

TRAFFIC IMPACT STUDY

Trinity Ranch

- RR-2.5 Rezone

El Paso County, Colorado

PCD File No. CS252

Delete

P267

Prepared for:

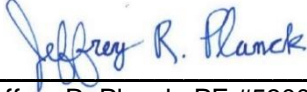
20165 Howle Street, LLC

Kimley»Horn

T R A F F I C I M P A C T S T U D Y

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.



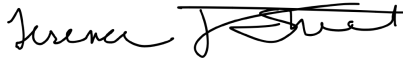
Jeffrey R. Planck, PE #53006

April 21, 2026

Date

Developer's Statement

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



Mr. Terry Street
20165 Howle Street, LLC
8576 Via Gwynn Way
Fair Oaks, CA 95528

May 4, 2026

Date

Trinity Ranch

~~PCD File No. CS252~~

El Paso County, Colorado

P267

Prepared for
20165 Howle Street, LLC
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Fair Oaks, CA 95528

Prepared by
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April 2026



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TABLE OF CONTENTS

TABLE OF CONTENTS	i
LIST OF TABLES	ii
LIST OF FIGURES	ii
1.0 EXECUTIVE SUMMARY	1
2.0 INTRODUCTION	4
3.0 EXISTING AND FUTURE CONDITIONS	7
3.1 Existing Study Area	7
3.2 Existing Roadway Network	7
3.3 Existing Traffic Volumes	11
3.4 Unspecified Development Traffic Growth	11
4.0 PROJECT TRAFFIC CHARACTERISTICS	16
4.1 Trip Generation	16
4.2 Trip Distribution	17
4.3 Traffic Assignment	17
4.4 Total (Background Plus Project) Traffic	18
5.0 TRAFFIC OPERATIONS ANALYSIS	26
5.1 Analysis Methodology	26
5.2 Key Intersection Operational Analysis	27
5.3 CDOT Auxiliary Turn Lane Warrant & Length Evaluation	30
5.4 Vehicle Queuing Analysis	32
5.5 Access Spacing Requirements and Internal Roadway Classifications	32
5.6 Sight Distance Evaluation	34
5.7 Bicycle and Pedestrian Access	35
5.8 Road Impact Fees	35
5.9 Improvement Summary	35
6.0 CONCLUSIONS AND RECOMMENDATIONS	38

Appendices

- Appendix A: Conceptual Site Plan
- Appendix B: Intersection Count Sheets
- Appendix C: Future Traffic Projections
- Appendix D: Trip Generation Worksheets
- Appendix E: Intersection Analysis Worksheets
- Appendix F: Signal Warrant Analysis Worksheet

LIST OF TABLES

Table 1 – Trinity Ranch Traffic Generation.....	17
Table 2 – Level of Service Definitions	26
Table 3 – SH-94 & Peyton Highway LOS Results	28
Table 4 – SH-94 & Antelope Drive LOS Results.....	29
Table 5 – Project Access Level of Service Results.....	30
Table 6 – Turn Lane Queuing Analysis Results.....	32
Table 7 – Road Impact Fees	35

LIST OF FIGURES

Figure 1 – Vicinity Map.....	6
Figure 2 – Existing Geometry and Control.....	10
Figure 3 –Existing Traffic Volumes.....	12
Figure 4 –2029 Background Traffic Volumes	13
Figure 5 – 2030 Background Traffic Volumes.....	14
Figure 6 – 2050 Background Traffic Volumes.....	15
Figure 7 – 2029 Filing No. 1 Project Trip Distribution	19
Figure 8 – Total Project Trip Distribution	20
Figure 9 – 2029 Filing No. 1 Project Traffic Assignment.....	21
Figure 10 – Total Project Traffic Assignment.....	22
Figure 11 – 2029 Filing No. 1 Total Traffic Volumes.....	23
Figure 12 – 2030 Total Traffic Volumes.....	24
Figure 13 – 2050 Total Traffic Volumes.....	25
Figure 14 – Roadway Classification Map	33
Figure 15 – 2030 Recommended Geometry and Control	36
Figure 16 – 2050 Recommended Geometry and Control	37

1.0 EXECUTIVE SUMMARY

Trinity Ranch is proposed to be located near the northeast corner of the State Highway 94 (SH-94) and Peyton Highway intersection in El Paso County, Colorado. The project is proposed to contain single-family homes and a commercial component, currently envisioned to be mini-warehouse uses on approximately 138 acres. The latest preliminary plan identifies 35 single-family homes to be completed in two filings. For the purpose of this analysis, the project is anticipated to include approximately 40 single-family homes and 1,250 storage units. This traffic study was previously submitted for the Commercial Service (CS) Rezone which includes approximately 35 acres in the southern portion of the overall site. The CS Rezone has been evaluated as 1,250 storage units which equates to approximately 200,000 square feet of building area. The study was then updated to document the traffic impacts to the remaining 100 acres of the project, which is proposed to rezone from RR-5 to RR-2.5. However, the overall project site has been evaluated in this study to appropriately evaluate the study area intersections with future development. It is expected that the project will be completed in the next several years over two filings. Filing No. 1 will consist of 17 2.5 acre single family homes anticipated to be completed in 2029 and the full buildout of the project anticipated to be completed in 2030. Therefore, analysis was conducted for the 2029 and 2030 short-term buildout horizons as well as the 2050 long-term twenty-year planning horizon.

When is the commercial portion expected to be built?

The purpose of this traffic study is to identify project traffic generation characteristics to determine potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The intersection of SH-94 and Peyton Highway was incorporated into this traffic study in accordance with El Paso County and State of Colorado Department of Transportation (CDOT) standards and requirements. In addition, the intersection of SH-94 and Antelope Drive was evaluated for the 2029 horizon and the proposed access along SH-94 was evaluated during the 2030 and 2050 horizons.

Regional access to Trinity Ranch will be provided by SH-94. Primary access will be provided by SH-94 and Peyton Highway. Direct access for Filing No. 1 will be provided by SH-94 and Antelope Drive. Direct access for the full buildout of the site will be provided by a full movement access located approximately 4,275 feet east of the SH-94 and Peyton Highway intersection. During Filing No.1, a gravel emergency access road will be constructed to provide access to SH-94 and

Indicate if this access is intended to be gated to limit access.

will be restricted to emergency vehicles only. Cross access will also be provided at Golden Eagle Drive on the east side of the site. If development to the west of the site occurs in the future, cross access will also be designated for adjacent property to the west.

Be sure overall length of the cul-de-sac is being looked at from the last intersection. Max length for rural CDS is 1600'.

Filing No. 1 of the project evaluated with 17 2.5 acre single-family houses is expected to generate 198 weekday daily trips, with 15 of these trips occurring during the morning peak hour and 19 of these trips occurring during the afternoon peak hour.

The commercial area evaluated with 1,250 storage units is expected to generate approximately 226 weekday daily trips, with 15 of these trips occurring during the morning peak hour and 21 of these trips occurring during the afternoon peak hour. The overall project site including 1,250 storage units and 40 single family houses is expected to generate approximately 660 weekday daily trips, with 47 of these trips occurring during the morning peak hour and 63 of these trips occurring during the afternoon peak hour.

Based on the analysis presented in this report, Kimley-Horn believes Trinity Ranch will be successfully incorporated into the existing and future roadway network. Analysis of the existing street network, the proposed project development, and expected traffic volumes resulted in the following conclusions and recommendations:

State what the traffic is at this intersection and how it meets criteria and doesn't need any improvements

- With Filing No. 1 of development consisting of 17 2.5 acre single family houses, the project is anticipated to only gain cross access from Golden Eagle Drive to the east through the intersection of SH-94 and Antelope Drive. There are no improvements needed at the intersection of SH-94 and Antelope Drive to successfully incorporate Filing No.1 into the existing roadway network.
- With completion of the future filings for the Trinity Ranch project, a public street access intersection is proposed along the north side of SH-94. It is recommended that the public street access intersection operate with stop control with installation of a R1-1 "STOP" sign the southbound exiting approach. A separate eastbound left turn lane is warranted at the project access based on CDOT criteria and the left turn traffic volume projections along SH-94. This eastbound left turn lane should provide a length of 530 feet plus a 300-foot taper.

- The threshold for requiring an access permit along Colorado Department of Transportation (CDOT) roadways occurs when project traffic is anticipated to increase the existing access traffic volumes by more than 20 percent. Based on traffic projections, the addition of project traffic on the north and south legs of SH-94 at Peyton Highway are not anticipated to increase existing access traffic volumes by more than 20 percent, with the maximum expected increase at six (6) percent on the north leg (7 project / 124 existing) and three (3) percent on the south leg (3 project / 86 existing). Therefore, a CDOT access permit is not anticipated to be required at the SH-94 and Peyton Highway intersection in association with this project. An access permit will be required for the north leg of the proposed project access along SH-94.
- If future long term planning level 2050 traffic volume projections are realized, the intersection of SH-94 and Peyton Highway will meet warrants for signalization. Therefore, signalization may be the appropriate control at this intersection by the long-term horizon. If signal control is implemented at the SH-94 and Peyton Highway intersection in the future, northbound and southbound left turn lanes should be incorporated coinciding with signal control to avoid split phasing signal timing at this intersection.
- Any on-site or offsite improvements should be incorporated into the Civil Drawings and conform to standards of El Paso County, CDOT, and the Manual on Uniform Traffic Control Devices (MUTCD) – 11th Edition, 2023.

2.0 INTRODUCTION

Kimley-Horn has prepared this report to document the results of a Traffic Impact Study for Trinity Ranch proposed to be located near the northeast corner of the State Highway 94 (SH-94) and Peyton Highway intersection in El Paso County, Colorado. A vicinity map illustrating the project development location is shown in **Figure 1**. The project is proposed to include approximately 138 acres of 2.5 acre single-family homes and commercial uses consisting of mini-warehouse storage units. A conceptual site plan is attached in **Appendix A**.

The preliminary plan identifies 35 single-family homes though, for the purpose of this analysis, the project is anticipated to include approximately 40 single-family homes and 1,250 storage units. This traffic study was previously submitted for the Commercial Service (CS) Rezone which includes approximately 35 acres in the southern portion of the overall site. The CS Rezone has been evaluated as 1,250 storage units which equates to approximately 200,000 square feet of building area. The study was then updated to document the traffic impacts to the remaining 100 acres of the project, which is proposed to rezone from RR-5 to RR-2.5. However, the overall project site has been evaluated in this study to appropriately evaluate the study area intersections with future development. It is expected that the project will be completed in the next several years over two filings. Filing No. 1 will consist of 17 single family homes anticipated to be completed in 2029 and the full buildout of the project anticipated to be completed in 2030. Therefore, analysis was conducted for the 2029 and 2030 short-term buildout horizons as well as the 2050 long-term twenty-year planning horizon.

The purpose of this traffic study is to identify project traffic generation characteristics to determine potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The SH-94 and Peyton Highway intersection was incorporated into this traffic study in accordance with El Paso County and CDOT standards. In addition, the intersection of SH-94 and Antelope Drive was evaluated for the 2029 horizon and the proposed access along SH-94 was evaluated for the 2030 and 2050 horizons.

Regional access to the site will be provided by SH-94. Primary access will be provided by SH-94 and Peyton Highway. Direct access for Filing No.1 will be provided by SH-94 and Antelope Drive. Direct access for the full buildout of the project will be provided by a full movement access located approximately 4,275 feet east of the SH-94 and Peyton Highway intersection. During Filing No.1, a gravel emergency access road will be constructed to provide access to SH-94 and will be restricted to emergency vehicles only. Cross access will also be provided at Golden Eagle Drive on the east side of the site. If development to the west of the site occurs in the future, cross access will also be designated for adjacent property to the west.



FIGURE 1

Trinity Ranch
El Paso County, CO
Vicinity Map

3.0 EXISTING AND FUTURE CONDITIONS

3.1 Existing Study Area

The existing site consists of vacant land. Directly east of the site is a single-family residential development with large lots. The surrounding area consists of single-family homes and vacant parcels.

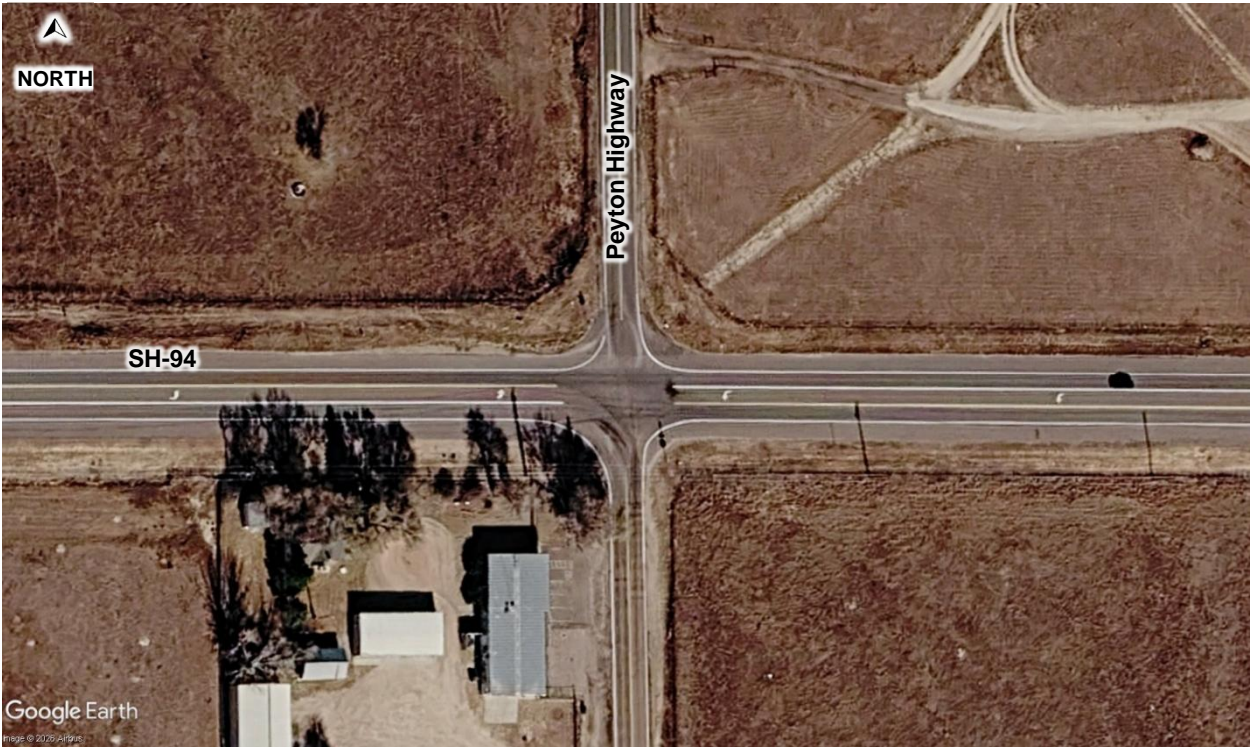
3.2 Existing Roadway Network

State Highway 94 (SH-94) extends in the east-west direction as a two-lane roadway and has a posted speed limit of 65 miles per hour near the project site. The El Paso County Major Transportation Corridor Plan (MTCP) identifies SH-94 as a “Principal Arterial” roadway while CDOT categorizes SH-94 as a NR-A: Non-Rural Principal Highway.

Peyton Highway extends northbound and southbound with one lane in each direction and has a posted speed limit of 55 miles per hour within the project limits. The MTCP identifies Peyton Highway as a “Minor Arterial” roadway.

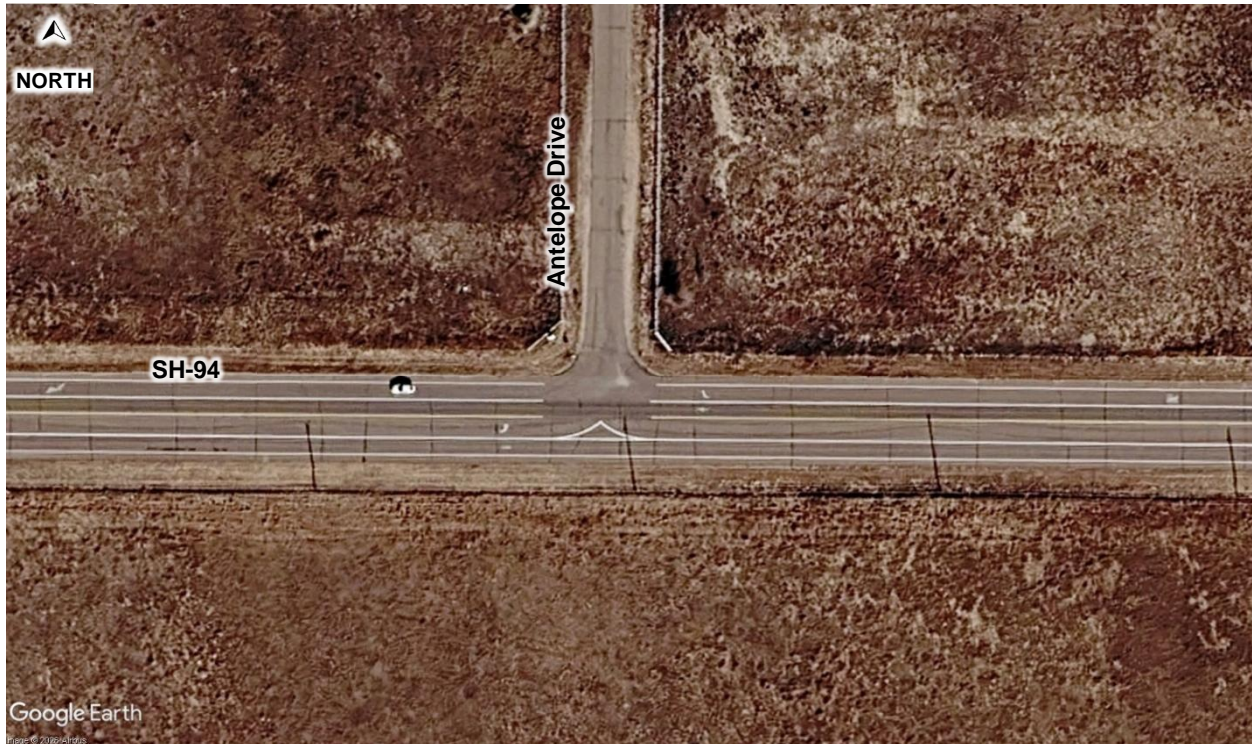
Antelope Drive extends in the north-south directions with one lane in each direction and has a posted speed limit of 30 miles per hour within the project limits. The MTCP identifies Antelope Drive as a “Local” roadway.

