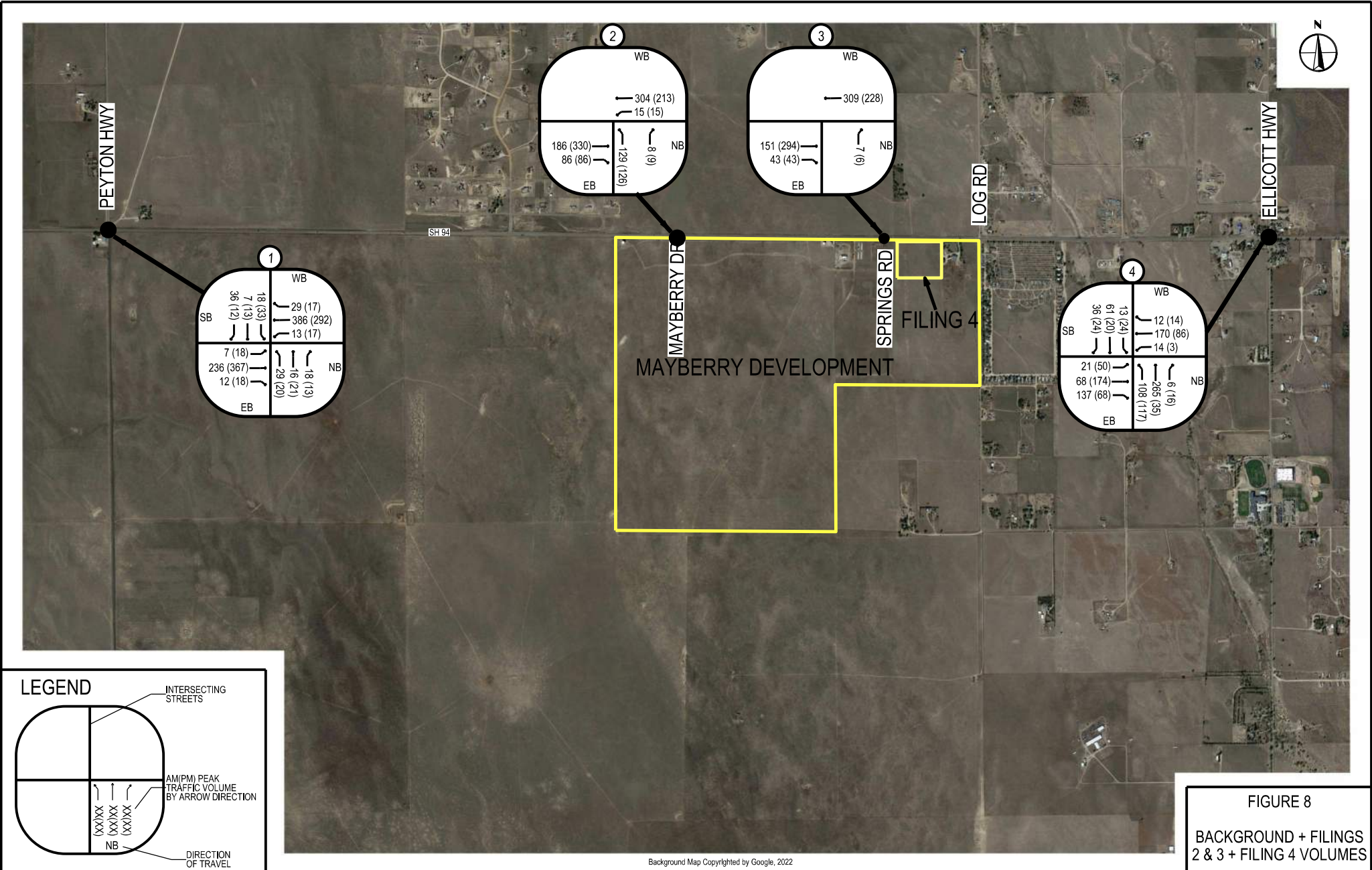
Intersection	2026 Background + Previous Filings + Filing 4	
	AM	PM
Peyton Highway and SH 94	C (17.0)	C (19.8)
Mayberry Drive and SH 94	C (15.3)	C (16.4)
Springs Road and SH 94	A (9.1)	B (10.2)
Ellicott Highway and SH 94	C (17.3)	C (16.5)



