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Silverado Ranch Filing No. 2 Transportation Memorandum PCD File No.: SF246 (LSC #S224530) October 2, 2024

Traffic Engineer's Statement

This 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.



Developer's Statement

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

& Seaile

10-7-24

Date

Silverado Ranch, Filing 2 Transportation Memorandum

Prepared for: Mr. Stan Searle 18911 Cherry Springs Ranch Drive Monument, CO 80132

OCTOBER 2, 2024

LSC Transportation Consultants Prepared by: Jeffrey C. Hodsdon, P.E.

LSC # S224530 PCD File No.: SF246



CONTENTS

REPORT CONTENTS
PRIOR AREA TRAFFIC REPORTS
LAND USE AND ACCESS
Filing No. 2 Land Use2
Filing No. 1 (Previous Subdivision Plat)2
Proposed Site Access and Roadway Phasing2
SIGHT DISTANCE
Intersection Sight Distance2
EXISTING TRAFFIC VOLUMES
SHORT-TERM BASELINE TRAFFIC CONDITIONS
Traffic Volumes3
Levels of Service
TRIP GENERATION
TRIP DISTRIBUTION AND ASSIGNMENT
Trip Directional Distribution4
Site-Generated Traffic4
Short-Term Total (Baseline-Plus Filing No. 2 Site-Generated) Traffic Volumes5
LEVEL OF SERVICE ANALYSIS – SHORT-TERM BASELINE PLUS-SITE CONDITION
ESTIMATED 20-YEAR FUTURE TRAFFIC VOLUMES5
DRENNAN ROAD RELATIVE TRAFFIC IMPACT6
SUBDIVISION ROADWAY CLASSIFICATION
AUXILIARY TURN-LANE NEEDS ANALYSIS
Peyton Highway/Drennan Road7
Southbound-Left-Turn Lane7
Northbound-Right-Turn Lane8
Drover Canyon View/Drennan Road8
WAIVERS AND DEVIATION REQUESTS
Deviation Requests8
Deviation No. 1
Deviation No. 28
Land Development Code Waiver8

ROADWAY IMPROVEMENT FEE PROGRAM	8
Anticipated Fees and PID Option	8
Potentially Reimbursable Improvements Under the MTCP Fee Program	9
Auxiliary Turn Lanes	9
Enclosures:	9
Table 2	

Figure 1 - Figure 7 Traffic Count Reports Synchro LOS Reports



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October 2, 2024

Mr. Stan Searle 18911 Cherry Springs Ranch Drive Monument, CO 80132

> RE: Silverado Ranch, Filing 2 Transportation Memorandum El Paso County, CO PCD File No.: SF246 LSC #S224530

Dear Mr. Searle,

LSC Transportation Consultants, Inc. has prepared this Transportation Memorandum for the proposed Silverado Ranch Filing No. 2. Silverado Ranch is located southeast of the intersection of Peyton Highway and Drennan Road in El Paso County, Colorado.

Filing No. 2 is a proposed 15-lot residential subdivision. The site is located just east of Filing No. 1, which is partially developed. Access is proposed through Filing No. 1 to Drennan Road at the existing Drover Canyon View stop-sign-controlled T-intersection. This report has been prepared for submittal to El Paso County.

The "Silverado Ranch Updated Traffic Impact Analysis" dated January 18, 2008 was the full, "master TIS", with detailed traffic engineering evaluation and recommendations for the Silverado Ranch development. This report presents the details of the current subdivision filing, updated traffic-count data, and short-term traffic analysis and recommendations associated with the proposed Filing No. 2.

REPORT CONTENTS

This report contains the following updates to the 2008 study with respect to Filing 2:

- The currently-proposed Filing 2 proposed land use and access;
- The adjacent roadway current traffic volumes, based on current traffic count data;
- Filing 2 trip-generation estimate;
- Short-term auxiliary turn-lane needs assessment for Filing No. 2;
- Recommended Filing 2 street classifications;
- List of deviations requested with Filing No. 2; and
- County Road Improvement Fee Program with respect to Filing 2.