The unsignalized intersection of SH-94 and Peyton Highway operates with stop control on the northbound and southbound approaches of Peyton Highway. The eastbound and westbound approaches both provide a left turn lane and a shared through/right turn lane. The northbound and southbound approaches of Peyton Highway each provides a shared lane for all movements. An aerial photo of the existing intersection configuration is below (north is up - typical).



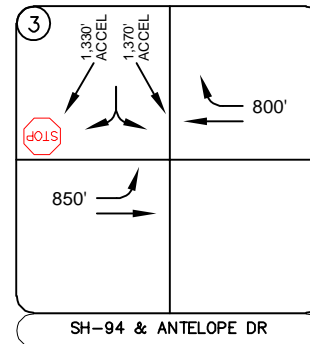
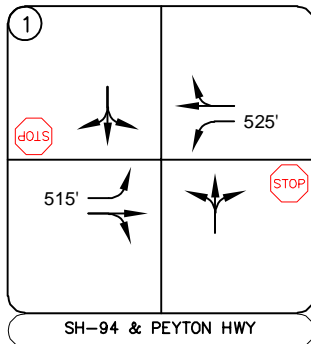
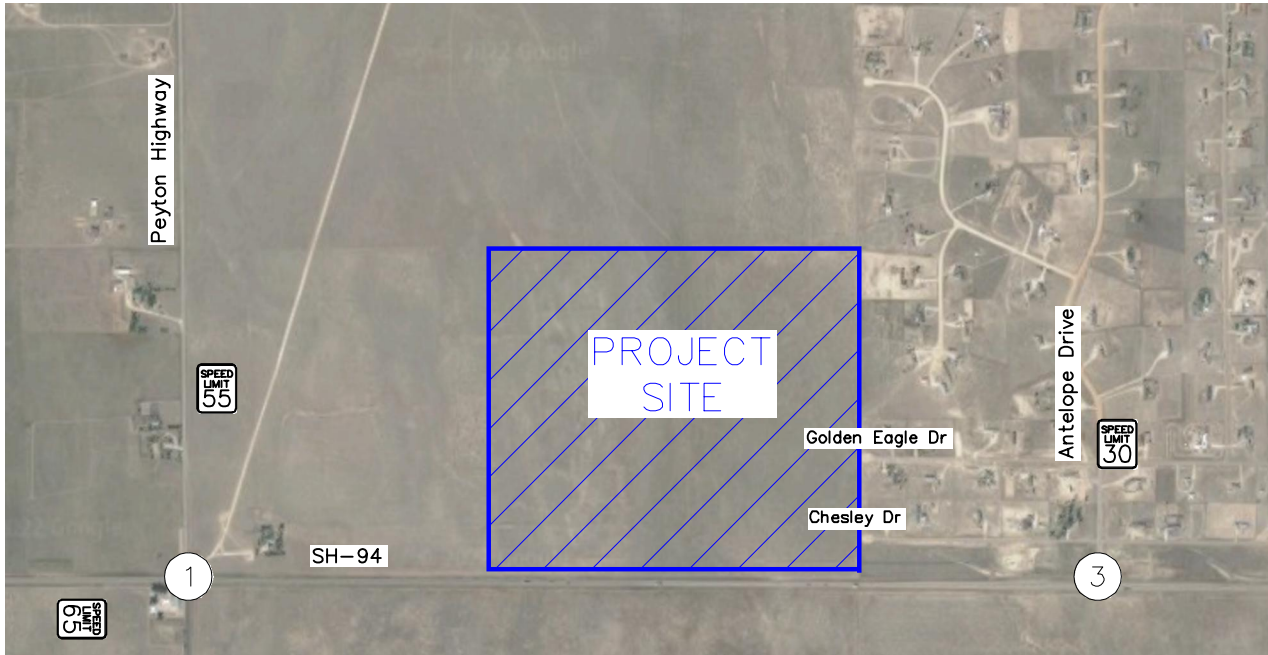
SH-94 & Peyton Highway

The unsignalized 'T'-intersection of SH-94 and Antelope Drive operates with stop control on the southbound approach of Antelope Drive. The eastbound approach provides a left turn lane and one through lane while the westbound approach provides one through lane and a right turn lane. The southbound approach provides a shared left turn/right turn lane with acceleration lanes for both movements. An aerial photo of the existing intersection configuration is below (north is up - typical).



SH-94 & Antelope Drive

The intersection lane configuration and control for the study area intersections are shown in **Figure 2**.



LEGEND

- (X) Study Area Key Intersection
- (STOP) Stop-Controlled Approach
- (XX) Roadway Speed Limit
- 100' Turn Lane Length (feet)

FIGURE 2
 Trinity Ranch
 El Paso County, CO
 Existing Geometry and Control

3.3 Existing Traffic Volumes

Existing turning movement counts were conducted at the study intersections during the weekday morning and afternoon peak hours on Tuesday, April 29, 2025 for SH-94 and Peyton Highway and on Tuesday, March 10, 2026 for SH-94 and Antelope Drive. The counts were conducted during the morning and afternoon peak hours of adjacent street traffic in 15-minute intervals from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM on this count date. The existing intersection traffic volumes are shown in **Figure 3** with count sheets provided in **Appendix B**.

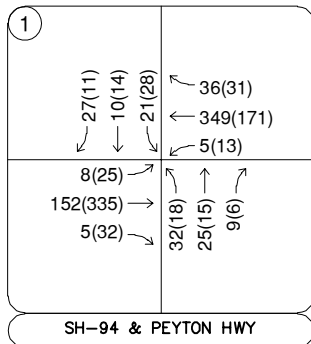
3.4 Unspecified Development Traffic Growth

According to information provided on the website for the Colorado Department of Transportation (CDOT), the 20-year growth factor along SH-94 in the vicinity of the site is between 1.23. The 20-year growth factor equates to an annual growth rate of one (1) percent along SH-94.

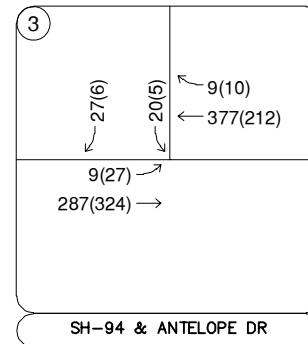
Later in the report, it appears the old MTCP was still be used. Verify information represents information that is in the 2024 MTCP.

According to traffic projections from the El Paso County Major Transportation Corridor Plan (MTCP) traffic model, Peyton Highway is expected to have an average 15-year growth factor of 2.6. Peyton Highway growth factor equates to an annual growth rate of 6.5 percent. Therefore, the eastbound and westbound through volumes along SH-94 used a one (1) percent annual growth rate and the movements to and from Peyton Highway used a 6.5 percent annual growth rate.

Future traffic projections and growth rate are included in **Appendix C**. These annual growth rates were used to estimate near-term 2029, 2030 and long-term 2050 traffic volume projections at the key intersections. Background traffic volumes for 2029, 2030 and 2050 are shown in **Figure 4**, **Figure 5** and **Figure 6**, respectively.



Tuesday, April 29, 2025
7:00 to 8:00AM (4:00 to 5:00PM)



Tuesday, March 10, 2026
7:00 to 8:00AM (4:00 to 5:00PM)

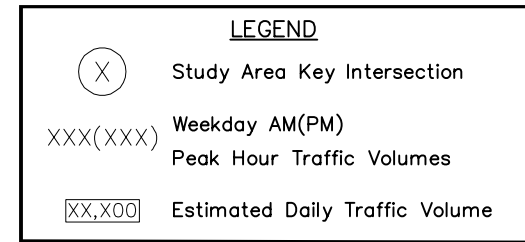
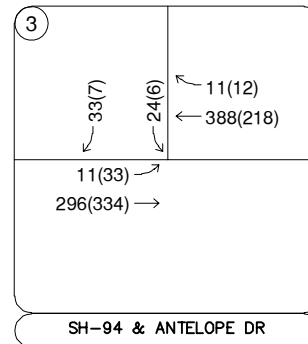
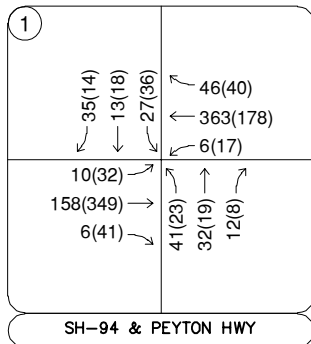


FIGURE 3

Trinity Ranch
El Paso County, CO
Existing Traffic Volumes



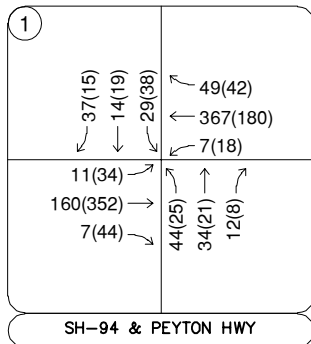
LEGEND

⊗ Study Area Key Intersection

XXX(XXX) Weekday AM(PM)
Peak Hour Traffic Volumes

XX,X00 Estimated Daily Traffic Volume

FIGURE 4
 Trinity Ranch
 El Paso County, CO
 2029 Background Traffic Volumes



Include this intersection

LEGEND

⊗ Study Area Key Intersection

XXX(XXX) Weekday AM(PM)
Peak Hour Traffic Volumes

XX,X00 Estimated Daily Traffic Volume

FIGURE 5
 Trinity Ranch
 El Paso County, CO
 2030 Background Traffic Volumes



Include this intersection

①	
130(63) ↙	101(135) ↘
48(68) ↔	174(150) ↖
39(121) →	448(219) ←
195(430) →	24(63) ↖
24(154) ↘	154(87) ↖
	121(72) ↖
	43(29) ↖
SH-94 & PEYTON HWY	

LEGEND	
(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 6
 Trinity Ranch
 El Paso County, CO
 2050 Background Traffic Volumes

4.0 PROJECT TRAFFIC CHARACTERISTICS

4.1 Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*¹ published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. For this study, Kimley-Horn used the ITE Trip Generation Report average rates that apply to Mini-Warehouse (ITE Land Use Code 151) and fitted-curve equations that apply to Single-Family Detached Housing (ITE 210) for traffic associated with the development.

Filing No. 1 of the project evaluated with 17 2.5 acre single-family houses is expected to generate 198 weekday daily trips, with 15 of these trips occurring during the morning peak hour and 19 of these trips occurring during the afternoon peak hour.

The commercial area evaluated with 1,250 storage units is expected to generate approximately 226 weekday daily trips, with 15 of these trips occurring during the morning peak hour and 21 of these trips occurring during the afternoon peak hour. The overall project site including 1,250 storage units and 40 single family houses is expected to generate approximately 660 weekday daily trips, with 47 of these trips occurring during the morning peak hour and 63 of these trips occurring during the afternoon peak hour.

Calculations were based on the procedure and information provided in the ITE *Trip Generation Manual, 11th Edition – Volume 1: User’s Guide and Handbook, 2021*. **Table 1** summarizes the estimated trip generation for the site. The trip generation worksheets are included in **Appendix D**.

¹ Institute of Transportation Engineers, *Trip Generation Manual*, Eleventh Edition, Washington DC, 2021.

Table 1 – Trinity Ranch Traffic Generation

Land Use and Size	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Filing No. 1: Single Family Houses (47 Acres)							
Single-Family Detached Housing (ITE 210) – 17 Dwelling Units	198	4	11	15	12	7	19
CS Rezone Site Only (35 Acres - Storage Units)							
Mini-Warehouse (ITE 151) – 1,250 Storage Units	226	8	7	15	11	10	21
Overall Site: CS Rezone (35 Acres - Storage Units) & Single Family Houses (103 Acres)							
Mini-Warehouse (ITE 151) – 1,250 Storage Units	226	8	7	15	11	10	21
Single-Family Detached Housing (ITE 210) – 40 Dwelling Units	434	8	24	32	26	16	42
Total Overall Site Generated Trips	660	16	31	47	37	26	63

4.2 Trip Distribution

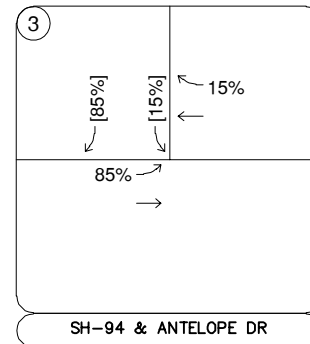
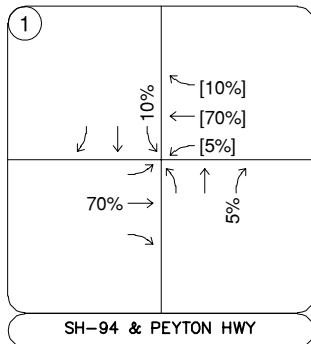
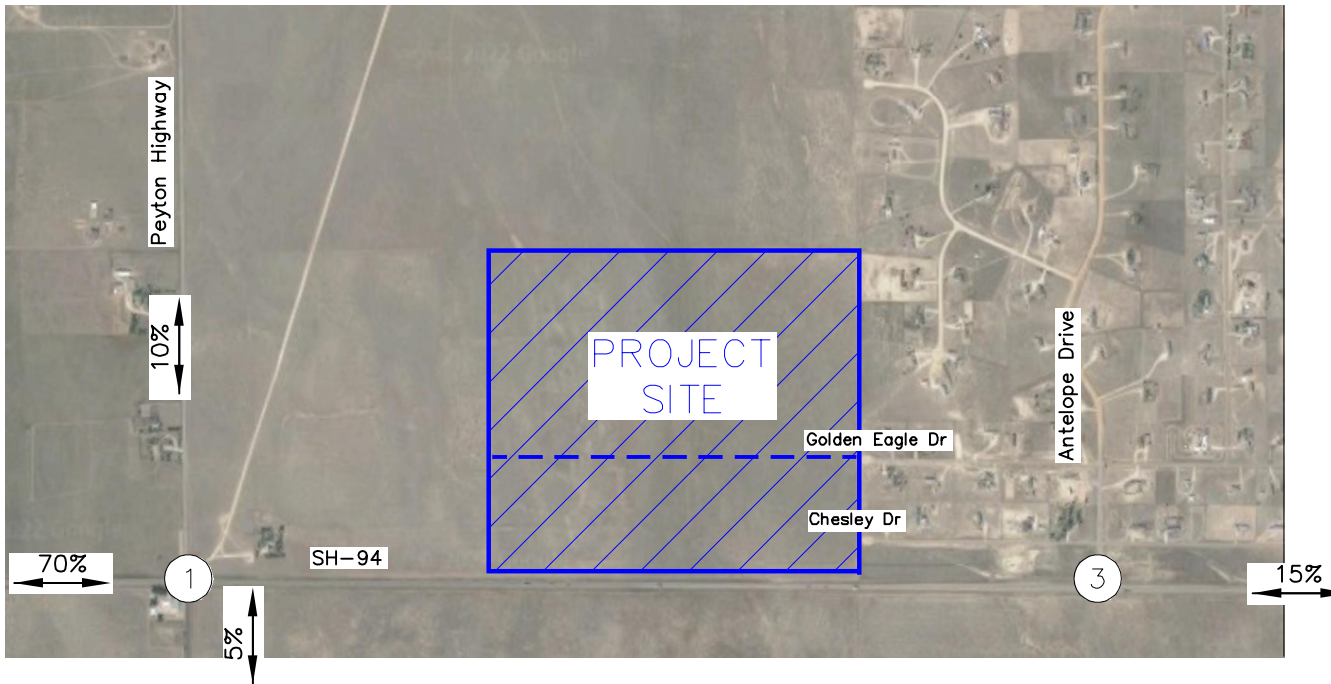
Distribution of site traffic on the street system was based on the area street system characteristics, existing traffic patterns, existing and anticipated surrounding employment, school, and attraction information, and the proposed access system for the project. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site back to the original source. As documented previously, Filing No. 1 will gain access from Golden Eagle Drive to the east; therefore, the project trip distribution for Filing No. 1 is illustrated in **Figure 7**. The project trip distribution for full buildout of the proposed development is illustrated in **Figure 8**. Cross access will also be provided at Golden Eagle Drive on the east side of the site. For the purpose of this traffic study, all trips were conservatively assigned to the SH-94 access at full buildout to ensure it is appropriately designed. It is also believed that even with cross access, most if not all project traffic would utilize the proposed access along SH-94. With the negligible amount of project traffic that could potentially utilize Golden Eagle Drive to the east, it is believed that a net neutral volume from the adjacent development to the east would utilize the proposed access along SH-94.

4.3 Traffic Assignment

The project's traffic assignment was obtained by applying the project trip distribution to the estimated traffic generation of the development shown in Table 1. Traffic assignment for Filing No. 1 and the total project is shown in **Figure 9** and **Figure 10**, respectively.