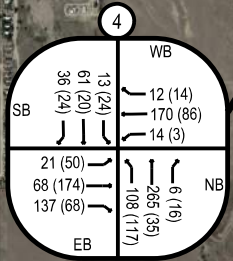
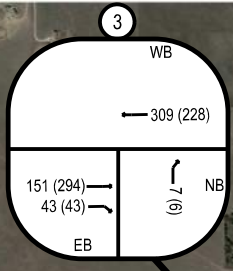
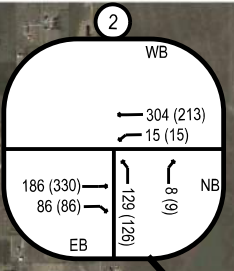


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**FIGURE 7**  
**FILING 4 GENERATED VOLUMES**



**FIGURE 8**  
**BACKGROUND + FILINGS**  
**2 & 3 + FILING 4 VOLUMES**



# Summary of Findings

Intersections adjacent to the development on SH 94 will operate at LOS C or better for all scenarios analyzed in this TIA. Therefore, the infrastructure that is anticipated to be in place by the time Filing 3 and Filing 4 are developed and occupied will have the capacity to handle the generated traffic. No improvements are needed for the addition of Filing 4 to the Mayberry Communities Development. Intersection LOS and delay results are presented in Table 7.

**Table 7: Level of Service Summary**

Intersection	2026 Existing		2026 Background + Filings 1,2 & ,3		2026 Background + Filing 4	
	AM	PM	AM	PM	AM	PM
Highest delay minor street approach is reported for all unsignalized intersections.						
Peyton Highway and SH 94	B (14.2)	B (13.6)	C (15.1)	C (18.4)	C (17.0)	C (19.8)
Mayberry Drive and SH 94	-	-	B (14.6)	B (15.6)	C (15.3)	C (16.4)
Springs Road and SH 94	-	-	A (9.1)	B (10.0)	A (9.1)	B (10.2)
Ellicott Highway and SH 94	C (16.4)	C (15.5)	C (17.0)	C (16.7)	C (17.3)	C (16.5)

## CDOT Permits

Because the posted speed limit on SH 94 is greater than 40 MPH, auxiliary turn lanes may be necessary for public safety and traffic operations. These requirements have been explored in the previously submitted TIS and are currently being implemented at Mayberry Drive and SH 94 and have been completed in 2022 for Springs Road and SH 94.

## Transportation Impact Fees

The impact that Filing 4 will have on the surrounding network is expected to be negligible, according to the traffic analysis discussed in the previous section. With the anticipation of intersections operating at acceptable levels of service, no impact fees are expected. However, any deviation of the expected land use or types of business will require a revaluation of the impacts.

# References

1. 2020 - June - Ellicott Town Center Commercial Rezone TIS Report, LSC, PCD File Nos. CS192 & SF1910
2. 2022 - September - Mayberry Filing No. 3, LSC, PCD File No. SF2219
3. El Paso County 2016 Major Transportation Corridor Plan Update
4. El Paso County Engineering Criteria Manual Appendix B, October 14, 2020
5. Transportation Research Board 2016 Highway Capacity Manual, 6th Edition, Washington, D.C.
6. Trafficware Ltd 2017 Synchro 11, Sugar Land, Texas
7. Institute of Transportation Engineers 2017 Trip Generation Manual, An Informational Report, 11th Edition, Washington D.C.



# Appendix A: Highway Capacity Manual Description

# HCM Unsignalized Intersection Level of Service

Unsignalized intersections were analyzed for this study. Unsignalized intersection LOS is defined in terms of average control delay and, in some cases, volume to capacity (v/c) ratio. Control delay is that portion of total delay attributed to traffic control measures, either traffic signals or stop signs. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

For two-way stop-controlled intersections, the analysis method assumes that major street-through traffic is not affected by minor street flows. Major street left-turning traffic and the traffic on the minor approaches will be affected by opposing movements. Stop or yield signs are used to assign the right-of-way to the major street, and this designation forces drivers on the controlled street to judgmentally select gaps in the major street flow through which to execute crossing or turning maneuvers. Thus, the capacity of the controlled legs is based on two factors:

- The distribution of gaps in the major street traffic stream.
- Driver judgment in selecting gaps through which to execute their desired maneuvers.