PRIOR AREA TRAFFIC REPORTS

The following are prior LSC traffic reports prepared for Silverado Ranch: Silverado Ranch, Updated Traffic Impact Analysis – dated January 18, 2008

- Silverado Ranch *Sight Distance Memorandum* dated March 30, 2010
- Silverado Ranch Filing No. 1 Transportation Memorandum dated July 3, 2018

LAND USE AND ACCESS

Filing No. 2 Land Use

Figure 1 shows the site location relative to the adjacent and nearby roadways. Fifteen lots for single-family residential dwelling units are proposed with Filing 2. Figure 2 shows the site plan.

Filing No. 1 (Previous Subdivision Plat)

Approximately 4 dwelling units currently have been constructed within the adjacent Filing No. 1, with an additional 6 dwelling units still to be constructed as part of Filing 1.

Proposed Site Access and Roadway Phasing

Access for Filing No. 2 is proposed through Filing No. 1 to Drennan Road via an extension of existing Silverado Hill Loop and Drover Canyon View. Drover Canyon View connects to Drennan Road at a stop-sign-controlled T-intersection, located 1,267 feet east of Peyton Highway (centerline spacing).

Per the proposed plat, interim access would only be to Drennan Road. An interim/temporary cul-de-sac would be constructed at the east end of the subdivision. The access to Peyton Highway would not be implemented with Filing No. 2. The Preliminary Plan/PUD for the overall development site and the 2008 TIS show a second access to Peyton Highway located 1,455 feet south of Drennan Road. The completion of Silverado Hill Loop and this second access would be with a future phase.

A copy of the subdivision plat is shown in Figure 2 (plat drawings attached for reference), which shows the proposed lot layout, the temporary cul-de-sac, and access through Filing No. 1.

SIGHT DISTANCE

Intersection Sight Distance

The intersection sight distance at the since-completed intersection of Drennan Road/Drover Canyon View was addressed in the 2018 report for Filing No. 1. Please refer to the 2018 Filing No. 1 report and the prior March 30, 2010 *Sight Distance Memorandum*.

EXISTING TRAFFIC VOLUMES

Vehicular turning-movement counts were conducted on Wednesday, August 9, 2023 from 6:30 to 8:30 a.m. and from 4:00 to 6:00 p.m. at the Peyton Highway/Drennan Road intersection. An afternoon peak-hour count was also conducted at the Drennan Road/Drover Canyon View (current Filing No. 1 access) intersection.

Figure 3 shows these turning-movement volumes, as well as the estimated current average weekday traffic volumes on the study-area roads. Raw count data are attached.

SHORT-TERM BASELINE TRAFFIC CONDITIONS

Traffic Volumes

Figure 7 shows the sum of the existing traffic volumes plus additional traffic associated with the buildout of Filing No. 1. A three-percent growth rate for one year (to 2024) has also been applied to the existing volumes. These volumes represent the estimated short-term baseline traffic.

Levels of Service

The following intersections have been analyzed to determine the short-term baseline intersection levels of service for the AM and PM peak-hour time periods:

- Peyton Highway/Drennan Road
- Drennan Road/Drover Canyon View

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection and is indicated on a scale from "A" to "F." LOS A is indicative of little congestion or delay. LOS F indicates a high level of congestion or delay. Table 1 shows the level of service delay ranges for signalized and unsignalized intersections.

	Intersection Levels of Servic	e Delay Naliges
Level of	Signalized Intersections	Unsignalized Intersections
Service	Average Control Delay	Average Control Delay
Service	(seconds per vehicle)	(seconds per vehicle) ¹
А	10.0 sec or less	10.0 sec or less
В	10.1-20.0 sec	10.1-15.0 sec
С	20.1-35.0 sec	15.1-25.0 sec
D	35.1-55.0 sec	25.1-35.0 sec
E	55.1-80.0 sec	35.1-50.0 sec
F	80.1 sec or more	50.1 sec or more
¹ For unsignalized inters	sections if V/C ratio is greater	than 1.0 the level of service is

Table 1: Intersection Levels of Service Delay Ranges

¹ For unsignalized intersections, if V/C ratio is greater than 1.0 the level of service is LOS F, regardless of the projected average control delay per vehicle.