4.4 Total (Background Plus Project) Traffic

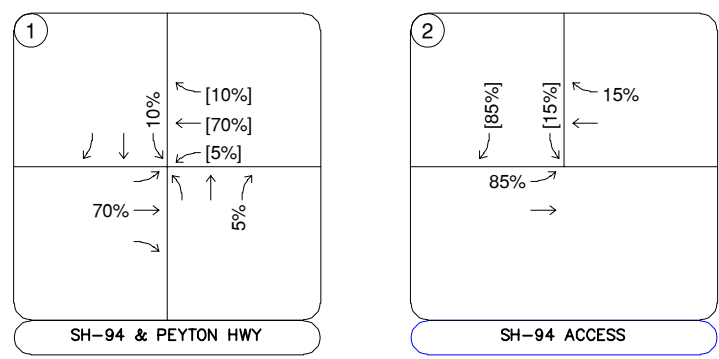
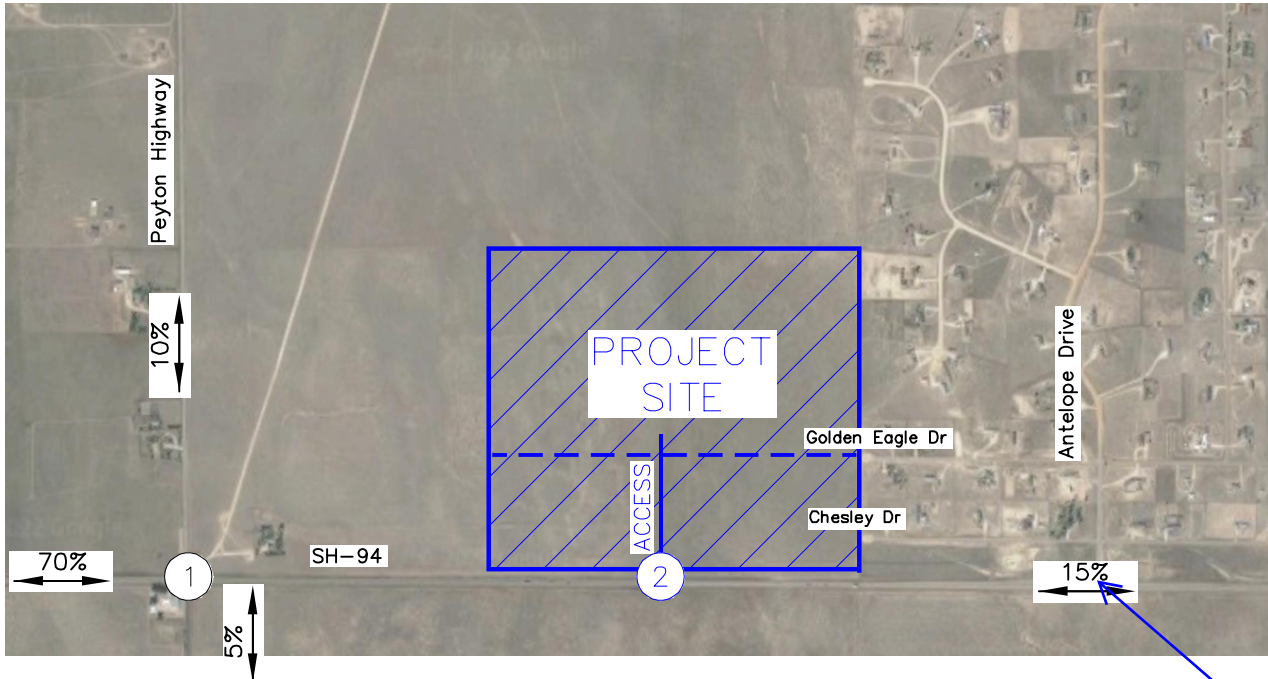
Site traffic volumes were added to the background volumes to represent estimated traffic conditions for initial filing, short-term 2030 buildout horizon, and long-term 2050 twenty-year planning horizon. These total traffic volumes for the study area are illustrated for the 2029, 2030 and 2050 horizon years in **Figure 11**, **Figure 12**, and **Figure 13**, respectively.



LEGEND

- Study Area Key Intersection
- Project Access Intersection
- External Trip Distribution Percentage
- Entering[Exiting] Trip Distribution Percentage

FIGURE 7
 Trinity Ranch
 El Paso County, CO
 2029 Filing No. 1 Project Trip Distribution

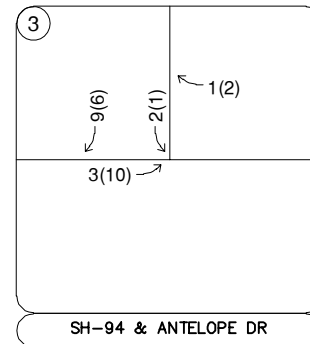
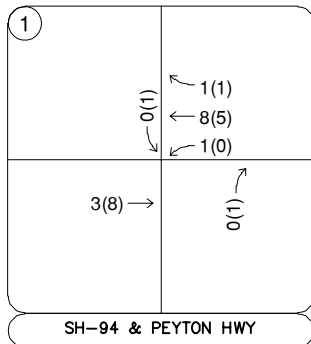


Include this intersection

LEGEND

- (X) Study Area Key Intersection
- (X) Project Access Intersection
- XX% External Trip Distribution Percentage
- XX%[XX%] Entering[Exiting] Trip Distribution Percentage

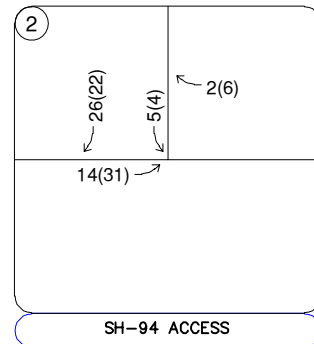
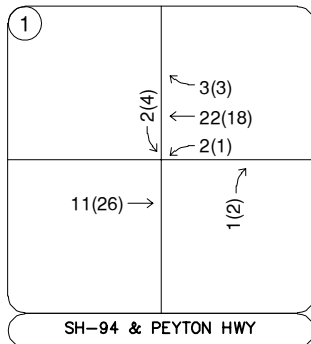
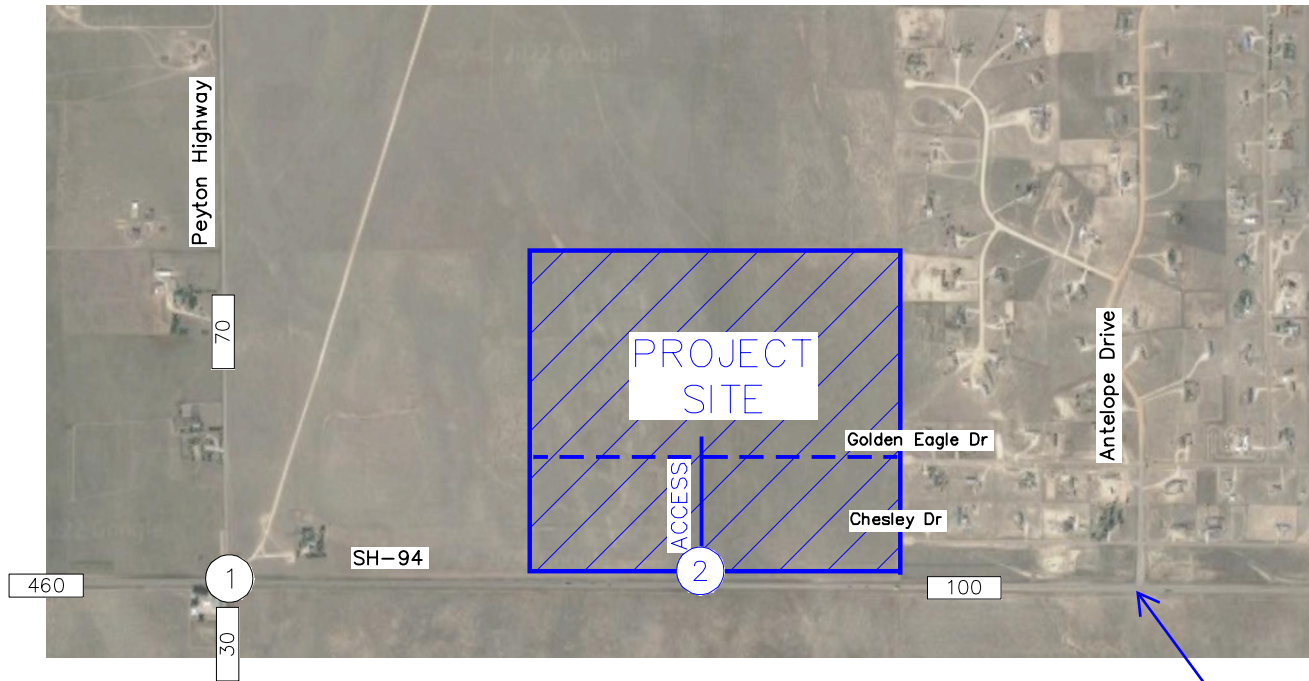
FIGURE 8
 Trinity Ranch
 El Paso County, CO
 Total Project Trip Distribution



LEGEND

- ⊗ Study Area Key Intersection
- ⊗ Project Access Intersection
- XXX(XXX) Weekday AM(PM)
Peak Hour Traffic Volumes
- XX,X00 Estimated Daily Traffic Volume

FIGURE 9
 Trinity Ranch
 El Paso County, CO
 2029 Filing No. 1 Project Traffic Assignment

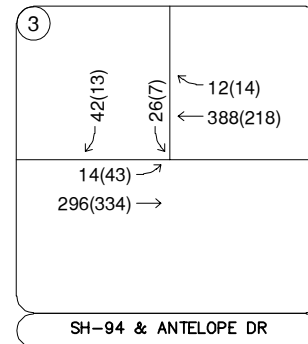
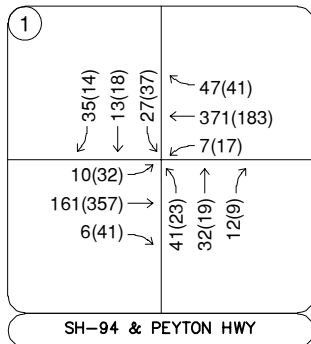


Include this intersection

LEGEND

- Study Area Key Intersection
- Project Access Intersection
- XXX(XXX) Weekday AM(PM)
Peak Hour Traffic Volumes
- XX,X00 Estimated Daily Traffic Volume

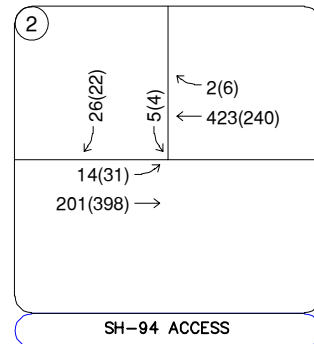
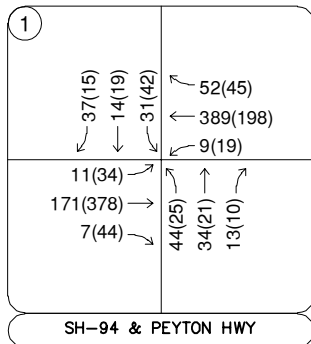
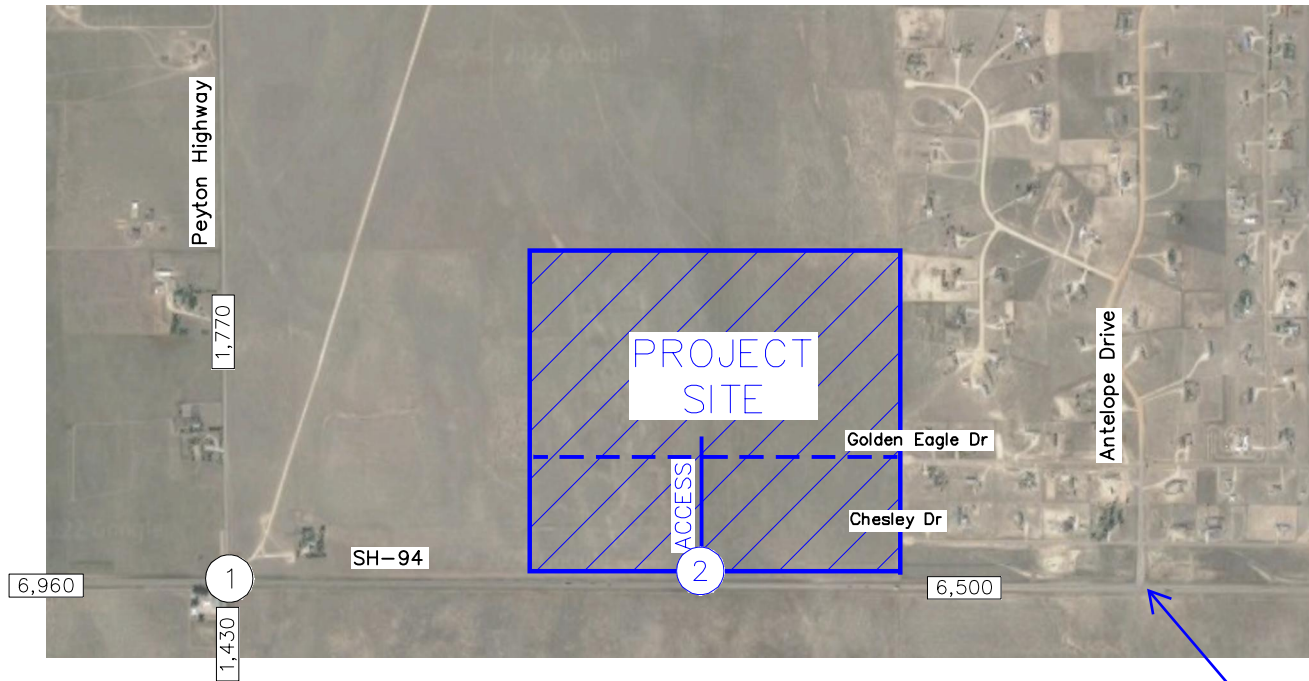
FIGURE 10
 Trinity Ranch
 El Paso County, CO
 Total Project Traffic Assignment



LEGEND

- ⊗ Study Area Key Intersection
- ⊗ Project Access Intersection
- XXX(XXX) Weekday AM(PM)
Peak Hour Traffic Volumes
- XX,X00 Estimated Daily Traffic Volume

FIGURE 11
 Trinity Ranch
 El Paso County, CO
 2029 Filing No. 1 Total Traffic Volumes

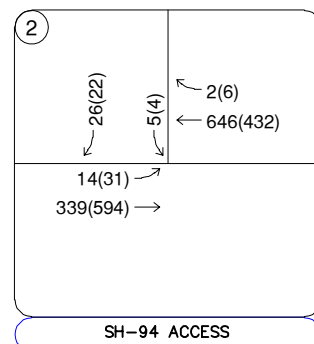
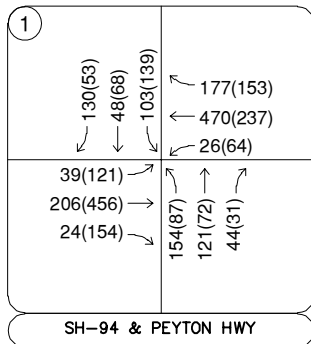
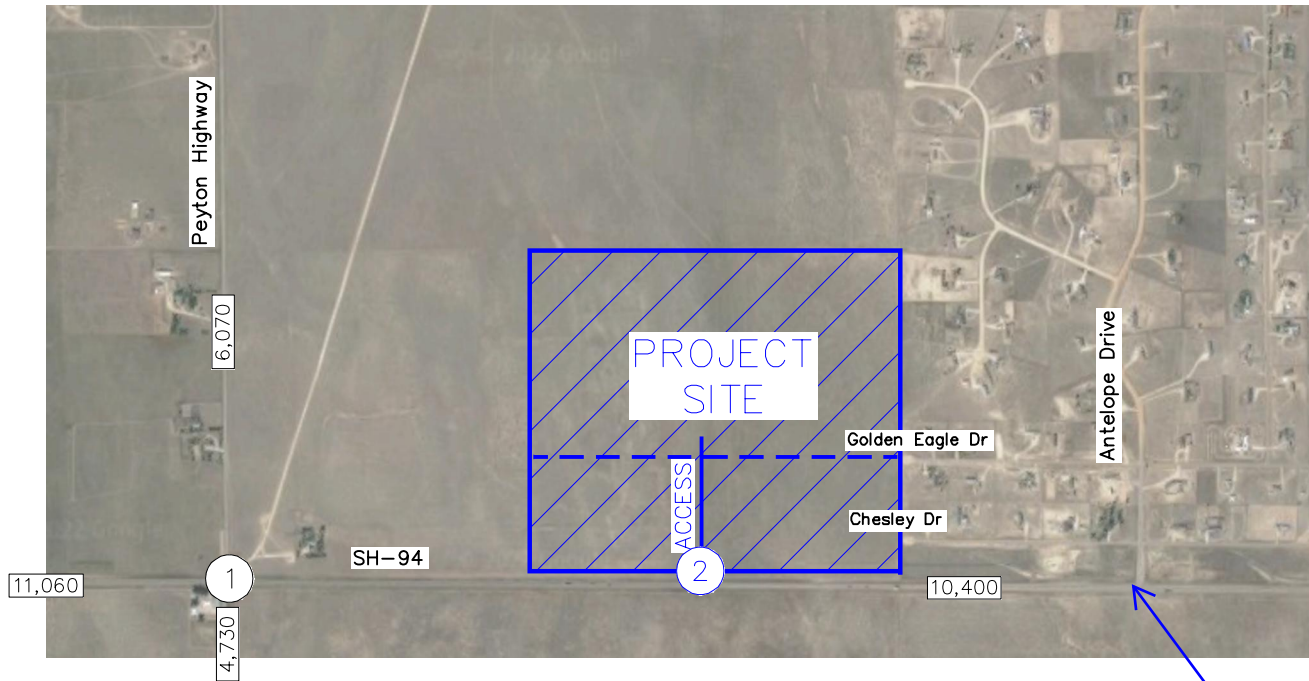


Include this intersection

LEGEND

- (X) Study Area Key Intersection
- (X) Project Access Intersection
- XXX(XXX) Weekday AM(PM)
Peak Hour Traffic Volumes
- XX,X00 Estimated Daily Traffic Volume

FIGURE 12
 Trinity Ranch
 El Paso County, CO
 2030 Total Traffic Volumes



Include this intersection

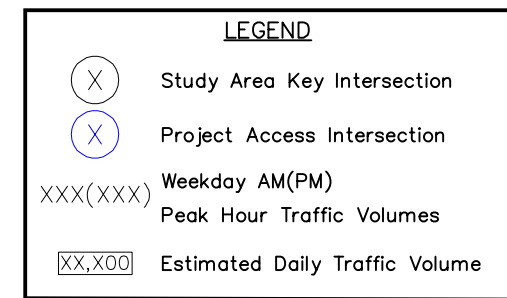


FIGURE 13
 Trinity Ranch
 El Paso County, CO
 2050 Total Traffic Volumes

5.0 TRAFFIC OPERATIONS ANALYSIS

Kimley-Horn's analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies in the 2030 and 2050 development horizons at the identified key intersections. The acknowledged source for determining overall capacity is the *Highway Capacity Manual (HCM)*².