The LOS procedure computes a capacity for each movement based on the critical time gap required to complete the maneuver and the volume of traffic that is opposing the movement. The average control delay for any particular movement is calculated as a function of the capacity of the approach and the degree of saturation (v/c ratio). The degree of saturation is defined as the volume for a movement, expressed as an hourly flow rate, divided by the movement's capacity, expressed as an hourly flow rate. With the HCM 6 methodology (Ref. 5), overall intersection LOS is best quantified based on minor street movement average control delay. The HCM 6 methodology adjusts individual movement delay to account for a degree of saturation (v/c ratio) that is greater than 1.0. Those movements are assigned a LOS of F, regardless of the average control delay. Engineering judgment must be used to determine which minor street movement controls for overall intersection LOS and whether unacceptable LOS on minor street movements appropriately reflects unacceptable LOS for the overall intersection.

Table 2 shows the relationship between the average control delay and the LOS. The LOS range for unsignalized intersections is different than that for signalized intersections, and this difference is because drivers expect different levels of performance from other kinds of transportation facilities. Unsignalized intersections carry less traffic volume than signalized intersections, and delays at unsignalized intersections are variable. For these reasons, control delay would be less for an unsignalized intersection than for a signalized intersection. The overall approach LOS is computed as a weighted average of the vehicle delay for each movement; therefore, an approach may have an overall LOS of C or D and have individual movements, which are LOS E or F.

Analysis was performed using the microcomputer program "Synchro 11" (Ref. 6), based on the procedures contained in the Highway Capacity Manual.

**Table 1: Unsignalized Intersection:  
Level of Service Measurement**

Level of Service	Control Delay Per Vehicle (sec)
A	< 10
B	> 10 and < 15
C	> 15 and < 25
D	> 25 and < 35
E	> 35 and < 50
F	> 50

## Appendix B: Synchro Outputs

HCM 6th TWSC  
13: Ellicott Highway & SH 94

08/31/2023

Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	20	63	125	14	159	12	101	25	6	13	60	33
Future Vol, veh/h	20	63	125	14	159	12	101	25	6	13	60	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	400	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	70	139	16	176	13	112	28	7	14	67	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	189	0	0	209	0	0	451	405	140	416	468	183
Stage 1	-	-	-	-	-	-	184	184	-	215	215	-
Stage 2	-	-	-	-	-	-	267	221	-	201	253	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1385	-	-	1362	-	-	519	535	908	547	493	859
Stage 1	-	-	-	-	-	-	818	747	-	787	725	-
Stage 2	-	-	-	-	-	-	738	720	-	801	698	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1385	-	-	1362	-	-	435	520	908	510	479	859
Mov Cap-2 Maneuver	-	-	-	-	-	-	435	520	-	510	479	-
Stage 1	-	-	-	-	-	-	805	735	-	774	716	-
Stage 2	-	-	-	-	-	-	633	711	-	753	687	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.6	16.4	13.1
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	460	1385	-	-	1362	-	-	560
HCM Lane V/C Ratio	0.318	0.016	-	-	0.011	-	-	0.21
HCM Control Delay (s)	16.4	7.6	-	-	7.7	-	-	13.1
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.4	0	-	-	0	-	-	0.8

HCM 6th TWSC  
14: Peyton Highway & SH 94

08/31/2023

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷			↕			↕	
Traffic Vol, veh/h	7	119	12	10	332	22	28	16	10	11	7	35
Future Vol, veh/h	7	119	12	10	332	22	28	16	10	11	7	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	532	-	-	532	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	132	13	11	368	24	31	18	11	12	8	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	392	0	0	145	0	0	581	569	139	571	563	380
Stage 1	-	-	-	-	-	-	155	155	-	402	402	-
Stage 2	-	-	-	-	-	-	426	414	-	169	161	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1167	-	-	1437	-	-	425	432	909	432	435	667
Stage 1	-	-	-	-	-	-	847	769	-	625	600	-
Stage 2	-	-	-	-	-	-	606	593	-	833	765	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1167	-	-	1437	-	-	391	426	909	409	428	667
Mov Cap-2 Maneuver	-	-	-	-	-	-	391	426	-	409	428	-
Stage 1	-	-	-	-	-	-	841	764	-	621	595	-
Stage 2	-	-	-	-	-	-	559	588	-	798	760	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.2			14.2			12.3		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	449	1167	-	-	1437	-	-	554
HCM Lane V/C Ratio	0.133	0.007	-	-	0.008	-	-	0.106
HCM Control Delay (s)	14.2	8.1	-	-	7.5	-	-	12.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.4