Detailed Synchro reports are attached. A summary of the short-term baseline LOS during the weekday morning and evening peak hours is shown in Figure 4. Levels of service are projected to be "A."

TRIP GENERATION

Estimates of the existing and projected vehicle trips to be generated by Filing No. 2 have been made using the following nationally-published average trip-generation rates for land use code "210 – Single-Family (Detached) Housing" in *Trip Generation*, *11th Edition*, *2021* by the Institute of Transportation Engineers (ITE). A detailed trip-generation estimate for the subdivision, including ITE rates for the proposed 15 dwelling units to be constructed within Filing No. 2, is presented in Table 2 (attached). Table 3 below presents a summary of the estimated site trip generation for Filing No. 2.

Analysis Dariad		Weekday	,
Analysis Period	In	Out	Total
Morning Peak Hour	3	9	12
Evening Peak Hour	10	6	16
Daily/24-hour	85	85	169

Table 3: Estimated Site Vehicle-Trip Generation – Filing 2 Only

Based on the ITE estimate, Filing No. 2 is projected to generate about 169 vehicle trips on the average weekday. During the weekday morning peak hour, approximately 3 vehicles would enter, and 9 vehicles would exit the site. Approximately 10 entering vehicles and 6 exiting vehicles are projected for the weekday afternoon peak hour.

TRIP DISTRIBUTION AND ASSIGNMENT

Trip Directional Distribution

The directional distribution and localized routing of site-generated vehicle trips to the study-area roads and intersections are necessary components in determining the site's traffic impacts. Figure 4 shows the percentages of the site-generated vehicle trips projected to be oriented to and from the site's major approaches. The distribution estimate is based on Figure 4 of the 2008 Preliminary Plan ("master") TIS. Adjustments have been made based on the traffic-count data.

Site-Generated Traffic

Figure 6 shows the projected site-generated traffic volumes for the average weekday and the weekday morning and evening peak hours. Filing No. 2 site-generated traffic volumes at the intersection of Peyton Highway/Drennan Road and at Drennan Road/Drover Canyon View have been calculated by applying the directional-distribution percentages estimated by LSC (from Figure 4) to the trip-generation estimates (from Table 2).

Short-Term Total (Baseline-Plus Filing No. 2 Site-Generated) Traffic Volumes

Figure 7 shows the sum of the short-term baseline traffic volumes (from Figure 4) and site-generated peak-hour traffic volumes (shown in Figure 6). These volumes represent the estimated short-term **total** traffic following buildout of Filing No. 2.

LEVEL OF SERVICE ANALYSIS – SHORT-TERM BASELINE PLUS-SITE CONDITION

The following intersections have been analyzed to determine the projected intersection levels of service for short-term total (baseline plus site) traffic scenario for the AM and PM peak-hour time periods:

- Peyton Highway/Drennan Road
- Drennan Road/Drover Canyon View

Detailed Synchro reports are attached. A summary of LOS during the weekday morning and evening peak hours is shown in Figure 7.

All movements at the study-area intersections are projected to continue to operate at LOS A during both short-term peak hours, based on the projected short-term total traffic volumes.

ESTIMATED 20-YEAR FUTURE TRAFFIC VOLUMES

The 2008 Preliminary Plan TIS report presented future, 20- year traffic volumes. Those volumes included the trips to be generated by Filing No. 2.

Future background traffic estimated for adjacent Drennan Road and Peyton Highway in the 2008 Preliminary Plan TIS report is likely conservative, even for 2043. Those original estimates had anticipated a higher level of development within the Ellicott Springs Sketch Plan area to the east.