5.1 Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). Based on El Paso County standards, the threshold for acceptable LOS is not less than LOS D during peak hours **Table 2** shows the definition of level of service for signalized and unsignalized intersections.

Table 2 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Definitions provided from the Highway Capacity Manual, Seventh Edition, Transportation Research Board, 2022.

Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections. Under the unsignalized analysis, the LOS for a two-way stop-controlled intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the intersection as a whole. LOS for signalized, roundabout, and all-way stop controlled intersections are defined for each approach and for the overall intersection.

² Transportation Research Board, *Highway Capacity Manual*, Seventh Edition, Washington DC, 2022.

5.2 Key Intersection Operational Analysis

Calculations for the operational level of service at the key intersections for the study area are provided in **Appendix E**. The existing year analysis is based on the lane geometry and intersection control shown in **Figure 2**. Existing peak hour factors were utilized in the analysis. Synchro traffic analysis software was used to analyze the signalized and unsignalized key intersections for HCM level of service.

SH-94 and Peyton Highway

The unsignalized intersection of SH-94 and Peyton Highway operates with stop control on the northbound and southbound approaches of Peyton Highway. The intersection movements operate acceptably at LOS B or better during both peak hours under existing conditions. With the existing geometry and project traffic, all movements are anticipated to continue operating at an acceptable level of service in 2029 and 2030.

If 2050 traffic volume projections are realized, the intersection operates with unacceptable LOS on the northbound and southbound approaches. Therefore, an MUTCD Four Hour Signal Warrant Analysis was completed based on the long-term traffic volumes with and without project traffic. From the signal warrant analysis, all four hours are anticipated to meet warrants for signalization. It is recommended that CDOT and El Paso County monitor traffic volumes at this intersection in the future to determine if and when a traffic signal becomes warranted. If signal control is implemented at the SH-94 and Peyton Highway intersection in the future, northbound and southbound left turn lanes should be incorporated coinciding with signal control to avoid split phasing signal timing at this intersection. A fair share escrow may be required by El Paso County for the possible future signal and left turn lanes at this intersection. A signal warrant analysis figure is included in **Appendix F**. **Table 3** provides the results of the LOS analysis conducted at this intersection.

Table 3 – SH-94 & Peyton Highway LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2025 Existing				
Northbound Approach	13.5	B	13.3	B
Eastbound Left	8.3	A	7.7	A
Westbound Left	7.6	A	8.1	A
Southbound Approach	12.6	B	13.2	B
2029 Background				
Northbound Approach	14.4	B	14.1	B
Eastbound Left	8.4	A	7.8	A
Westbound Left	7.6	A	8.2	A
Southbound Approach	13.3	B	14.1	B
2029 Background Plus Filing 1				
Northbound Approach	14.6	B	14.2	B
Eastbound Left	8.4	A	7.8	A
Westbound Left	7.6	A	8.3	A
Southbound Approach	13.4	B	14.3	B
2030 Background				
Northbound Approach	14.8	B	14.4	B
Eastbound Left	8.4	A	7.8	A
Westbound Left	7.6	A	8.2	A
Southbound Approach	13.5	B	14.4	B
2030 Background Plus Project				
Northbound Approach	15.3	C	14.9	B
Eastbound Left	8.5	A	7.8	A
Westbound Left	7.6	A	8.3	A
Southbound Approach	14.0	B	15.2	C
2050 Background				
Northbound Approach	188.5	F	79.1	F
Eastbound Left	9.3	A	8.5	A
Westbound Left	7.8	A	9.1	A
Southbound Approach	60.6	F	219.4	F
2050 Background Plus Project¹	24.9	C	20.0	B

¹Signalized

SH-94 and Antelope Drive

The unsignalized 'T'-intersection of SH-94 and Antelope Drive operates with stop control on the southbound approach of Antelope Drive. The intersection movements operate acceptably at LOS B or better during both peak hours under existing conditions. With the existing geometry and temporary Filing 1 project traffic, all movements are anticipated to continue operating at an acceptable level of service with Filing 1 project traffic 2029.

Table 4 – SH-94 & Antelope Drive LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2025 Existing				
Eastbound Left	8.3	A	7.8	A
Southbound Approach	11.9	B	11.8	B
2029 Background				
Eastbound Left	8.3	A	7.9	A
Southbound Approach	12.2	B	12.1	B
2029 Background Plus Filing 1				
Eastbound Left	8.3	A	7.9	A
Southbound Approach	12.4	B	11.7	B

Project Access Intersection

With completion of all filings for the Trinity Ranch project, a public street access intersection is proposed along the north side of SH-94. It is recommended that the public street access intersection operate with stop control with installation of a R1-1 “STOP” sign the southbound exiting approach. A separate eastbound left turn lane is warranted at the project access based on CDOT criteria and the left turn traffic volume projections along SH-94. **Table 5** provides the results of the level of service for this project access intersection. As shown in the table, the project access intersections are anticipated to have all movements operating with acceptable LOS C or better during the peak hours in both the buildout year 2030 and the 2050 long-term horizons.

Table 5 – Project Access Level of Service Results

Intersection	2030 Total				2050 Total			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
SH-94 Access								
Eastbound Left	8.4	A	7.9	A	9.2	A	8.5	A
Southbound Approach	12.1	B	10.8	B	15.8	C	13.7	B

5.3 CDOT Auxiliary Turn Lane Warrant & Length Evaluation

The threshold for requiring an access permit along Colorado Department of Transportation (CDOT) roadways occurs when project traffic is anticipated to increase the existing access traffic volumes by more than 20 percent. Based on traffic projections, the addition of project traffic on the north and south legs of SH-94 at Peyton Highway are not anticipated to increase existing access traffic volumes by more than 20 percent, with the maximum expected increase at six (6) percent on the north leg (7 project / 124 existing) and three (3) percent on the south leg (3 project / 86 existing). Therefore, a CDOT access permit is not anticipated to be required at the SH-94 and Peyton Highway intersection in association with this project. An access permit will be required for the north leg of the proposed project access along SH-94.

SH-94 is categorized as an NR-A: Non-Rural Principal Highway roadway and has a 65 mile per hour speed limit within the project area. According to the State Highway Access Code for category Non-Rural Principal Highway (NR-A) roadways, the turn lane warrants are as follows:

- A left turn deceleration lane and taper with storage length is required for any access with a projected peak hour ingress turning volume greater than 10 vph. The taper length will be included within the required deceleration length.
- A right turn deceleration lane and taper is required for any access with a projected peak hour ingress turning volume greater than 25 vph. The taper length will be included within the required deceleration length.
- Right turn acceleration lane and taper is required for any access with a projected peak hour right turning volume greater than 50 vph when the posted speed on the highway is greater than 40 mph. The taper length will be included within the required acceleration length.

Based on traffic projections and the above thresholds, auxiliary turn lane requirements were for the proposed project access along SH-94 and are as follows:

SH-94 Project Access

- An eastbound left turn lane **is** warranted at the SH-94 Access intersection based on projected 2050 background plus project traffic volumes being 31 eastbound left turns during the peak hour and the threshold being 10 vph. Based on the 65 mile per hour speed limit, the deceleration length is 500 feet, plus a 300-foot taper. In addition, a 30-foot storage length is required based on the peak hour left turn entering volume. Therefore, the eastbound left turn lane is recommended to provide a length of 530 feet plus a 300-foot taper to meet CDOT turn lane standards.
- A westbound right turn lane **is not** warranted at the SH-94 Access intersection based on projected 2050 background plus project traffic volumes being six (6) westbound right turns during the peak hour and the threshold being 25 vph. Therefore, a turn lane is not required based on CDOT Access Code turn lane requirements.
- A westbound acceleration lane along SH-94 from the Access southbound right turn **is not** warranted based on projected 2050 background plus project traffic volumes being 26 southbound right turns during the peak hour and the threshold being 50 vph. Therefore, an acceleration lane is not required based on CDOT Access Code turn lane requirements.

What about SH-94 and Antelope Dr intersection?
Please include in discussion

5.4 Vehicle Queuing Analysis

A vehicle queuing analysis was conducted for the study area intersections. The queuing analysis was performed using Synchro presenting the results of the 95th percentile queue lengths. Results are shown in the following **Table 6** with calculations provided within the level of service operational sheets in **Appendix E**.

Table 6 – Turn Lane Queuing Analysis Results

Intersection Turn Lane	Existing Turn Lane Length	2030 Calculated Queue (AM/PM)	2030 Recommended Length	2050 Calculated Queue (AM/PM)	2050 Recommended Length
SH-94 & Peyton Hwy					
Eastbound Left	515'	25'/25'	515'	25'/50'	100'
Westbound Left	525'	25'/25'	525'	25'/25'	75'
Northbound Left	DNE	DNE	DNE	175'/100'	310'
Southbound Left	DNE	DNE	DNE	100'/150'	310'
SH-94 Access					
Eastbound Left	DNE	25'/25'	530'+300'T	25'/25'	530'+300'T

Include SH94 & Antelope Dr

DNE = Does Not Exist; **Blue** Text = Recommendation

All vehicle queues are anticipated to be managed within the existing or recommended turn lane lengths through 2050.

Should be referencing and using the 2024 MTCP

5.5 Access Spacing Requirements and Internal Roadway Classifications

According to El Paso County 2016 Major Transportation Corridors Plan Update, SH-94 is classified as a Principal Arterial roadway and Peyton Highway is classified as a Minor Arterial roadway. The following identifies the intersection spacing requirements for the access intersections associated with the project:

SH-94 Access

The proposed Access along SH-94 is located approximately 4,275 feet east of the SH-94/Peyton Highway intersection (measured centerline to centerline) and 3,000 feet west of the SH-94/Antelope Drive intersection (measured centerline to centerline). The access will be constructed at the start of Filing No. 2. According to the El Paso County Engineering Criteria Manual, spacing intersections along rural Major Arterial roadways should be a half mile between intersections. Therefore, the proposed Access meets ECM standards.

Include some sort of statement that final full road will be done with Filing 2, but secondary emergency only gravel access will be done with Filing 1. Will it be gated?

SH-94 is classified as a Rural Principal Arterial and Peyton Highway is classified as a Rural Minor Arterial. The project access has been classified as a Rural Local roadway. **Figure 14** illustrates the circulation plan and street classification map for roadways internal and external to the Trinity Ranch project.

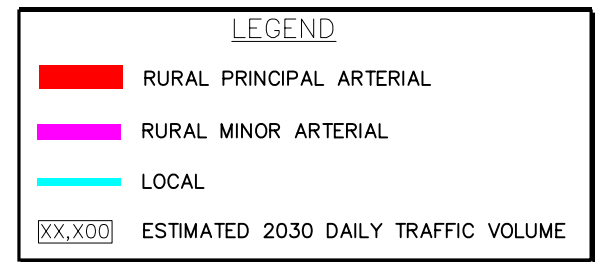
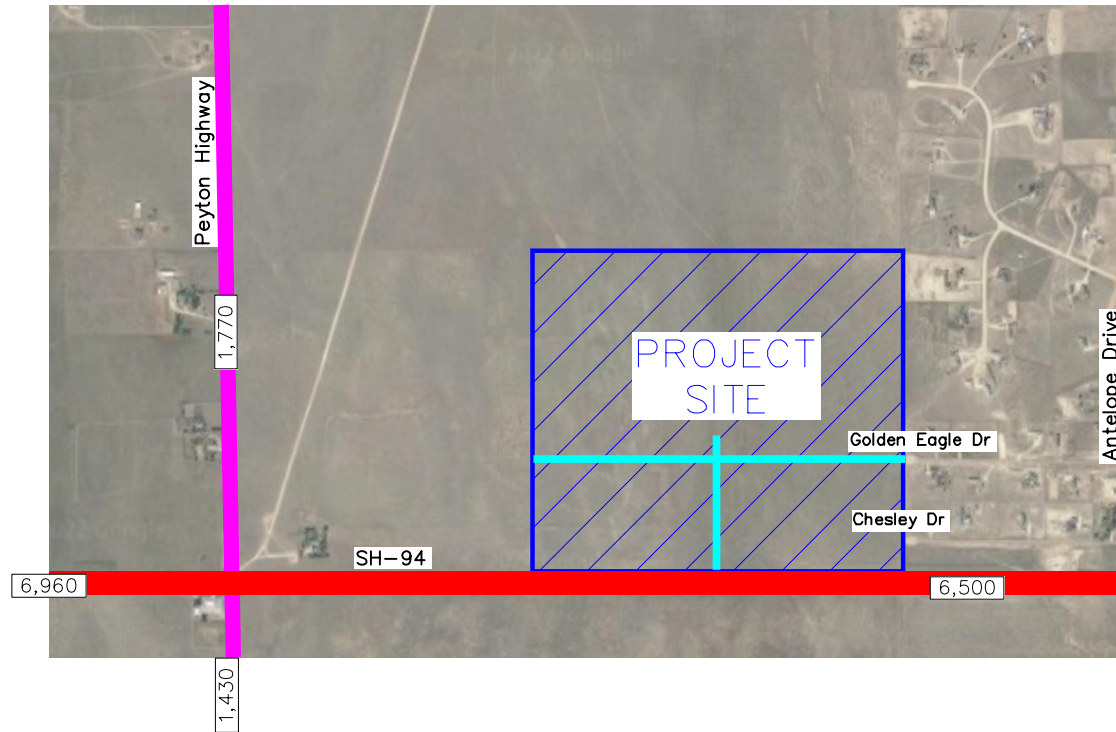


FIGURE 14
 Trinity Ranch
 El Paso County, CO
 Roadway Classification Map

5.6 Sight Distance Evaluation

It is recommended that sight triangles be provided at all site access points to give drivers exiting the site a clear view of oncoming traffic. Landscaping and objects within sight triangles must not obstruct drivers' views of the adjacent travel lanes. ECM design sight distances for left turn from stop from public street intersections (Table 2-21) was evaluated at the public access intersection along SH-94. ECM does not provide sight distances for right-turning vehicles from stop for public street intersections; therefore, AASHTO standards were used for right-turn from stop distances at the public access intersection along SH-94. The following identifies sight distance requirements for the access intersection:

Does Antelope Dr have a left turn as well?

SH-94 Access

With El Paso County standards and a roadway design speed of 65 miles per hour, the intersection sight distance for a vehicle turning left from stop is not provided but can be determined by extrapolating data. Therefore, the intersection sight distance for a vehicle turning left from stop is 720 feet. Since the access along SH-94 will have a left turn lane, exiting left turn movements will cross one extra lane and additional sight distance needs to be added based on factors from AASHTO. According to AASHTO 9.5.3.2.1 Case B1 – Left Turn from the Minor Road, for left turns onto two-way roadways with more than two lanes, including turn lanes, 0.5 seconds should be added to the time gap for passenger cars for each additional lane. Based on this, one additional lane accounts for an additional 0.5 seconds and approximately 50 feet of sight distance ($0.5 \text{ sec} * 65 \text{ mph} * 5280 \text{ ft/mi} / 3600 \text{ sec/hr} = 47.66 \text{ feet}$) and a total of 770 feet of sight distance (720 feet + 50 feet). The AASHTO standards for the sight distance for a vehicle turning right from stop is 625 feet. Therefore, all obstructions for left turning vehicles from stop should be clear to the right within the triangle created with a vertex point located 13 feet from the edge of the major road traveled way and a line-of-sight distance of 770 feet located in the middle of the westbound through lane along SH-94. Likewise, all obstructions for right turning vehicles from stop should be clear to the left within the triangle created with a vertex point located 13 feet from the edge of the major road traveled way and a line-of-sight distance of 625 feet located in the middle of the eastbound through lane along SH-94. Therefore, it is believed that the proposed access along SH-94 Parkway is appropriately located to provide necessary sight distances.

5.7 Bicycle and Pedestrian Access

Sidewalks are not present on either side of SH-94 or Peyton Highway. The surrounding area is rural and does not provide pedestrian or bicycle connections.