HCM 6th TWSC  
13: Ellicott Highway & SH 94

08/31/2023

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	46	164	64	3	77	14	109	34	16	24	20	23
Future Vol, veh/h	46	164	64	3	77	14	109	34	16	24	20	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	400	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	182	71	3	85	16	121	38	18	27	22	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	101	0	0	253	0	0	443	427	218	447	454	93
Stage 1	-	-	-	-	-	-	320	320	-	99	99	-
Stage 2	-	-	-	-	-	-	123	107	-	348	355	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1491	-	-	1312	-	-	525	520	822	522	502	964
Stage 1	-	-	-	-	-	-	692	652	-	907	813	-
Stage 2	-	-	-	-	-	-	881	807	-	668	630	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1491	-	-	1312	-	-	480	501	822	468	484	964
Mov Cap-2 Maneuver	-	-	-	-	-	-	480	501	-	468	484	-
Stage 1	-	-	-	-	-	-	668	630	-	876	811	-
Stage 2	-	-	-	-	-	-	832	805	-	593	609	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			0.2			15.9			12.2		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	506	1491	-	-	1312	-	-	575
HCM Lane V/C Ratio	0.348	0.034	-	-	0.003	-	-	0.129
HCM Control Delay (s)	15.9	7.5	-	-	7.8	-	-	12.2
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.5	0.1	-	-	0	-	-	0.4

HCM 6th TWSC  
14: Peyton Highway & SH 94

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Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	18	250	18	12	145	15	20	21	9	23	13	12
Future Vol, veh/h	18	250	18	12	145	15	20	21	9	23	13	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	532	-	-	532	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	277	20	13	161	17	22	23	10	26	14	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	178	0	0	297	0	0	536	531	287	540	533	170
Stage 1	-	-	-	-	-	-	327	327	-	196	196	-
Stage 2	-	-	-	-	-	-	209	204	-	344	337	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1398	-	-	1264	-	-	455	454	752	453	453	874
Stage 1	-	-	-	-	-	-	686	648	-	806	739	-
Stage 2	-	-	-	-	-	-	793	733	-	671	641	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1398	-	-	1264	-	-	429	443	752	421	442	874
Mov Cap-2 Maneuver	-	-	-	-	-	-	429	443	-	421	442	-
Stage 1	-	-	-	-	-	-	676	639	-	795	732	-
Stage 2	-	-	-	-	-	-	758	726	-	629	632	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.5			13.6			13.2		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	472	1398	-	-	1264	-	-	491
HCM Lane V/C Ratio	0.117	0.014	-	-	0.011	-	-	0.108
HCM Control Delay (s)	13.6	7.6	-	-	7.9	-	-	13.2
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.4



**Intersection**

Int Delay, s/veh 3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	169	52	10	299	122	8
Future Vol, veh/h	169	52	10	299	122	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	570	570	-	0	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	184	57	11	325	133	9

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	241
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1326
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1326
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	14.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	505	858	-	-	1326	-
HCM Lane V/C Ratio	0.263	0.01	-	-	0.008	-
HCM Control Delay (s)	14.6	9.2	-	-	7.7	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	1	0	-	-	0	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↑		↗
Traffic Vol, veh/h	151	26	0	309	0	6
Future Vol, veh/h	151	26	0	309	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	-	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	164	28	0	336	0	7

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	164
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	881
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	881
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	881	-	-	-
HCM Lane V/C Ratio	0.007	-	-	-
HCM Control Delay (s)	9.1	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

HCM 6th TWSC  
13: Ellicott Highway & SH 94

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Intersection												
Int Delay, s/veh	6.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	21	68	136	14	167	12	106	26	6	13	61	35
Future Vol, veh/h	21	68	136	14	167	12	106	26	6	13	61	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	400	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	74	148	15	182	13	115	28	7	14	66	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	195	0	0	222	0	0	465	419	148	431	487	189
Stage 1	-	-	-	-	-	-	194	194	-	219	219	-
Stage 2	-	-	-	-	-	-	271	225	-	212	268	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1378	-	-	1347	-	-	508	525	899	535	481	853
Stage 1	-	-	-	-	-	-	808	740	-	783	722	-
Stage 2	-	-	-	-	-	-	735	718	-	790	687	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1378	-	-	1347	-	-	424	510	899	498	468	853
Mov Cap-2 Maneuver	-	-	-	-	-	-	424	510	-	498	468	-
Stage 1	-	-	-	-	-	-	794	727	-	770	714	-
Stage 2	-	-	-	-	-	-	630	710	-	741	675	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.7			0.6			17			13.3		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	449	1378	-	-	1347	-	-	552
HCM Lane V/C Ratio	0.334	0.017	-	-	0.011	-	-	0.215
HCM Control Delay (s)	17	7.7	-	-	7.7	-	-	13.3
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.4	0.1	-	-	0	-	-	0.8