Based on the current 2023 traffic count data collected, the overall increase in vehicle traffic at the intersection of Peyton Highway/Drennan Road has only increased by 27 total vehicles during the AM peak and 26 total vehicles during the PM peak over the past five years. A portion of these additional trips are likely generated by Filing No. 1, which was considered site traffic in the 2008 study, and not included in the background traffic projections. Please refer to Table 4 for more details:

- AM peak hour increased by 27 total vehicles from July 2018 to August 2023
- PM peak hour increased by 26 total vehicles from July 2018 to August 2023

Ro	oadway		AM Peak	1		PM Peak	1
Approach	Name	2018	2023	Change	2018	2023	Change
SB	Peyton Hwy	16	20	4	17	37	20
WB	Drennan Rd	6	23	17	5	10	5
NB	Peyton Hwy	15	21	6	20	26	6
EB	Drennan Rd	3	3	0	14	9	-5
	Total	40	67	27	56	82	26

Table 4: Comparison of Approach Volumes at Peyton Highway/Drennan Road (2023 vs. 2018)

Projected 2040 volumes in the current EPC *Major Transportation Corridors Plan (MTCP*) indicate about 3,300 vehicles per day (vpd) on Peyton Highway south of Drennan Road, which is lower than the estimated 2030 total volume in the 2006 TIS (3,750).

The *MTCP* also indicates about 3,500 vehicles per day on Drennan road west of Peyton Highway, which is significantly lower than the estimated 2030 total volume in the 2006 TIS (7,750). Current daily volumes on Drennan Road are likely between about 260 to 310 vehicles per day, based on factored peak-hour count data.

DRENNAN ROAD RELATIVE TRAFFIC IMPACT

The estimated existing and projected short-term total average daily traffic (ADT) impacts have been compared to the roadway design ADTs shown in Tables 2-4 and 2-5 of the *ECM*. Figure 3 shows estimated **existing** annual average daily traffic (AADT) estimates on the adjacent roadways. These are based on peak-period data collected and other available 24-hour data on nearby roadways. Figure 7 shows the estimated short-term total ADTs on the study-area roadways.

Drennan Road is currently a gravel roadway. The *ECM* design ADT for a gravel roadway is 200 vehicles per day. Based on the LSC-estimated existing daily volume shown in Figure 3, the ADT on Drennan Road east of Peyton Highway to Drover Canyon View is approximately 275 vpd. This is an existing deficiency as the *ECM* 200-vpd design ADT for a gravel roadway is exceeded.

Figure 7 shows the projected short-term total ADT volumes. Based on LSC estimates, with the addition of projected Filing No. 2 site-generated trips plus trips to be generated by future new homes on the remainder of the currently-undeveloped, Filing No. 1 lots, this segment of Drennan Road is projected to be approximately 515 ADT based on the short-term analysis scenario. Note: some existing trips may include those associated with new home construction, which would be temporary.

The 2040 *MTCP* classifies Drennan Road as a "Collector." Under 2040 improvements, the MTCP calls for a Drennan Road upgrade to a 24-foot, paved (unimproved) roadway.

SUBDIVISION ROADWAY CLASSIFICATION

The proposed roadway within Filing 2, Silverado Hill Loop, is proposed as a private, unpaved local roadway. Please refer to design plans by JPS Engineering and Deviation No. 2 for details regarding requested roadway construction material.

AUXILIARY TURN-LANE NEEDS ANALYSIS

Filing No. 2 will **not** "trigger" the requirement for any auxiliary left- or right-turn lanes at the site access or at the Peyton Highway/Drennan Road intersection – based on the projected short-term and long-term total traffic volumes.

Peyton Highway/Drennan Road

Southbound-Left-Turn Lane

The projected southbound-left-turn volume at Peyton Highway/Drennan Road exceeds the *ECM*-minimum left-turn volume threshold prescribing an exclusive turn lane (25 vehicles per hour on a Minor Arterial [Rural Major Collector in the 2024 *MTCP*]), based on the projected long-term volumes, with or without the addition of site-generated traffic.

However, the projected total opposing traffic in the northbound direction during the PM peak hour (61 vph) is below 100 vph. Per Section 3.5(5) of the *Colorado State Highway Access Code*, this southbound-left-turn lane requirement may be dropped due to the low projected opposing traffic volumes:

"The auxiliary turn lanes required in the category design standards may be waived when the 20th year projected roadway volumes conflicting with the turning vehicle are below the following minimum volume thresholds. The right turn deceleration lane may be dropped if the volume in the travel lane is predicted to be below 150 DHV. **The left turn deceleration lane may be dropped if the opposing traffic is predicted to be below 100 DHV**. The right turn acceleration lane may be dropped if the adjacent traveled lane is predicted to be below 120 DHV. The left turn acceleration lane may be dropped if the volume in the inside lane in the direction of travel is predicted to be below 120 DHV."