5.8 Road Impact Fees

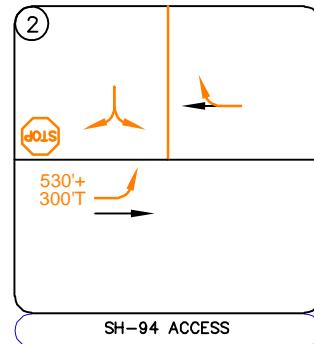
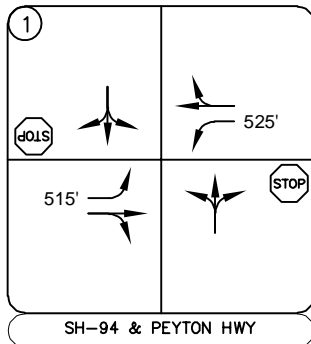
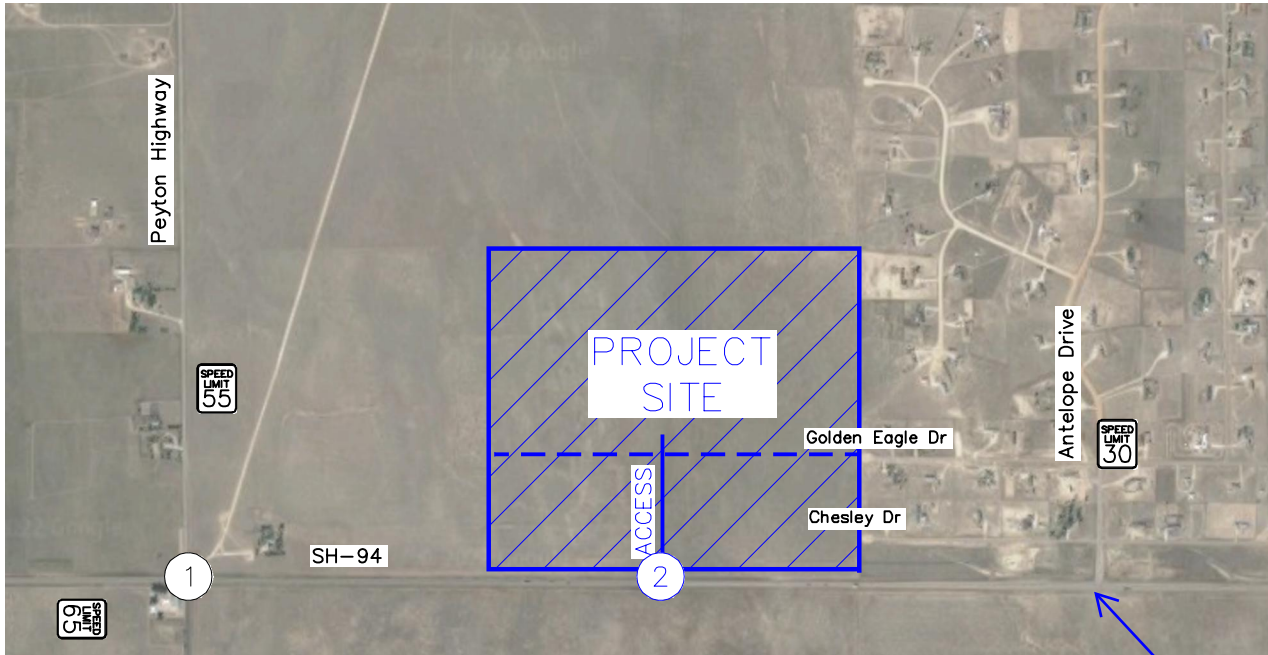
Road impact fees were evaluated based on the El Paso County Road Impact Fee Schedule. The road impact fees were calculated for the ultimately proposed 35 single family detached housing units and 200,000 square feet of storage use. Based on the fee schedule guidelines, the fee for single family detached housing is \$4,101 per dwelling unit and mini-warehouse is \$447 per 1,000 square feet. Therefore, the road impact fee for the proposed 35 single family homes and 1,250 storage units (200,000 square feet of building area) is \$143,535 and \$89,400, respectively. The total road impact fee for the ultimate buildout is \$232,935. Of note, the initial Filing No. 1 consisting of 17 single family housing units will have a road impact fee of \$69,717. Road impact fee calculations are shown in **Table 7**. During the final plat process, the project team will determine if the impact fees are paid up front or if the property will be included in one of the available public improvement districts with reduced upfront costs. The project team will determine payment methods with the final plat.

Table 7 – Road Impact Fees

Use	Units	Fee	Total Fee
Single Family Detached – 35 Dwelling Units	35 Dwelling Units	\$4,101 per Dwelling Unit	\$143,535
Mini-Warehouse (KSF) – 200,000 SF	200,000 SF	\$447 per 1,000 SF	\$89,400
Total			\$232,935

5.9 Improvement Summary

Based on the results of the intersection operational, turn lane evaluations, and vehicle queuing analysis, the key intersection recommended improvements and control are shown in **Figure 15** for 2030 and **Figure 16** for 2050.



Be sure to include this intersection as this is the "main" access for Filing 1. Typical comment for following Figures as well.

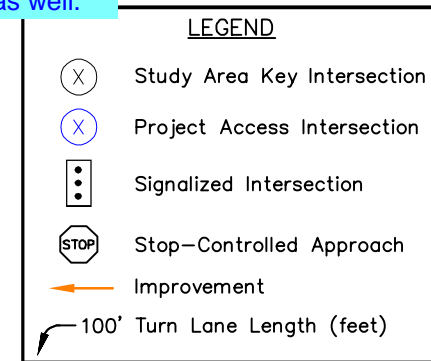


FIGURE 15
Trinity Ranch
El Paso County, CO
2030 Recommended Geometry and Control

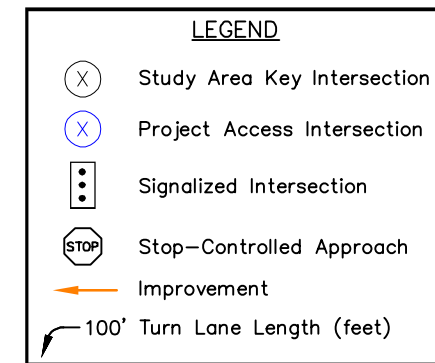
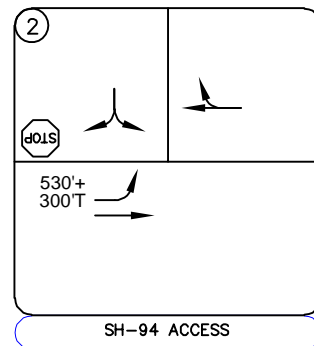
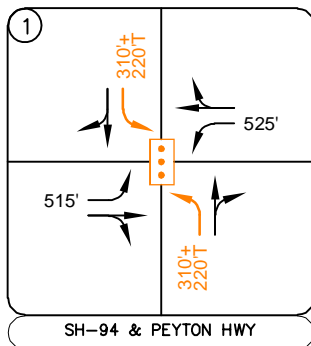
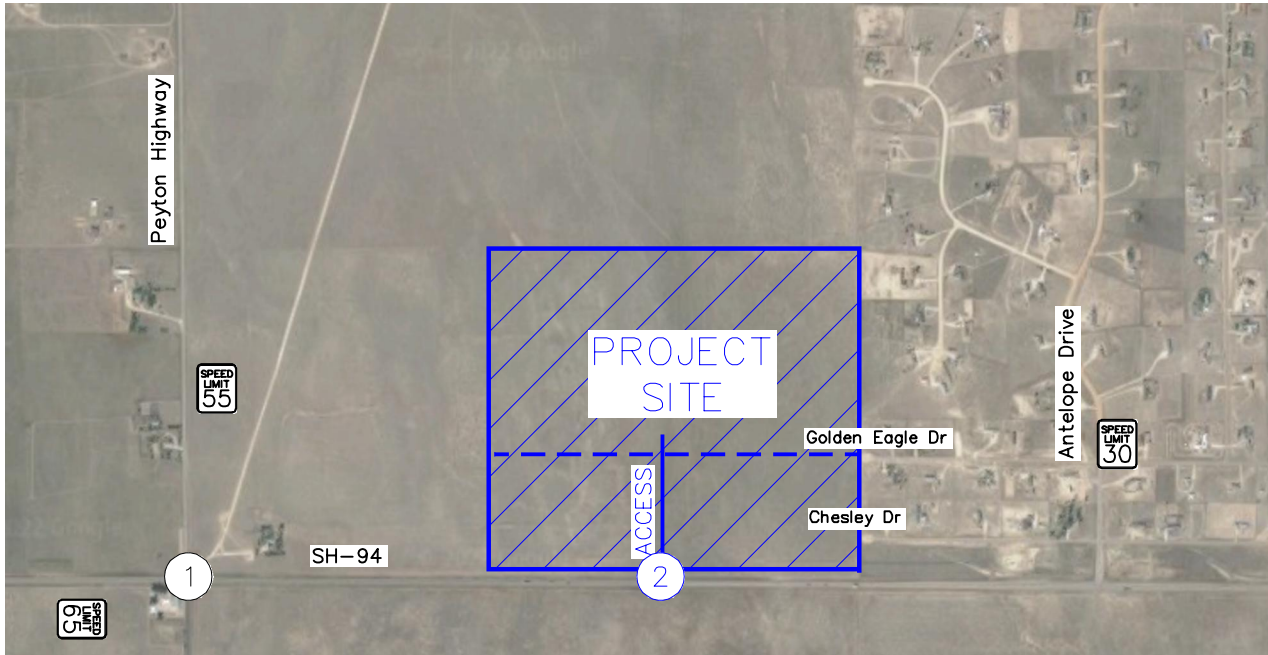


FIGURE 16
 Trinity Ranch
 El Paso County, CO
 2050 Recommended Geometry and Control

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis presented in this report, Kimley-Horn believes Trinity Ranch will be successfully incorporated into the existing and future roadway network. Analysis of the existing street network, the proposed project development, and expected traffic volumes resulted in the following conclusions and recommendations:

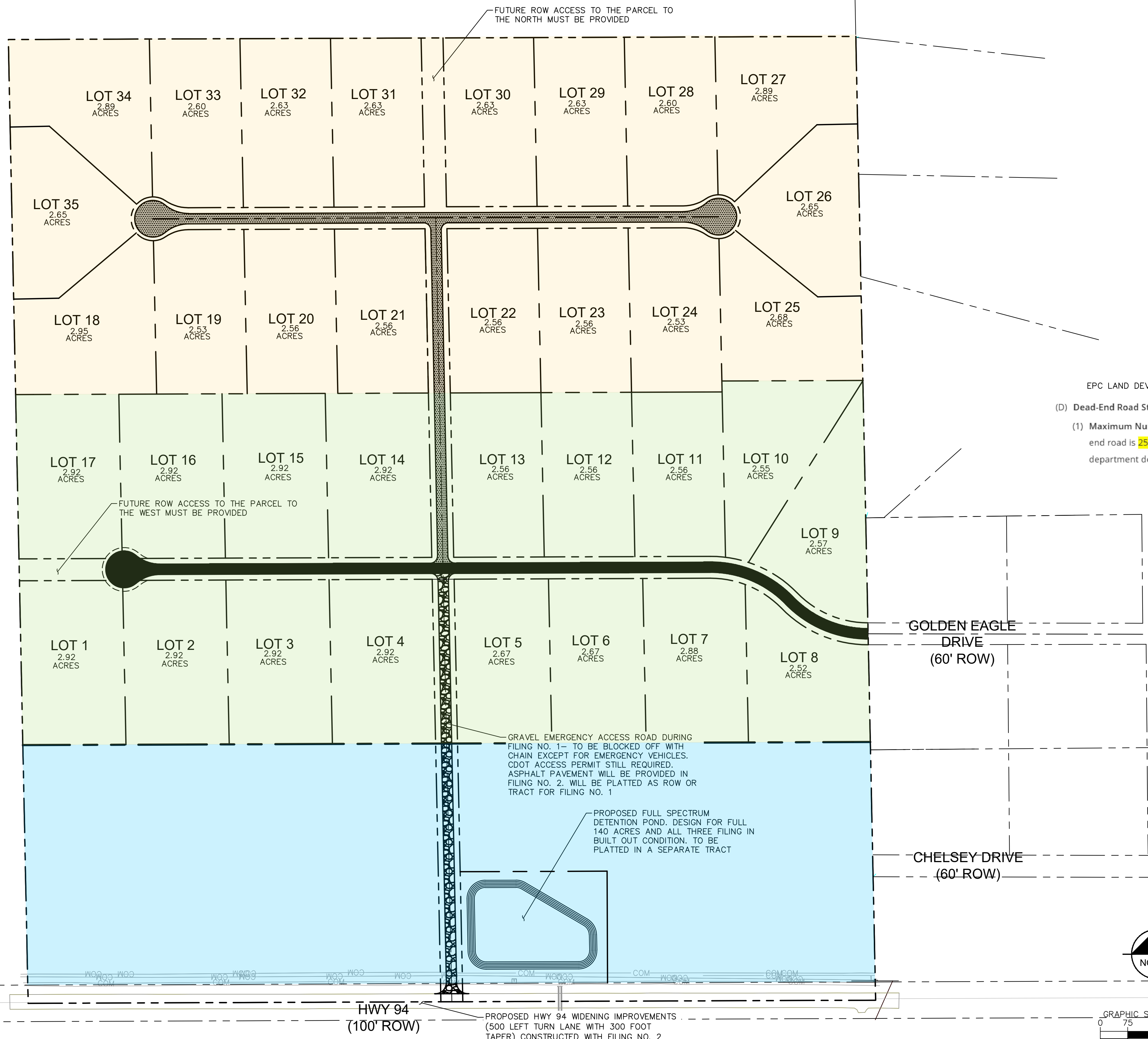
- With Filing No.1 of development consisting of 17 2.5 acre single family houses, the project is anticipated to only gain cross access from Golden Eagle Drive to the east through the intersection of SH-94 and Antelope Drive. There are no improvements needed at the intersection of SH-94 and Antelope Drive to successfully incorporate Filing No.1 into the existing roadway network. [What about once Filing 2 is completed?](#)
- With completion of the future filings for the Trinity Ranch project, a public street access intersection is proposed along the north side of SH-94. It is recommended that the public street access intersection operate with stop control with installation of a R1-1 “STOP” sign the southbound exiting approach. A separate eastbound left turn lane is warranted at the project access based on CDOT criteria and the left turn traffic volume projections along SH-94. This eastbound left turn lane should provide a length of 530 feet plus a 300-foot taper.
- The threshold for requiring an access permit along Colorado Department of Transportation (CDOT) roadways occurs when project traffic is anticipated to increase the existing access traffic volumes by more than 20 percent. Based on traffic projections, the addition of project traffic on the north and south legs of SH-94 at Peyton Highway are not anticipated to increase existing access traffic volumes by more than 20 percent, with the maximum expected increase at six (6) percent on the north leg (7 project / 124 existing) and three (3) percent on the south leg (3 project / 86 existing). Therefore, a CDOT access permit is not anticipated to be required at the SH-94 and Peyton Highway intersection in association with this project. An access permit will be required for the north leg of the proposed project access along SH-94.
- If future long term planning level 2050 traffic volume projections are realized, the intersection of SH-94 and Peyton Highway will meet warrants for signalization. Therefore, signalization may be the appropriate control at this intersection by the long-term horizon. If signal control is

implemented at the SH-94 and Peyton Highway intersection in the future, northbound and southbound left turn lanes should be incorporated coinciding with signal control to avoid split phasing signal timing at this intersection.

- Any on-site or offsite improvements should be incorporated into the Civil Drawings and conform to standards of El Paso County, CDOT, and the Manual on Uniform Traffic Control Devices (MUTCD) – 11th Edition.



Appendix A: Conceptual Site Plan



LEGEND

- PROPOSED LOT LINE
- PROPOSED ROADWAY CENTER LINE
- PROPOSED RIGHT OF WAY
- PROPOSED ASPHALT (FILING 1)
- PROPOSED GRAVEL (FILING 1)
- PROPOSED ASPHALT (FILING 2)
- FILING 1
- FILING 2
- COMMERCIAL PROPERTY (PROCESSED SEPARATELY)

COUNTS

FILING NO. 1: 17 LOTS (MAXIMUM BASED ON EPC NOTE BELOW)

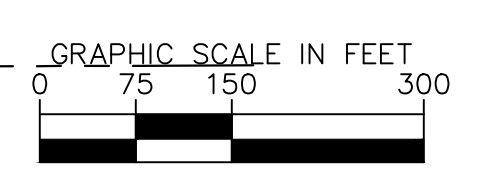
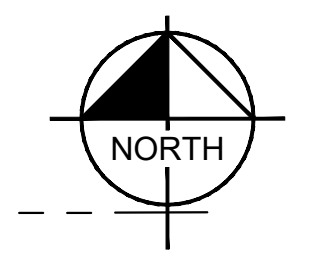
FILING NO. 2: 18 LOTS

TOTAL LOTS: 35 LOTS

EPC LAND DEVELOPMENT CODE 8.4.4.D.1

(D) Dead-End Road Standards.

(1) Maximum Number of Lots on Dead-End Road. The maximum number of lots fronting and taking access from a dead-end road is 25. A corner lot is not counted in the maximum number of lots on a dead-end road when the fire department determines that adequate emergency access is provided to the corner lot by an alternative road.



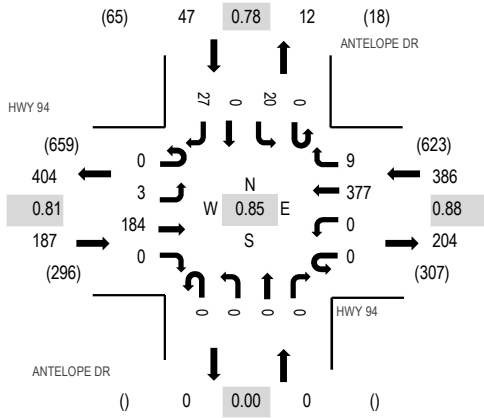
TRINITY RANCH -CONCEPT 1
2.5-ACRE PHASED LOT LAYOUT
03/25/2025

Kimley»Horn

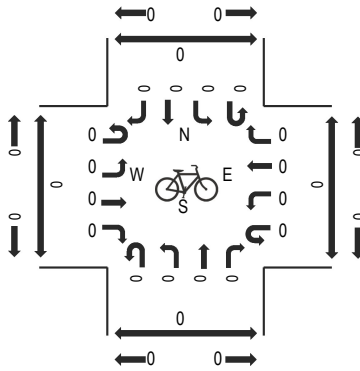
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
2 N NEVADA AVE., SUITE 900, COLORADO SPRINGS, 80903
PHONE: 719-453-0180

Appendix B: Intersection Count Sheets

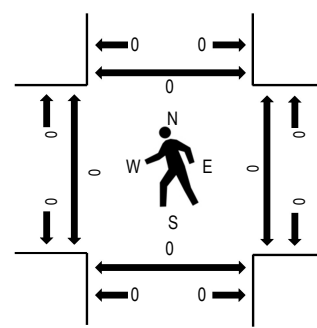
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians

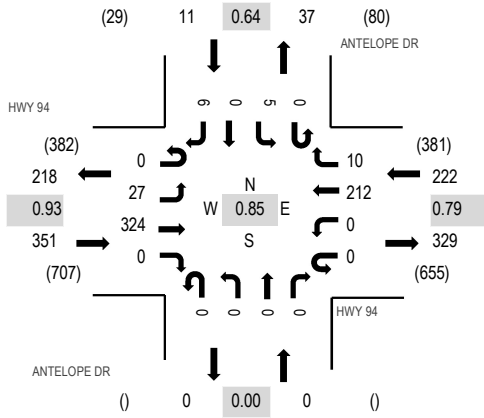


Note: Total study counts contained in parentheses.