HCM 6th TWSC  
 14: Peyton Highway & SH 94

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Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷			↕			↕	
Traffic Vol, veh/h	7	137	12	13	380	29	29	16	15	17	7	36
Future Vol, veh/h	7	137	12	13	380	29	29	16	15	17	7	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	532	-	-	532	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	149	13	14	413	32	32	17	16	18	8	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	445	0	0	162	0	0	653	645	156	645	635	429
Stage 1	-	-	-	-	-	-	172	172	-	457	457	-
Stage 2	-	-	-	-	-	-	481	473	-	188	178	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1115	-	-	1417	-	-	380	391	890	385	396	626
Stage 1	-	-	-	-	-	-	830	756	-	583	568	-
Stage 2	-	-	-	-	-	-	566	558	-	814	752	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1115	-	-	1417	-	-	347	384	890	360	389	626
Mov Cap-2 Maneuver	-	-	-	-	-	-	347	384	-	360	389	-
Stage 1	-	-	-	-	-	-	824	751	-	579	562	-
Stage 2	-	-	-	-	-	-	518	552	-	775	747	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.2			15.1			13.5		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	422	1115	-	-	1417	-	-	489
HCM Lane V/C Ratio	0.155	0.007	-	-	0.01	-	-	0.133
HCM Control Delay (s)	15.1	8.3	-	-	7.6	-	-	13.5
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.5

Intersection						
Int Delay, s/veh	2.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	328	83	15	213	97	7
Future Vol, veh/h	328	83	15	213	97	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	-	570	570	-	0	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	357	90	16	232	105	8

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	447	0	621	357
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	264	-
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	-	-	1113	-	451	687
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	780	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1113	-	445	687
Mov Cap-2 Maneuver	-	-	-	-	445	-
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	769	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	15.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	445	687	-	-	1113	-
HCM Lane V/C Ratio	0.237	0.011	-	-	0.015	-
HCM Control Delay (s)	15.6	10.3	-	-	8.3	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↑		↗
Traffic Vol, veh/h	294	41	0	228	0	5
Future Vol, veh/h	294	41	0	228	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	-	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	320	45	0	248	0	5

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	320
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	721
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	721
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	721	-	-	-
HCM Lane V/C Ratio	0.008	-	-	-
HCM Control Delay (s)	10	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

HCM 6th TWSC  
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Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	50	174	67	3	86	14	117	35	16	24	20	24
Future Vol, veh/h	50	174	67	3	86	14	117	35	16	24	20	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	400	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	54	189	73	3	93	15	127	38	17	26	22	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	108	0	0	262	0	0	465	448	226	468	477	101
Stage 1	-	-	-	-	-	-	334	334	-	107	107	-
Stage 2	-	-	-	-	-	-	131	114	-	361	370	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1483	-	-	1302	-	-	508	506	813	505	487	954
Stage 1	-	-	-	-	-	-	680	643	-	898	807	-
Stage 2	-	-	-	-	-	-	873	801	-	657	620	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1483	-	-	1302	-	-	463	487	813	451	468	954
Mov Cap-2 Maneuver	-	-	-	-	-	-	463	487	-	451	468	-
Stage 1	-	-	-	-	-	-	656	620	-	866	805	-
Stage 2	-	-	-	-	-	-	824	799	-	582	598	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			0.2			16.7			12.4		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	488	1483	-	-	1302	-	-	561
HCM Lane V/C Ratio	0.374	0.037	-	-	0.003	-	-	0.132
HCM Control Delay (s)	16.7	7.5	-	-	7.8	-	-	12.4
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.7	0.1	-	-	0	-	-	0.5