Therefore, a southbound left-turn deceleration lane is not needed with Filing No. 2. The need for the turn lane could be re-checked with the next subdivision filing.

Northbound-Right-Turn Lane

The northbound-right-turn volume at Peyton Highway/Drennan Road is **not** expected to exceed the *ECM*-minimum right-turn volume threshold prescribing an exclusive turn lane (50 vehicles per hour on a Minor Arterial), based on the projected short-term and long-term total volumes.

Drover Canyon View/Drennan Road

The turning volumes at Drover Canyon View/Drennan Road are not projected to exceed the *ECM*-minimum volume thresholds prescribing exclusive right- or left-turn lanes, based on the projected short-term and long-term total volumes.

WAIVERS AND DEVIATION REQUESTS

Deviation Requests

Deviation No. 1

A deviation request for length of temporary cul-de-sac has been prepared and is included with this submittal.

Deviation No. 2

A deviation request to allow construction of all roads in Silverado Ranch using crushed asphalt (reclaimed asphalt pavement (RAP)) material instead of the ECM standard material of compacted gravel.

Land Development Code Waiver

A waiver to LDC Section 8.4.4.E.3 to allow the subdivision roadways to be private was previously approved.

ROADWAY IMPROVEMENT FEE PROGRAM

Anticipated Fees and PID Option

This project will be required to participate in the El Paso County Road Improvement Fee Program. The applicant will join the 10-mil PID. The 10-mil PID building permit fee portion associated with this option is \$1,221 per single-family dwelling unit. Based on 15 lots for Filing 2 only, the total building permit fee would be \$18,315.

Potentially Reimbursable Improvements Under the MTCP Fee Program

Nearby improvement projects which are potentially reimbursable under the Fee Program are (from Map 13 on the *MTCP*) include:

• P8 – Drennan Road from Curtis Road to Ellicott Highway (upgrade from 2-lane Rural gravel road to a 2-lane Unimproved County Road (\$7,148,000))

Given the rural location, pedestrian facilities do not currently exist on Peyton Highway or Drennan Road adjacent to the site. The following multi-modal improvement projects are shown adjacent to the site on "Map 15: Bicycle and Pedestrian Network and Improvements" on El Paso County's *Major Transportation Corridors Plan (MTCP*):

- M1 Peyton Highway from Squirrel Creek Road to Falcon Highway 15.93 miles of new bicycle lanes.
- P8 Drennan Road from Curtis Road to Ellicott Highway proposed bicycle route as part of future roadway upgrades/widening project.

Auxiliary Turn Lanes

Based on the projected intersection volumes for the short and long term, no auxiliary turn lanes are needed with Filing No. 2 at the intersections of Drover Canyon View/Drennan Road or Drennan Road/Peyton Highway. Please refer to the "Auxiliary Turn Lane Needs Analysis" section above for details. The potential need for auxiliary turn lanes could be re-checked with the next subdivision filing.

* * * * *

Please contact me if you have any questions regarding this report.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By: Jeffrey C. Hodsdon, P.E. Principal

JCH/JAB:jas

Enclosures: Table 2 Figure 1 - Figure 7 Traffic Count Reports Synchro LOS Reports