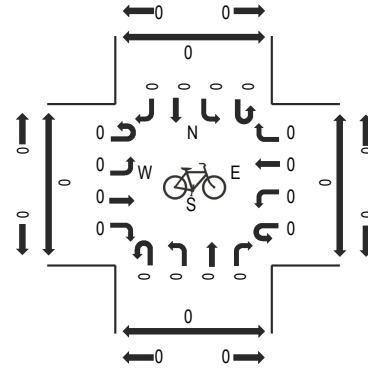
Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				ANTELOPE DR Northbound				ANTELOPE DR 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	1	45	0	0	0	79	1	0	0	0	0	0	3	0	11	140	620	0	0	0	0
7:15 AM	0	0	58	0	0	0	108	2	0	0	0	0	0	7	0	7	182	575	0	0	0	0
7:30 AM	0	1	52	0	0	0	98	1	0	0	0	0	0	9	0	6	167	497	0	0	0	0
7:45 AM	0	1	29	0	0	0	92	5	0	0	0	0	0	1	0	3	131	410	0	0	0	0
8:00 AM	0	2	20	0	0	0	71	0	0	0	0	0	0	0	0	2	95	364	0	0	0	0
8:15 AM	0	1	28	0	0	0	70	0	0	0	0	0	0	0	0	5	104		0	0	0	0
8:30 AM	0	1	27	0	0	0	46	0	0	0	0	0	0	0	0	6	80		0	0	0	0
8:45 AM	0	2	28	0	0	0	50	0	0	0	0	0	0	0	0	5	85		0	0	0	0
Count Total	0	9	287	0	0	0	614	9	0	0	0	0	0	20	0	45	984		0	0	0	0
Peak Hour	0	3	184	0	0	0	377	9	0	0	0	0	0	20	0	27	620		0	0	0	0

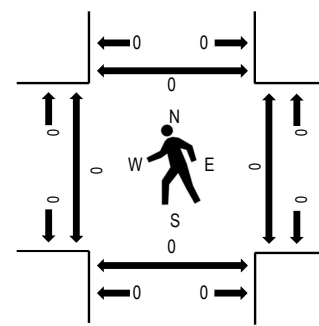
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians

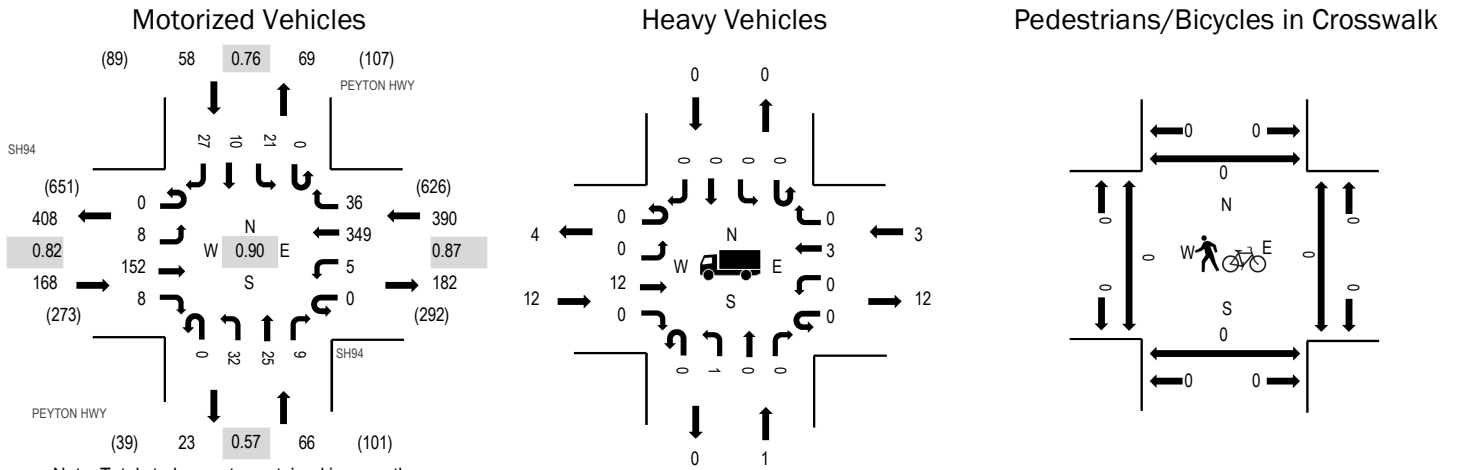


Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				ANTELOPE DR Northbound				ANTELOPE DR 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	8	90	0	0	0	66	4	0	0	0	0	0	2	0	1	171	584	0	0	0	0
4:15 PM	0	2	70	0	0	0	61	4	0	0	0	0	0	0	0	1	138	545	0	0	0	0
4:30 PM	0	6	75	0	0	0	42	1	0	0	0	0	0	1	0	2	127	546	0	0	0	0
4:45 PM	0	11	89	0	0	0	43	1	0	0	0	0	0	2	0	2	148	546	0	0	0	0
5:00 PM	0	10	83	0	0	0	30	6	0	0	0	0	0	1	0	2	132	533	0	0	0	0
5:15 PM	0	7	91	0	0	0	38	0	0	0	0	0	0	0	0	3	139		0	0	0	0
5:30 PM	0	7	71	0	0	0	41	1	0	0	0	0	0	1	0	6	127		0	0	0	0
5:45 PM	0	12	75	0	0	0	43	0	0	0	0	0	0	4	0	1	135		0	0	0	0
Count Total	0	63	644	0	0	0	364	17	0	0	0	0	0	11	0	18	1,117		0	0	0	0
Peak Hour	0	27	324	0	0	0	212	10	0	0	0	0	0	5	0	6	584		0	0	0	0

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	7.1%	0.82
WB	0.8%	0.87
NB	1.5%	0.57
SB	0.0%	0.76
All	2.3%	0.90

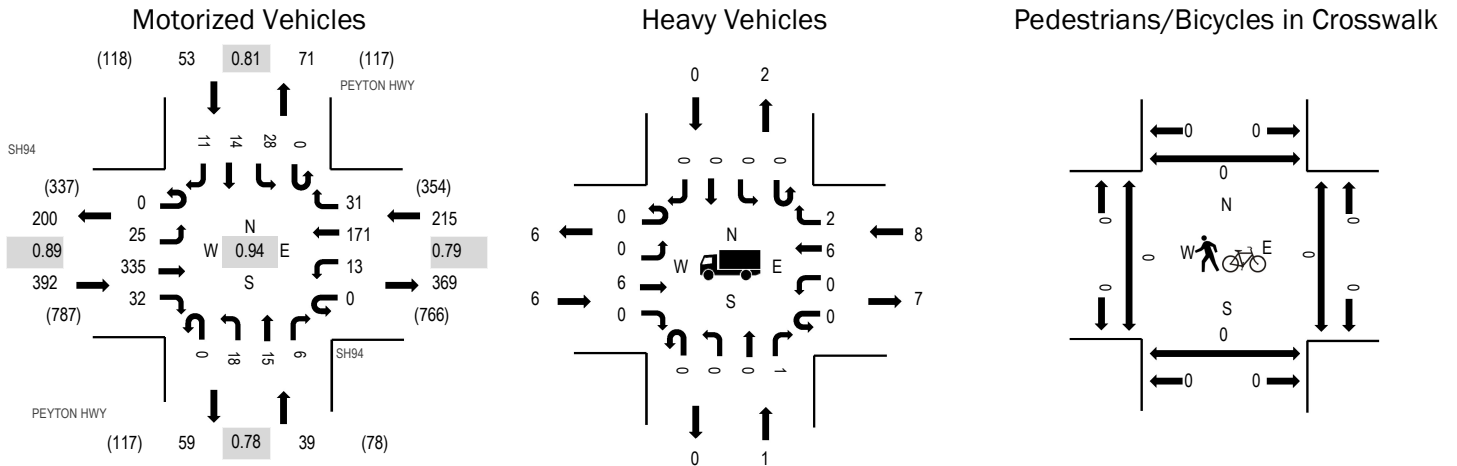
Traffic Counts - Motorized Vehicles

Interval Start Time	SH94 Eastbound				SH94 Westbound				PEYTON HWY Northbound				PEYTON HWY Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	2	46	3	0	0	88	9	0	9	15	5	0	3	2	8	190	682
7:15 AM	0	0	45	2	0	2	99	11	0	11	4	1	0	7	2	6	190	601
7:30 AM	0	1	38	1	0	2	89	9	0	9	4	3	0	10	3	6	175	528
7:45 AM	0	5	23	2	0	1	73	7	0	3	2	0	0	1	3	7	127	440
8:00 AM	0	2	24	0	0	2	58	7	0	3	3	1	0	4	1	4	109	407
8:15 AM	0	0	27	2	0	2	57	7	0	6	4	1	0	0	2	9	117	
8:30 AM	0	0	19	2	0	1	42	5	0	9	0	3	0	4	1	1	87	
8:45 AM	0	4	23	2	0	1	49	5	0	3	1	1	0	3	0	2	94	
Count Total	0	14	245	14	0	11	555	60	0	53	33	15	0	32	14	43	1,089	
Peak Hour	0	8	152	8	0	5	349	36	0	32	25	9	0	21	10	27	682	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	2	0	0	0	2	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:15 AM	0	0	1	0	1	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:30 AM	4	1	2	0	7	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:45 AM	6	0	0	0	6	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
8:00 AM	10	0	1	0	11	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:15 AM	6	1	2	0	9	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:30 AM	1	1	3	0	5	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:45 AM	4	1	5	0	10	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
Count Total	33	4	14	0	51	Count Total	0	0	0	0	0	Count Total	0	0	0	0	0
Peak Hour	12	1	3	0	16	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	1.5%	0.89
WB	3.7%	0.79
NB	2.6%	0.78
SB	0.0%	0.81
All	2.1%	0.94

Traffic Counts - Motorized Vehicles

Interval Start Time	SH94 Eastbound				SH94 Westbound				PEYTON HWY Northbound				PEYTON HWY Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	4	75	13	0	3	47	12	0	2	1	0	0	4	5	1	167	699
4:15 PM	0	5	80	3	0	3	52	13	0	7	4	4	0	7	3	5	186	684
4:30 PM	0	8	88	5	0	5	42	5	0	7	7	0	0	6	3	1	177	676
4:45 PM	0	8	92	11	0	2	30	1	0	2	3	2	0	11	3	4	169	646
5:00 PM	0	4	67	9	0	3	35	7	0	6	4	1	0	9	5	2	152	638
5:15 PM	0	4	97	13	0	0	31	5	0	6	2	3	0	11	6	0	178	
5:30 PM	0	5	88	7	0	0	23	4	0	4	2	2	0	7	2	3	147	
5:45 PM	0	3	91	7	0	2	26	3	0	1	3	5	0	16	4	0	161	
Count Total	0	41	678	68	0	18	286	50	0	35	26	17	0	71	31	16	1,337	
Peak Hour	0	25	335	32	0	13	171	31	0	18	15	6	0	28	14	11	699	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	1	0	6	0	7	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:15 PM	2	1	1	0	4	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:30 PM	1	0	1	0	2	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	2	0	0	0	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
5:00 PM	1	0	1	0	2	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:15 PM	0	0	3	5	8	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	2	2	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
Count Total	7	1	12	7	27	Count Total	0	0	0	0	0	Count Total	0	0	0	0	0
Peak Hour	6	1	8	0	15	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0

Appendix C: Future Traffic Projections

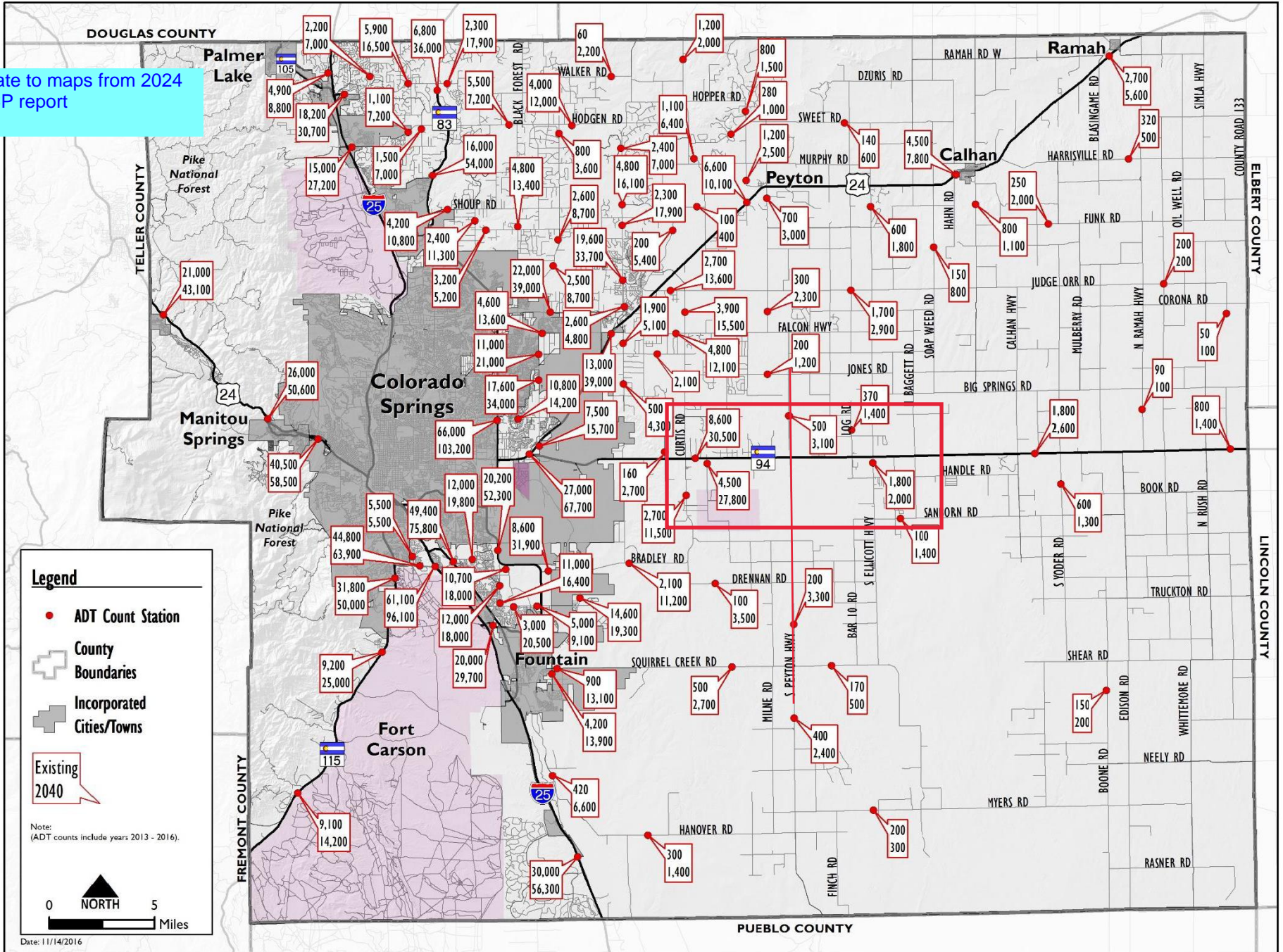
CDOT OTIS: Trinity Ranch

ROUTE	REFPT	ENDREFPT	LENGTH	AADT	AADTYR	COUNTYEAR	DHTRK	OFFPKTRK	YR20FACTOR	ANNUAL GROWTH R	DHV	DD	LOCATION
094A	13.095	17.1	3.993	4500	2023	2022	0.3	6.6	1.23	1%	11	57	ON SH 94 E/O PEYTON HWY CR 463

El Paso County Traffic Projections

	2025	2040	Growth	Growth
	Existing	Future	Factor	Rate
Peyton Highway	1,200	3,100	2.6	6.5%

Update to maps from 2024
MTCP report



Map 9: Existing and 2040 Traffic Volumes

Appendix D: Trip Generation Worksheets

Update to Filing 1 since that is how it's referred to within report.