HCM 6th TWSC  
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Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	18	364	18	19	267	15	20	21	12	29	13	12
Future Vol, veh/h	18	364	18	19	267	15	20	21	12	29	13	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	532	-	-	532	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	396	20	21	290	16	22	23	13	32	14	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	306	0	0	416	0	0	800	794	406	804	796	298
Stage 1	-	-	-	-	-	-	446	446	-	340	340	-
Stage 2	-	-	-	-	-	-	354	348	-	464	456	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1255	-	-	1143	-	-	303	321	645	301	320	741
Stage 1	-	-	-	-	-	-	591	574	-	675	639	-
Stage 2	-	-	-	-	-	-	663	634	-	578	568	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1255	-	-	1143	-	-	280	310	645	271	309	741
Mov Cap-2 Maneuver	-	-	-	-	-	-	280	310	-	271	309	-
Stage 1	-	-	-	-	-	-	582	565	-	664	627	-
Stage 2	-	-	-	-	-	-	625	623	-	535	559	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.5			17.9			18.4		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	336	1255	-	-	1143	-	-	327
HCM Lane V/C Ratio	0.171	0.016	-	-	0.018	-	-	0.179
HCM Control Delay (s)	17.9	7.9	-	-	8.2	-	-	18.4
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0.6



Intersection

Int Delay, s/veh	3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	186	86	10	304	129	8
Future Vol, veh/h	186	86	10	304	129	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	570	570	-	0	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	202	93	11	330	140	9

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	295	0	554
Stage 1	-	-	-	-	202
Stage 2	-	-	-	-	352
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1266	-	493
Stage 1	-	-	-	-	832
Stage 2	-	-	-	-	712
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1266	-	489
Mov Cap-2 Maneuver	-	-	-	-	489
Stage 1	-	-	-	-	832
Stage 2	-	-	-	-	706

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	489	839	-	-	1266	-
HCM Lane V/C Ratio	0.287	0.01	-	-	0.009	-
HCM Control Delay (s)	15.3	9.3	-	-	7.9	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	1.2	0	-	-	0	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↑		↗
Traffic Vol, veh/h	151	43	0	309	0	7
Future Vol, veh/h	151	43	0	309	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	-	250	-	-	-	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	164	47	0	336	0	8

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	- 164
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	- 6.22
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	- 3.318
Pot Cap-1 Maneuver	-	-	0	-	0 881
Stage 1	-	-	0	-	0
Stage 2	-	-	0	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	- 881
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	881	-	-	-
HCM Lane V/C Ratio	0.009	-	-	-
HCM Control Delay (s)	9.1	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

HCM 6th TWSC  
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Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	68	137	14	170	12	108	26	6	13	61	36
Future Vol, veh/h	21	68	137	14	170	12	108	26	6	13	61	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	400	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	74	149	15	185	13	117	28	7	14	66	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	198	0	0	223	0	0	469	423	149	434	491	192
Stage 1	-	-	-	-	-	-	195	195	-	222	222	-
Stage 2	-	-	-	-	-	-	274	228	-	212	269	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1375	-	-	1346	-	-	505	522	898	532	478	850
Stage 1	-	-	-	-	-	-	807	739	-	780	720	-
Stage 2	-	-	-	-	-	-	732	715	-	790	687	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1375	-	-	1346	-	-	420	507	898	495	465	850
Mov Cap-2 Maneuver	-	-	-	-	-	-	420	507	-	495	465	-
Stage 1	-	-	-	-	-	-	793	726	-	767	712	-
Stage 2	-	-	-	-	-	-	626	707	-	741	675	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.7			0.6			17.3			13.3		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	444	1375	-	-	1346	-	-	551
HCM Lane V/C Ratio	0.343	0.017	-	-	0.011	-	-	0.217
HCM Control Delay (s)	17.3	7.7	-	-	7.7	-	-	13.3
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.5	0.1	-	-	0	-	-	0.8

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	7	236	12	13	386	29	29	16	18	18	7	36
Future Vol, veh/h	7	236	12	13	386	29	29	16	18	18	7	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	532	-	-	532	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	257	13	14	420	32	32	17	20	20	8	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	452	0	0	270	0	0	768	760	264	762	750	436
Stage 1	-	-	-	-	-	-	280	280	-	464	464	-
Stage 2	-	-	-	-	-	-	488	480	-	298	286	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1109	-	-	1293	-	-	319	336	775	322	340	620
Stage 1	-	-	-	-	-	-	727	679	-	578	564	-
Stage 2	-	-	-	-	-	-	561	554	-	711	675	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1109	-	-	1293	-	-	290	330	775	297	334	620
Mov Cap-2 Maneuver	-	-	-	-	-	-	290	330	-	297	334	-
Stage 1	-	-	-	-	-	-	722	674	-	574	558	-
Stage 2	-	-	-	-	-	-	513	548	-	670	670	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.2			17			14.7		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	367	1109	-	-	1293	-	-	437
HCM Lane V/C Ratio	0.187	0.007	-	-	0.011	-	-	0.152
HCM Control Delay (s)	17	8.3	-	-	7.8	-	-	14.7
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.5