Tables



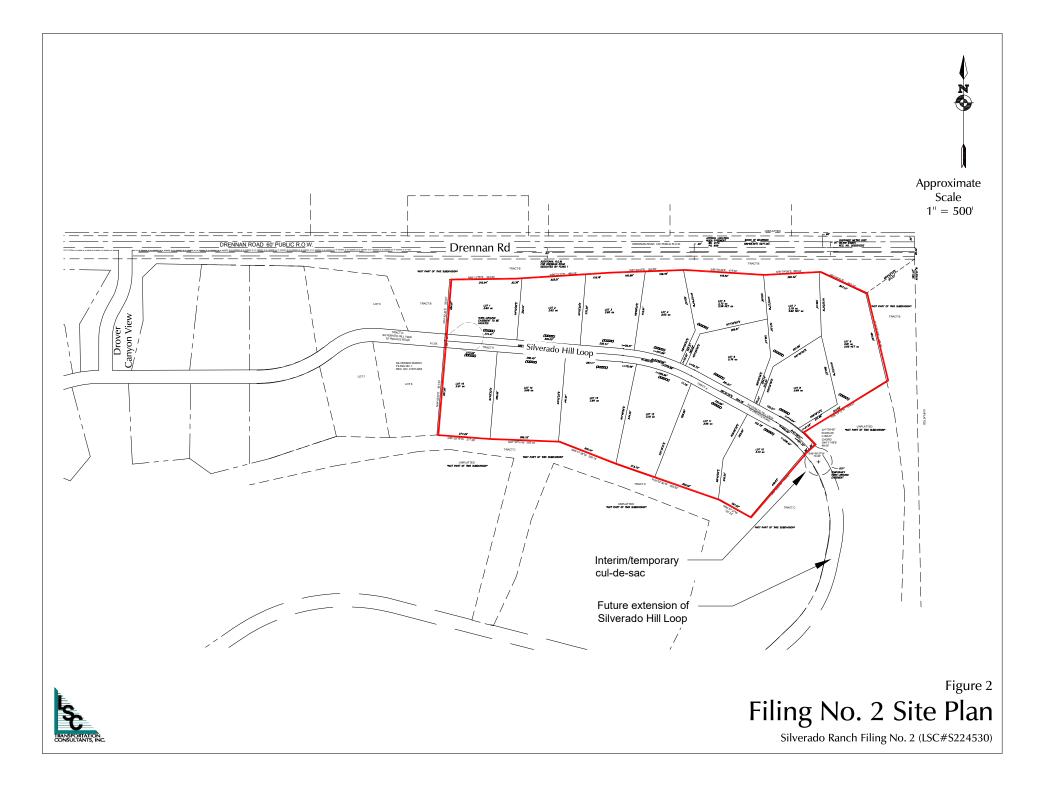
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coue	Description			Weekday	In	Out	In	Out	Weekday	In	Out	In	Out
Filing	1 Existing												
210	Single-Family (Detached) Housing	4	DU	11.27	0.22	0.62	0.68	0.40	45	1	2	3	2
Filing	1 Remainder to be Constructed												
210	Single-Family (Detached) Housing	6	DU	11.27	0.22	0.62	0.68	0.40	68	1	4	4	2
Filing	2 Only												
210	Single-Family (Detached) Housing	15	DU	11.27	0.22	0.62	0.68	0.40	169	3	9	10	6
Filing	s 1 + 2 Combined Total												
210	Single-Family (Detached) Housing	25	DU	11.27	0.22	0.62	0.68	0.40	282	5	16	17	10
¹ DU =	dwelling units												
² Sour	ce: Trip Generation, 11th Edition (2021)	by the Instit	tute of Tr	ansportation	n Engin	eers (IT	E)						