Trinity Ranch Phase-1 Weekday Trip Generation Calculations

TRIP GENERATION CHARACTERISTICS								DIRECTIONAL DISTRIBUTION		BASELINE TRIPS		
Land Use + Code	Land Use	Subcategory	Source	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total
1 (210) Single-Family Detached Housing	Single-Family Detached Housing	All Sites	ITE 11th Ed	210	17	DU	$\ln(T) = 0.92 \ln(X) + 2.68$	50%	50%	99	99	198
Total:										99	99	198

Trinity Ranch Phase-1 AM Peak Hour Trip Generation Calculations

TRIP GENERATION CHARACTERISTICS								DIRECTIONAL DISTRIBUTION		BASELINE TRIPS		
Land Use + Code	Land Use	Subcategory	Source	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total
1 (210) Single-Family Detached Housing	Single-Family Detached Housing	All Sites	ITE 11th Ed	210	17	DU	$\ln(T) = 0.91 \ln(X) + 0.12$	25%	75%	4	11	15
Total:										4	11	15

Trinity Ranch Phase-1 PM Peak Hour Trip Generation Calculations

TRIP GENERATION CHARACTERISTICS								DIRECTIONAL DISTRIBUTION		BASELINE TRIPS		
Land Use + Code	Land Use	Subcategory	Source	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total
1 (210) Single-Family Detached Housing	Single-Family Detached Housing	All Sites	ITE 11th Ed	210	17	DU	$\ln(T) = 0.94 \ln(X) + 0.27$	63%	37%	12	7	19
Total:										12	7	19

Trinity Ranch Weekday Trip Generation Calculations

TRIP GENERATION CHARACTERISTICS									DIRECTIONAL DISTRIBUTION		BASELINE TRIPS		
Land Use + Code	Land Use	Subcategory	Source	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	
1	(151) Mini-Warehouse	Mini-Warehouse	All Sites	ITE 11th Ed	151	12.5	CSU	$T = 17.96(X)$	50%	50%	113	112	225
2	(210) Single-Family Detached Housing	Single-Family Detached Housing	All Sites	ITE 11th Ed	210	40	DU	$\ln(T) = 0.92 \ln(X) + 2.68$	50%	50%	217	217	434
Total:											330	329	659

Trinity Ranch AM Peak Hour Trip Generation Calculations

TRIP GENERATION CHARACTERISTICS									DIRECTIONAL DISTRIBUTION		BASELINE TRIPS		
Land Use + Code	Land Use	Subcategory	Source	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	
1	(151) Mini-Warehouse	Mini-Warehouse	All Sites	ITE 11th Ed	151	12.5	CSU	$T = 1.21(X)$	51%	49%	8	7	15
2	(210) Single-Family Detached Housing	Single-Family Detached Housing	All Sites	ITE 11th Ed	210	40	DU	$\ln(T) = 0.91 \ln(X) + 0.12$	25%	75%	8	24	32
Total:											16	31	47

Trinity Ranch PM Peak Hour Trip Generation Calculations

TRIP GENERATION CHARACTERISTICS									DIRECTIONAL DISTRIBUTION		BASELINE TRIPS		
Land Use + Code	Land Use	Subcategory	Source	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	
1	(151) Mini-Warehouse	Mini-Warehouse	All Sites	ITE 11th Ed	151	12.5	CSU	$T = 1.68(X)$	50%	50%	11	10	21
2	(210) Single-Family Detached Housing	Single-Family Detached Housing	All Sites	ITE 11th Ed	210	40	DU	$\ln(T) = 0.94 \ln(X) + 0.27$	63%	37%	26	16	42
Total:											37	26	63



Appendix E: Intersection Analysis Worksheets

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	8	152	5	5	349	36	32	25	9	21	10	27
Future Vol, veh/h	8	152	5	5	349	36	32	25	9	21	10	27
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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	169	6	6	388	40	36	28	10	23	11	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	428	0	0	174	0	0	594	628	172	619	611	408
Stage 1	-	-	-	-	-	-	189	189	-	419	419	-
Stage 2	-	-	-	-	-	-	404	439	-	201	192	-
Critical Hdwy	4.17	-	-	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	2.263	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1105	-	-	1402	-	-	417	399	872	401	409	643
Stage 1	-	-	-	-	-	-	812	743	-	612	590	-
Stage 2	-	-	-	-	-	-	623	578	-	801	741	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1105	-	-	1402	-	-	383	395	872	368	404	643
Mov Cap-2 Maneuver	-	-	-	-	-	-	469	465	-	471	476	-
Stage 1	-	-	-	-	-	-	806	737	-	609	588	-
Stage 2	-	-	-	-	-	-	580	576	-	756	735	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.4			0.1			13.46			12.58		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	499	1105	-	-	1402	-	-	539
HCM Lane V/C Ratio	0.147	0.008	-	-	0.004	-	-	0.12
HCM Ctrl Dly (s/v)	13.5	8.3	-	-	7.6	-	-	12.6
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.4

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	25	335	32	13	171	31	18	15	6	28	14	11
Future Vol, veh/h	25	335	32	13	171	31	18	15	6	28	14	11
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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	4	4	4	3	3	3	2	2	2
Mvmt Flow	27	356	34	14	182	33	19	16	6	30	15	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	215	0	0	390	0	0	644	669	373	644	670	198
Stage 1	-	-	-	-	-	-	427	427	-	226	226	-
Stage 2	-	-	-	-	-	-	217	243	-	418	444	-
Critical Hdwy	4.12	-	-	4.14	-	-	7.13	6.53	6.23	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.236	-	-	3.527	4.027	3.327	3.518	4.018	3.318
Pot Cap-1 Maneuver	1355	-	-	1157	-	-	385	377	670	386	378	843
Stage 1	-	-	-	-	-	-	604	584	-	777	717	-
Stage 2	-	-	-	-	-	-	783	703	-	613	575	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1355	-	-	1157	-	-	355	365	670	358	366	843
Mov Cap-2 Maneuver	-	-	-	-	-	-	455	446	-	452	444	-
Stage 1	-	-	-	-	-	-	592	572	-	767	708	-
Stage 2	-	-	-	-	-	-	747	695	-	578	564	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.49			0.49			13.3			13.16		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	475	1355	-	-	1157	-	-	497
HCM Lane V/C Ratio	0.087	0.02	-	-	0.012	-	-	0.113
HCM Ctrl Dly (s/v)	13.3	7.7	-	-	8.1	-	-	13.2
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.4

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	10	158	6	6	363	46	41	32	12	27	13	35
Future Vol, veh/h	10	158	6	6	363	46	41	32	12	27	13	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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	176	7	7	403	51	46	36	13	30	14	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	454	0	0	182	0	0	625	669	179	658	647	429
Stage 1	-	-	-	-	-	-	201	201	-	442	442	-
Stage 2	-	-	-	-	-	-	424	468	-	216	204	-
Critical Hdwy	4.17	-	-	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	2.263	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1080	-	-	1393	-	-	397	379	864	378	390	626
Stage 1	-	-	-	-	-	-	801	735	-	594	576	-
Stage 2	-	-	-	-	-	-	608	561	-	787	732	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1080	-	-	1393	-	-	356	373	864	338	384	626
Mov Cap-2 Maneuver	-	-	-	-	-	-	444	447	-	448	461	-
Stage 1	-	-	-	-	-	-	793	727	-	591	573	-
Stage 2	-	-	-	-	-	-	553	559	-	729	725	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.48			0.11			14.38			13.25		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	478	1080	-	-	1393	-	-	519
HCM Lane V/C Ratio	0.198	0.01	-	-	0.005	-	-	0.16
HCM Ctrl Dly (s/v)	14.4	8.4	-	-	7.6	-	-	13.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.6

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	32	349	41	17	178	40	23	19	8	36	18	14
Future Vol, veh/h	32	349	41	17	178	40	23	19	8	36	18	14
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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	4	4	4	3	3	3	2	2	2
Mvmt Flow	34	371	44	18	189	43	24	20	9	38	19	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	232	0	0	415	0	0	696	729	393	696	730	211
Stage 1	-	-	-	-	-	-	461	461	-	247	247	-
Stage 2	-	-	-	-	-	-	235	268	-	449	483	-
Critical Hdwy	4.12	-	-	4.14	-	-	7.13	6.53	6.23	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.236	-	-	3.527	4.027	3.327	3.518	4.018	3.318
Pot Cap-1 Maneuver	1336	-	-	1133	-	-	355	348	654	356	349	830
Stage 1	-	-	-	-	-	-	578	563	-	757	702	-
Stage 2	-	-	-	-	-	-	766	685	-	589	553	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1336	-	-	1133	-	-	319	334	654	321	335	830
Mov Cap-2 Maneuver	-	-	-	-	-	-	425	420	-	420	417	-
Stage 1	-	-	-	-	-	-	564	549	-	745	691	-
Stage 2	-	-	-	-	-	-	719	674	-	546	539	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.59			0.6			14.11			14.13		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	448	1336	-	-	1133	-	-	466
HCM Lane V/C Ratio	0.119	0.025	-	-	0.016	-	-	0.155
HCM Ctrl Dly (s/v)	14.1	7.8	-	-	8.2	-	-	14.1
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0	-	-	0.5

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	10	161	6	7	371	47	41	32	12	27	13	35
Future Vol, veh/h	10	161	6	7	371	47	41	32	12	27	13	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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	179	7	8	412	52	46	36	13	30	14	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	464	0	0	186	0	0	639	684	182	673	662	438
Stage 1	-	-	-	-	-	-	204	204	-	454	454	-
Stage 2	-	-	-	-	-	-	435	480	-	219	208	-
Critical Hdwy	4.17	-	-	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	2.263	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1071	-	-	1389	-	-	389	371	860	369	382	618
Stage 1	-	-	-	-	-	-	797	732	-	586	569	-
Stage 2	-	-	-	-	-	-	600	554	-	783	730	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1071	-	-	1389	-	-	347	365	860	329	376	618
Mov Cap-2 Maneuver	-	-	-	-	-	-	436	441	-	440	454	-
Stage 1	-	-	-	-	-	-	789	725	-	582	566	-
Stage 2	-	-	-	-	-	-	545	551	-	726	722	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.47			0.13			14.55			13.39		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	471	1071	-	-	1389	-	-	512
HCM Lane V/C Ratio	0.201	0.01	-	-	0.006	-	-	0.163
HCM Ctrl Dly (s/v)	14.6	8.4	-	-	7.6	-	-	13.4
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.6

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	32	357	41	17	183	41	23	19	9	37	18	14
Future Vol, veh/h	32	357	41	17	183	41	23	19	9	37	18	14
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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	4	4	4	3	3	3	2	2	2
Mvmt Flow	34	380	44	18	195	44	24	20	10	39	19	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	238	0	0	423	0	0	710	744	402	711	744	216
Stage 1	-	-	-	-	-	-	470	470	-	253	253	-
Stage 2	-	-	-	-	-	-	240	274	-	458	491	-
Critical Hdwy	4.12	-	-	4.14	-	-	7.13	6.53	6.23	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.236	-	-	3.527	4.027	3.327	3.518	4.018	3.318
Pot Cap-1 Maneuver	1329	-	-	1125	-	-	347	342	646	348	343	823
Stage 1	-	-	-	-	-	-	572	559	-	752	698	-
Stage 2	-	-	-	-	-	-	761	681	-	583	548	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1329	-	-	1125	-	-	312	327	646	313	329	823
Mov Cap-2 Maneuver	-	-	-	-	-	-	419	415	-	413	412	-
Stage 1	-	-	-	-	-	-	558	544	-	740	687	-
Stage 2	-	-	-	-	-	-	714	670	-	539	534	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.58			0.58			14.2			14.32		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	445	1329	-	-	1125	-	-	459
HCM Lane V/C Ratio	0.122	0.026	-	-	0.016	-	-	0.16
HCM Ctrl Dly (s/v)	14.2	7.8	-	-	8.3	-	-	14.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0	-	-	0.6

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	11	160	7	7	367	49	44	34	12	29	14	37
Future Vol, veh/h	11	160	7	7	367	49	44	34	12	29	14	37
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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	178	8	8	408	54	49	38	13	32	16	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	462	0	0	186	0	0	637	684	182	672	661	435
Stage 1	-	-	-	-	-	-	206	206	-	451	451	-
Stage 2	-	-	-	-	-	-	431	478	-	221	210	-
Critical Hdwy	4.17	-	-	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	2.263	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1073	-	-	1389	-	-	390	371	861	370	383	621
Stage 1	-	-	-	-	-	-	796	731	-	588	571	-
Stage 2	-	-	-	-	-	-	603	556	-	781	728	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1073	-	-	1389	-	-	346	365	861	328	376	621
Mov Cap-2 Maneuver	-	-	-	-	-	-	435	441	-	440	455	-
Stage 1	-	-	-	-	-	-	787	723	-	585	568	-
Stage 2	-	-	-	-	-	-	544	553	-	721	720	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.52			0.13			14.77			13.5		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	468	1073	-	-	1389	-	-	512
HCM Lane V/C Ratio	0.214	0.011	-	-	0.006	-	-	0.174
HCM Ctrl Dly (s/v)	14.8	8.4	-	-	7.6	-	-	13.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.6

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	34	352	44	18	180	42	25	21	8	38	19	15
Future Vol, veh/h	34	352	44	18	180	42	25	21	8	38	19	15
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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	4	4	4	3	3	3	2	2	2
Mvmt Flow	36	374	47	19	191	45	27	22	9	40	20	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	236	0	0	421	0	0	710	745	398	710	746	214
Stage 1	-	-	-	-	-	-	470	470	-	252	252	-
Stage 2	-	-	-	-	-	-	240	274	-	458	494	-
Critical Hdwy	4.12	-	-	4.14	-	-	7.13	6.53	6.23	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.236	-	-	3.527	4.027	3.327	3.518	4.018	3.318
Pot Cap-1 Maneuver	1331	-	-	1127	-	-	347	341	650	348	342	826
Stage 1	-	-	-	-	-	-	572	558	-	752	698	-
Stage 2	-	-	-	-	-	-	761	681	-	583	547	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1331	-	-	1127	-	-	310	326	650	312	327	826
Mov Cap-2 Maneuver	-	-	-	-	-	-	417	414	-	411	410	-
Stage 1	-	-	-	-	-	-	556	543	-	739	686	-
Stage 2	-	-	-	-	-	-	712	669	-	536	532	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	0.62		0.62		14.43		14.41	
HCM LOS					B		B	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	439	1331	-	-	1127	-	-	459
HCM Lane V/C Ratio	0.131	0.027	-	-	0.017	-	-	0.167
HCM Ctrl Dly (s/v)	14.4	7.8	-	-	8.2	-	-	14.4
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	0.6

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	11	171	7	9	389	52	44	34	13	31	14	37
Future Vol, veh/h	11	171	7	9	389	52	44	34	13	31	14	37
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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	190	8	10	432	58	49	38	14	34	16	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	490	0	0	198	0	0	678	728	194	714	703	461
Stage 1	-	-	-	-	-	-	218	218	-	481	481	-
Stage 2	-	-	-	-	-	-	460	510	-	233	222	-
Critical Hdwy	4.17	-	-	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	2.263	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1048	-	-	1375	-	-	366	350	848	346	362	600
Stage 1	-	-	-	-	-	-	784	722	-	566	554	-
Stage 2	-	-	-	-	-	-	581	538	-	770	720	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1048	-	-	1375	-	-	323	343	848	304	355	600
Mov Cap-2 Maneuver	-	-	-	-	-	-	416	423	-	420	438	-
Stage 1	-	-	-	-	-	-	775	714	-	562	550	-
Stage 2	-	-	-	-	-	-	522	534	-	708	711	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.49			0.15			15.26			14.02		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	451	1048	-	-	1375	-	-	490
HCM Lane V/C Ratio	0.224	0.012	-	-	0.007	-	-	0.186
HCM Ctrl Dly (s/v)	15.3	8.5	-	-	7.6	-	-	14
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.7

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	34	378	44	19	198	45	25	21	10	42	19	15
Future Vol, veh/h	34	378	44	19	198	45	25	21	10	42	19	15
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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	4	4	4	3	3	3	2	2	2
Mvmt Flow	36	402	47	20	211	48	27	22	11	45	20	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	259	0	0	449	0	0	759	797	426	761	796	235
Stage 1	-	-	-	-	-	-	498	498	-	275	275	-
Stage 2	-	-	-	-	-	-	261	299	-	486	521	-
Critical Hdwy	4.12	-	-	4.14	-	-	7.13	6.53	6.23	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.236	-	-	3.527	4.027	3.327	3.518	4.018	3.318
Pot Cap-1 Maneuver	1306	-	-	1101	-	-	322	318	627	322	320	804
Stage 1	-	-	-	-	-	-	553	543	-	731	683	-
Stage 2	-	-	-	-	-	-	742	664	-	563	531	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1306	-	-	1101	-	-	286	304	627	286	305	804
Mov Cap-2 Maneuver	-	-	-	-	-	-	398	396	-	390	393	-
Stage 1	-	-	-	-	-	-	537	528	-	718	670	-
Stage 2	-	-	-	-	-	-	692	652	-	515	517	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.58			0.6			14.85			15.16		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	425	1306	-	-	1101	-	-	435
HCM Lane V/C Ratio	0.14	0.028	-	-	0.018	-	-	0.186
HCM Ctrl Dly (s/v)	14.9	7.8	-	-	8.3	-	-	15.2
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0.1	-	-	0.7

Intersection												
Int Delay, s/veh	51.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	39	195	24	24	448	174	154	121	43	101	48	130
Future Vol, veh/h	39	195	24	24	448	174	154	121	43	101	48	130
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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	217	27	27	498	193	171	134	48	112	53	144

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	691	0	0	243	0	0	894	1061	230	1018	978	594
Stage 1	-	-	-	-	-	-	317	317	-	648	648	-
Stage 2	-	-	-	-	-	-	578	744	-	371	330	-
Critical Hdwy	4.17	-	-	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	2.263	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	881	-	-	1323	-	-	262	224	809	216	251	505
Stage 1	-	-	-	-	-	-	695	654	-	459	466	-
Stage 2	-	-	-	-	-	-	502	421	-	650	646	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	881	-	-	1323	-	-	~ 148	208	809	~ 106	233	505
Mov Cap-2 Maneuver	-	-	-	-	-	-	223	296	-	249	338	-
Stage 1	-	-	-	-	-	-	660	622	-	450	457	-
Stage 2	-	-	-	-	-	-	310	413	-	456	614	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	1.41		0.29		188.46		60.58	
HCM LOS					F		F	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	276	881	-	-	1323	-	-	346
HCM Lane V/C Ratio	1.281	0.049	-	-	0.02	-	-	0.895
HCM Ctrl Dly (s/v)	188.5	9.3	-	-	7.8	-	-	60.6
HCM Lane LOS	F	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	17.3	0.2	-	-	0.1	-	-	8.7

Notes	
-: Volume exceeds capacity	\$. Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection												
Int Delay, s/veh	45.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	121	430	154	63	219	150	87	72	29	135	68	53
Future Vol, veh/h	121	430	154	63	219	150	87	72	29	135	68	53
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	515	-	-	525	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	4	4	4	3	3	3	2	2	2
Mvmt Flow	129	457	164	67	233	160	93	77	31	144	72	56

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	393	0	0	621	0	0	1200	1323	539	1200	1326	313
Stage 1	-	-	-	-	-	-	797	797	-	447	447	-
Stage 2	-	-	-	-	-	-	403	527	-	753	879	-
Critical Hdwy	4.12	-	-	4.14	-	-	7.13	6.53	6.23	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.236	-	-	3.527	4.027	3.327	3.518	4.018	3.318
Pot Cap-1 Maneuver	1166	-	-	950	-	-	161	155	540	162	156	727
Stage 1	-	-	-	-	-	-	379	397	-	591	574	-
Stage 2	-	-	-	-	-	-	622	527	-	402	365	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	1166	-	-	950	-	-	~ 85	128	540	~ 88	129	727
Mov Cap-2 Maneuver	-	-	-	-	-	-	191	222	-	161	207	-
Stage 1	-	-	-	-	-	-	337	353	-	549	533	-
Stage 2	-	-	-	-	-	-	461	490	-	264	325	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	1.45			1.32			79.09			219.41		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	226	1166	-	-	950	-	-	206
HCM Lane V/C Ratio	0.886	0.11	-	-	0.071	-	-	1.321
HCM Ctrl Dly (s/v)	79.1	8.5	-	-	9.1	-	-	219.4
HCM Lane LOS	F	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	7.2	0.4	-	-	0.2	-	-	15.1

Notes	
-: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Timings
1: SH-94 & Peyton Highway