Intersection						
Int Delay, s/veh	3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↖	↗
Traffic Vol, veh/h	330	86	15	213	126	9
Future Vol, veh/h	330	86	15	213	126	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	570	570	-	0	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	359	93	16	232	137	10

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	452	0	623
Stage 1	-	-	-	-	359
Stage 2	-	-	-	-	264
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1109	-	450
Stage 1	-	-	-	-	707
Stage 2	-	-	-	-	780
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1109	-	444
Mov Cap-2 Maneuver	-	-	-	-	444
Stage 1	-	-	-	-	707
Stage 2	-	-	-	-	769

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	16.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	444	685	-	-	1109	-
HCM Lane V/C Ratio	0.308	0.014	-	-	0.015	-
HCM Control Delay (s)	16.7	10.3	-	-	8.3	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	1.3	0	-	-	0	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↑		↗
Traffic Vol, veh/h	294	43	0	228	0	6
Future Vol, veh/h	294	43	0	228	0	6
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	320	47	0	248	0	7

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	344
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	699
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	699
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	699	-	-	-
HCM Lane V/C Ratio	0.009	-	-	-
HCM Control Delay (s)	10.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	50	174	68	3	86	14	117	35	16	24	20	24
Future Vol, veh/h	50	174	68	3	86	14	117	35	16	24	20	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	400	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	54	189	74	3	93	15	127	38	17	26	22	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	108	0	0	263	0	0	465	448	226	469	478	101
Stage 1	-	-	-	-	-	-	334	334	-	107	107	-
Stage 2	-	-	-	-	-	-	131	114	-	362	371	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1483	-	-	1301	-	-	508	506	813	505	486	954
Stage 1	-	-	-	-	-	-	680	643	-	898	807	-
Stage 2	-	-	-	-	-	-	873	801	-	657	620	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1483	-	-	1301	-	-	463	487	813	451	468	954
Mov Cap-2 Maneuver	-	-	-	-	-	-	463	487	-	451	468	-
Stage 1	-	-	-	-	-	-	656	620	-	866	805	-
Stage 2	-	-	-	-	-	-	824	799	-	582	598	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			0.2			16.7			12.4		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	488	1483	-	-	1301	-	-	561
HCM Lane V/C Ratio	0.374	0.037	-	-	0.003	-	-	0.132
HCM Control Delay (s)	16.7	7.5	-	-	7.8	-	-	12.4
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.7	0.1	-	-	0	-	-	0.5



HCM 6th TWSC  
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Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	18	367	18	17	292	17	20	21	13	33	13	12
Future Vol, veh/h	18	367	18	17	292	17	20	21	13	33	13	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	532	-	-	532	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	399	20	18	317	18	22	23	14	36	14	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	419	0	0	825	820	409	830	821	326
Stage 1	-	-	-	-	-	-	449	449	-	362	362	-
Stage 2	-	-	-	-	-	-	376	371	-	468	459	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1224	-	-	1140	-	-	292	310	642	289	309	715
Stage 1	-	-	-	-	-	-	589	572	-	657	625	-
Stage 2	-	-	-	-	-	-	645	620	-	575	566	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1224	-	-	1140	-	-	270	300	642	260	299	715
Mov Cap-2 Maneuver	-	-	-	-	-	-	270	300	-	260	299	-
Stage 1	-	-	-	-	-	-	580	563	-	646	615	-
Stage 2	-	-	-	-	-	-	609	610	-	531	557	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.4			18.3			19.6		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	329	1224	-	-	1140	-	-	310
HCM Lane V/C Ratio	0.178	0.016	-	-	0.016	-	-	0.203
HCM Control Delay (s)	18.3	8	-	-	8.2	-	-	19.6
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.7

# V2\_Traffic Impact Study Comments.pdf Markup Summary

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Daniel Torres (1)

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comments on the TIS have been provided in the rezoning application CS233.

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