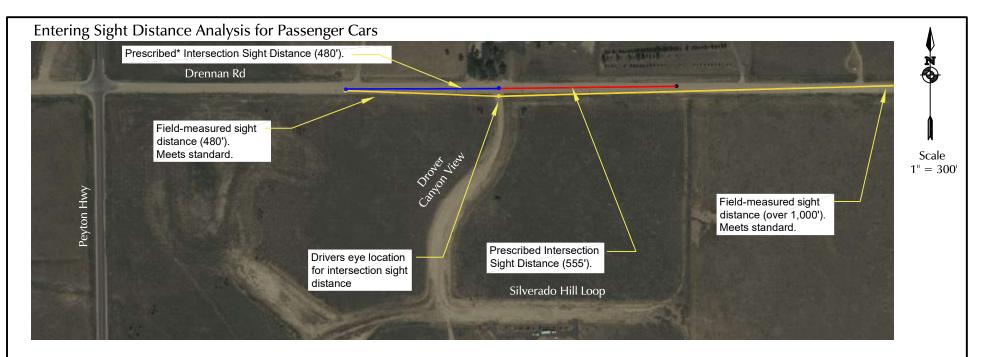
Table 2: Trip Generation Estimate

Figures









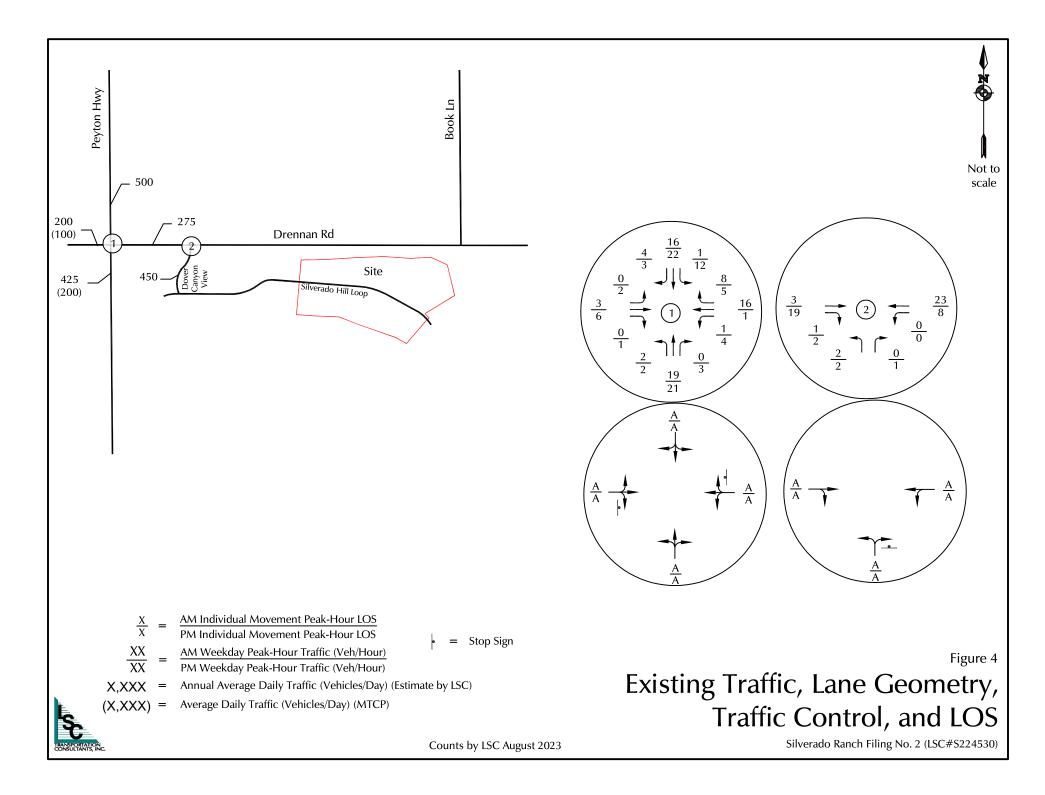
Stopping Sight Distance on a Major Street Approach to an Intersection