2050 Total AM
05/30/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	39	206	26	470	154	121	103	48
Future Volume (vph)	39	206	26	470	154	121	103	48
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	11.0	24.0	24.0	24.0	24.0
Total Split (s)	11.0	51.0	11.0	51.0	28.0	28.0	28.0	28.0
Total Split (%)	12.2%	56.7%	12.2%	56.7%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 79.3
 Natural Cycle: 70
 Control Type: Actuated-Uncoordinated

Splits and Phases: 1: SH-94 & Peyton Highway



HCM 7th Signalized Intersection Summary
 1: SH-94 & Peyton Highway

2050 Total AM
 05/30/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷		↶	↷		↶	↷	
Traffic Volume (veh/h)	39	206	24	26	470	177	154	121	44	103	48	130
Future Volume (veh/h)	39	206	24	26	470	177	154	121	44	103	48	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	229	27	29	522	197	171	134	49	114	53	144
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	811	96	619	655	247	260	328	120	281	112	304
Arrive On Green	0.04	0.51	0.51	0.03	0.51	0.51	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1711	1577	186	1781	1294	488	1186	1307	478	1201	445	1208
Grp Volume(v), veh/h	43	0	256	29	0	719	171	0	183	114	0	197
Grp Sat Flow(s),veh/h/ln	1711	0	1763	1781	0	1782	1186	0	1784	1201	0	1653
Q Serve(g_s), s	1.0	0.0	7.2	0.7	0.0	29.2	12.5	0.0	7.5	7.7	0.0	8.9
Cycle Q Clear(g_c), s	1.0	0.0	7.2	0.7	0.0	29.2	21.4	0.0	7.5	15.1	0.0	8.9
Prop In Lane	1.00		0.11	1.00		0.27	1.00		0.27	1.00		0.73
Lane Grp Cap(c), veh/h	267	0	906	619	0	902	260	0	448	281	0	415
V/C Ratio(X)	0.16	0.00	0.28	0.05	0.00	0.80	0.66	0.00	0.41	0.41	0.00	0.47
Avail Cap(c_a), veh/h	301	0	906	669	0	916	260	0	448	281	0	415
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.6	0.0	12.1	9.9	0.0	17.9	36.9	0.0	27.3	33.7	0.0	27.8
Incr Delay (d2), s/veh	0.3	0.0	0.8	0.0	0.0	4.9	5.9	0.0	0.6	0.9	0.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	0.0	5.2	0.5	0.0	18.0	7.2	0.0	5.8	4.1	0.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.9	0.0	12.9	9.9	0.0	22.8	42.9	0.0	27.9	34.6	0.0	28.7
LnGrp LOS	B		B	A		C	D		C	C		C
Approach Vol, veh/h		299			748			354				311
Approach Delay, s/veh		13.2			22.3			35.1				30.9
Approach LOS		B			C			D				C
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	51.0		28.0	9.2	50.3		28.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	45.0		22.0	5.0	45.0		22.0				
Max Q Clear Time (g_c+I1), s	2.7	9.2		23.4	3.0	31.2		17.1				
Green Ext Time (p_c), s	0.0	1.6		0.0	0.0	4.5		0.7				
Intersection Summary												
HCM 7th Control Delay, s/veh			24.9									
HCM 7th LOS			C									

Timings
1: SH-94 & Peyton Highway

2050 Total PM
05/30/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	121	456	64	237	87	72	139	68
Future Volume (vph)	121	456	64	237	87	72	139	68
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	12.0	53.0	11.0	52.0	26.0	26.0	26.0	26.0
Total Split (%)	13.3%	58.9%	12.2%	57.8%	28.9%	28.9%	28.9%	28.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 84.7
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated

Splits and Phases: 1: SH-94 & Peyton Highway



HCM 7th Signalized Intersection Summary
 1: SH-94 & Peyton Highway

2050 Total PM
 05/30/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷		↶	↷		↶	↷	
Traffic Volume (veh/h)	121	456	154	64	237	153	87	72	31	139	68	53
Future Volume (veh/h)	121	456	154	64	237	153	87	72	31	139	68	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1841	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	129	485	164	68	252	163	93	77	33	148	72	56
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	4	4	4	3	3	3	2	2	2
Cap, veh/h	566	734	248	391	564	365	247	239	102	264	189	147
Arrive On Green	0.06	0.55	0.55	0.05	0.54	0.54	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1781	1337	452	1753	1044	675	1252	1232	528	1283	975	759
Grp Volume(v), veh/h	129	0	649	68	0	415	93	0	110	148	0	128
Grp Sat Flow(s),veh/h/ln	1781	0	1789	1753	0	1719	1252	0	1760	1283	0	1734
Q Serve(g_s), s	2.7	0.0	22.0	1.4	0.0	12.5	6.0	0.0	4.6	9.6	0.0	5.5
Cycle Q Clear(g_c), s	2.7	0.0	22.0	1.4	0.0	12.5	11.5	0.0	4.6	14.2	0.0	5.5
Prop In Lane	1.00		0.25	1.00		0.39	1.00		0.30	1.00		0.44
Lane Grp Cap(c), veh/h	566	0	982	391	0	928	247	0	342	264	0	336
V/C Ratio(X)	0.23	0.00	0.66	0.17	0.00	0.45	0.38	0.00	0.32	0.56	0.00	0.38
Avail Cap(c_a), veh/h	591	0	982	411	0	928	296	0	411	315	0	405
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.6	0.0	13.7	10.5	0.0	11.9	35.0	0.0	29.7	35.8	0.0	30.0
Incr Delay (d2), s/veh	0.2	0.0	3.5	0.2	0.0	1.6	1.0	0.0	0.5	1.9	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.0	13.9	0.9	0.0	8.4	3.3	0.0	3.5	5.5	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.8	0.0	17.2	10.7	0.0	13.5	36.0	0.0	30.2	37.6	0.0	30.7
LnGrp LOS	A		B	B		B	D		C	D		C
Approach Vol, veh/h		778			483			203			276	
Approach Delay, s/veh		15.8			13.1			32.8			34.4	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	53.0		22.6	10.8	52.2		22.6				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	47.0		20.0	6.0	46.0		20.0				
Max Q Clear Time (g_c+I1), s	3.4	24.0		13.5	4.7	14.5		16.2				
Green Ext Time (p_c), s	0.0	4.8		0.4	0.0	3.0		0.4				
Intersection Summary												
HCM 7th Control Delay, s/veh			20.0									
HCM 7th LOS			B									

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗	↖		↖	
Traffic Vol, veh/h	14	201	423	2	5	26
Future Vol, veh/h	14	201	423	2	5	26
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	226	475	2	6	29

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	478	0	-	0	734
Stage 1	-	-	-	-	476
Stage 2	-	-	-	-	257
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	1085	-	-	-	387
Stage 1	-	-	-	-	625
Stage 2	-	-	-	-	786
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1085	-	-	-	382
Mov Cap-2 Maneuver	-	-	-	-	382
Stage 1	-	-	-	-	616
Stage 2	-	-	-	-	786

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.54	0	12.11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1085	-	-	-	541
HCM Lane V/C Ratio	0.015	-	-	-	0.064
HCM Ctrl Dly (s/v)	8.4	-	-	-	12.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↗		↖	
Traffic Vol, veh/h	31	398	240	6	4	22
Future Vol, veh/h	31	398	240	6	4	22
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	447	270	7	4	25

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	276	0	-	0	790 273
Stage 1	-	-	-	-	273 -
Stage 2	-	-	-	-	517 -
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	1287	-	-	-	359 766
Stage 1	-	-	-	-	773 -
Stage 2	-	-	-	-	599 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1287	-	-	-	349 766
Mov Cap-2 Maneuver	-	-	-	-	349 -
Stage 1	-	-	-	-	752 -
Stage 2	-	-	-	-	599 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.57	0	10.83
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1287	-	-	-	647
HCM Lane V/C Ratio	0.027	-	-	-	0.045
HCM Ctrl Dly (s/v)	7.9	-	-	-	10.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗	↖		↖	
Traffic Vol, veh/h	14	339	646	2	5	26
Future Vol, veh/h	14	339	646	2	5	26
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	381	726	2	6	29

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	728	0	-	0	1139 727
Stage 1	-	-	-	-	727 -
Stage 2	-	-	-	-	412 -
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	875	-	-	-	222 424
Stage 1	-	-	-	-	478 -
Stage 2	-	-	-	-	668 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	875	-	-	-	218 424
Mov Cap-2 Maneuver	-	-	-	-	218 -
Stage 1	-	-	-	-	470 -
Stage 2	-	-	-	-	668 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.36	0	15.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	875	-	-	-	368
HCM Lane V/C Ratio	0.018	-	-	-	0.095
HCM Ctrl Dly (s/v)	9.2	-	-	-	15.8
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↗		↖	
Traffic Vol, veh/h	31	594	432	6	4	22
Future Vol, veh/h	31	594	432	6	4	22
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	667	485	7	4	25

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	492	0	-	0	1226 489
Stage 1	-	-	-	-	489 -
Stage 2	-	-	-	-	737 -
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	1071	-	-	-	197 579
Stage 1	-	-	-	-	617 -
Stage 2	-	-	-	-	473 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1071	-	-	-	191 579
Mov Cap-2 Maneuver	-	-	-	-	191 -
Stage 1	-	-	-	-	597 -
Stage 2	-	-	-	-	473 -

Approach	EB	WB	SB
HCM Control Delay, s/v	0.42	0	13.74
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1071	-	-	-	441
HCM Lane V/C Ratio	0.033	-	-	-	0.066
HCM Control Delay (s/veh)	8.5	-	-	-	13.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↗
Traffic Vol, veh/h	9	287	377	9	20	27
Future Vol, veh/h	9	287	377	9	20	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	850	-	-	800	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	338	444	11	24	32

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	454	0	-	0	802 444
Stage 1	-	-	-	-	444 -
Stage 2	-	-	-	-	359 -
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	1107	-	-	-	353 614
Stage 1	-	-	-	-	647 -
Stage 2	-	-	-	-	707 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1107	-	-	-	350 614
Mov Cap-2 Maneuver	-	-	-	-	534 -
Stage 1	-	-	-	-	641 -
Stage 2	-	-	-	-	707 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.25	0	11.89
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1107	-	-	-	577
HCM Lane V/C Ratio	0.01	-	-	-	0.096
HCM Ctrl Dly (s/v)	8.3	-	-	-	11.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	27	324	212	10	5	6
Future Vol, veh/h	27	324	212	10	5	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	850	-	-	800	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	381	249	12	6	7

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	261	0	-	0	694 249
Stage 1	-	-	-	-	249 -
Stage 2	-	-	-	-	445 -
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	1303	-	-	-	409 789
Stage 1	-	-	-	-	792 -
Stage 2	-	-	-	-	646 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1303	-	-	-	399 789
Mov Cap-2 Maneuver	-	-	-	-	399 -
Stage 1	-	-	-	-	773 -
Stage 2	-	-	-	-	646 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.6	0	11.75
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1303	-	-	-	546
HCM Lane V/C Ratio	0.024	-	-	-	0.024
HCM Ctrl Dly (s/v)	7.8	-	-	-	11.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↗
Traffic Vol, veh/h	11	296	388	11	24	33
Future Vol, veh/h	11	296	388	11	24	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	850	-	-	800	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	348	456	13	28	39

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	469	0	-	0	831
Stage 1	-	-	-	-	456
Stage 2	-	-	-	-	374
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	1092	-	-	-	340
Stage 1	-	-	-	-	638
Stage 2	-	-	-	-	696
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1092	-	-	-	336
Mov Cap-2 Maneuver	-	-	-	-	523
Stage 1	-	-	-	-	630
Stage 2	-	-	-	-	696

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.3	0	12.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1092	-	-	-	567
HCM Lane V/C Ratio	0.012	-	-	-	0.118
HCM Ctrl Dly (s/v)	8.3	-	-	-	12.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.4

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↗
Traffic Vol, veh/h	33	334	218	12	6	7
Future Vol, veh/h	33	334	218	12	6	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	850	-	-	800	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	393	256	14	7	8

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	271	0	-	0	727 256
Stage 1	-	-	-	-	256 -
Stage 2	-	-	-	-	471 -
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	1293	-	-	-	391 782
Stage 1	-	-	-	-	786 -
Stage 2	-	-	-	-	629 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1293	-	-	-	379 782
Mov Cap-2 Maneuver	-	-	-	-	379 -
Stage 1	-	-	-	-	763 -
Stage 2	-	-	-	-	629 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.71	0	12.07
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1293	-	-	-	525
HCM Lane V/C Ratio	0.03	-	-	-	0.029
HCM Ctrl Dly (s/v)	7.9	-	-	-	12.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↗
Traffic Vol, veh/h	14	296	388	12	26	42
Future Vol, veh/h	14	296	388	12	26	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	850	-	-	800	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	348	456	14	31	49

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	471	0	-	0	838
Stage 1	-	-	-	-	456
Stage 2	-	-	-	-	381
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	1091	-	-	-	336
Stage 1	-	-	-	-	638
Stage 2	-	-	-	-	690
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1091	-	-	-	331
Mov Cap-2 Maneuver	-	-	-	-	520
Stage 1	-	-	-	-	628
Stage 2	-	-	-	-	690

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.38	0	12.36
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1091	-	-	-	569
HCM Lane V/C Ratio	0.015	-	-	-	0.141
HCM Ctrl Dly (s/v)	8.3	-	-	-	12.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.5

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	43	334	218	14	7	13
Future Vol, veh/h	43	334	218	14	7	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	850	-	-	800	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	393	256	16	8	15

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	273	0	-	0	751 256
Stage 1	-	-	-	-	256 -
Stage 2	-	-	-	-	494 -
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	1290	-	-	-	379 782
Stage 1	-	-	-	-	786 -
Stage 2	-	-	-	-	613 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1290	-	-	-	364 782
Mov Cap-2 Maneuver	-	-	-	-	364 -
Stage 1	-	-	-	-	755 -
Stage 2	-	-	-	-	613 -

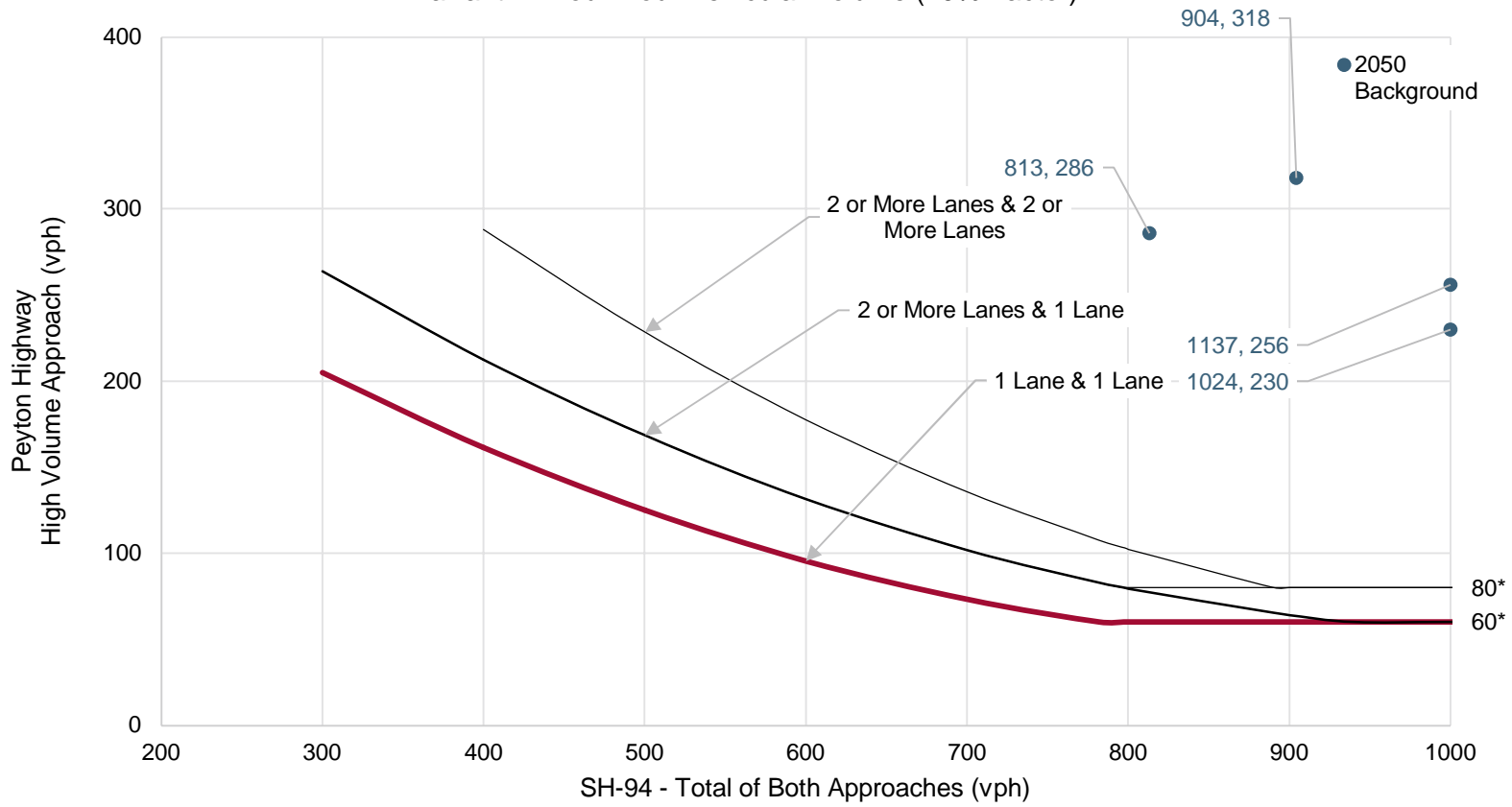
Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.9	0	11.74
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1290	-	-	-	558
HCM Lane V/C Ratio	0.039	-	-	-	0.042
HCM Ctrl Dly (s/v)	7.9	-	-	-	11.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1



Appendix F: Signal Warrant Analysis Worksheet

Warrant 2 - Four-Hour Vehicular Volume (70% Factor)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

SH-94 & Peyton Highway
Signal Warrant Analysis
Four-Hour Volume Warrant

Source: Manual on Uniform Traffic Control Devices 2009

Figure 1