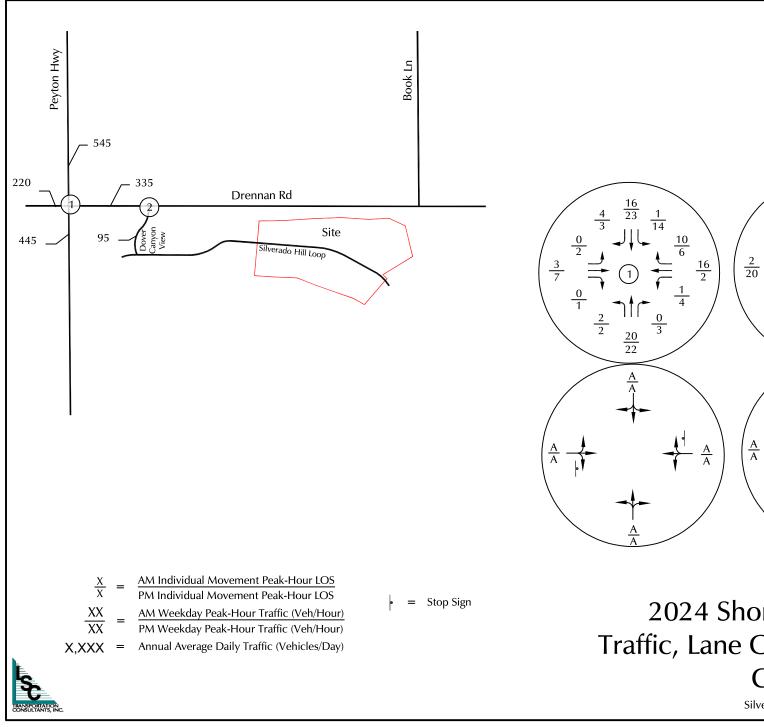




Required stopping sight distance, per ECM Table 2-17 Required stopping sight distance, per AASHTO. Required intersection sight distance, per ECM Table 2-21

Silverado Ranch Filing No. 2 (LSC#S224530)





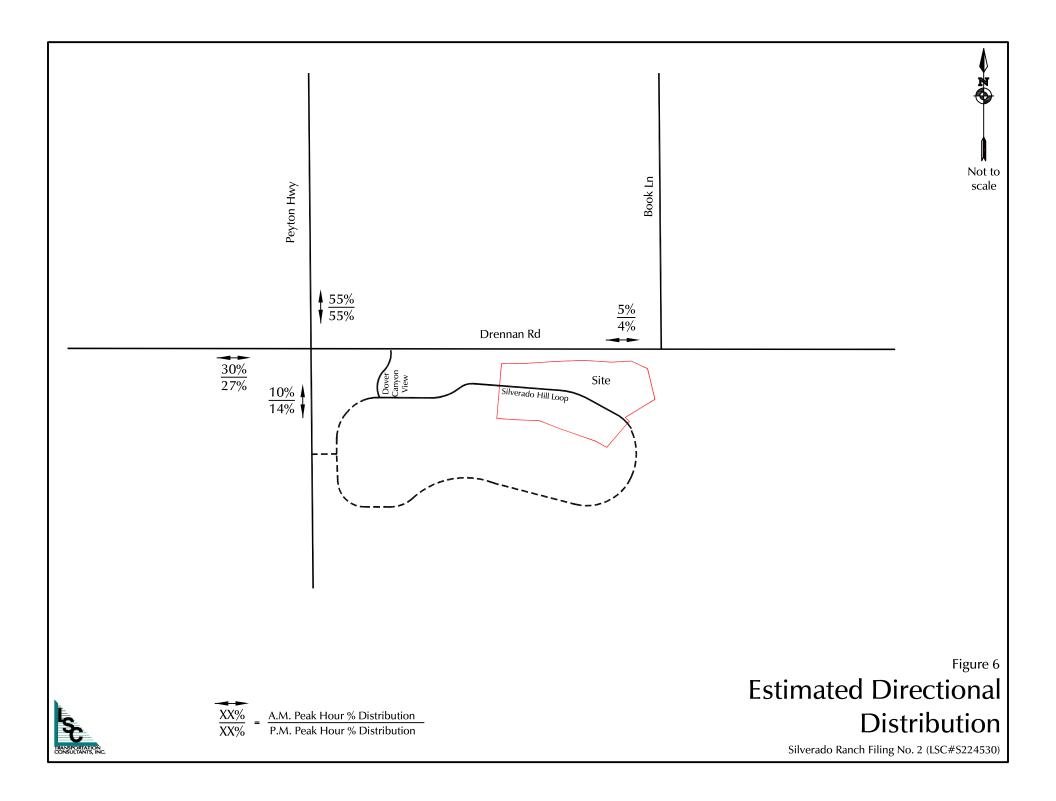
 $\frac{23}{8}$ 4 1 $\frac{A}{A}$ Figure 5 2024 Short-Term Baseline

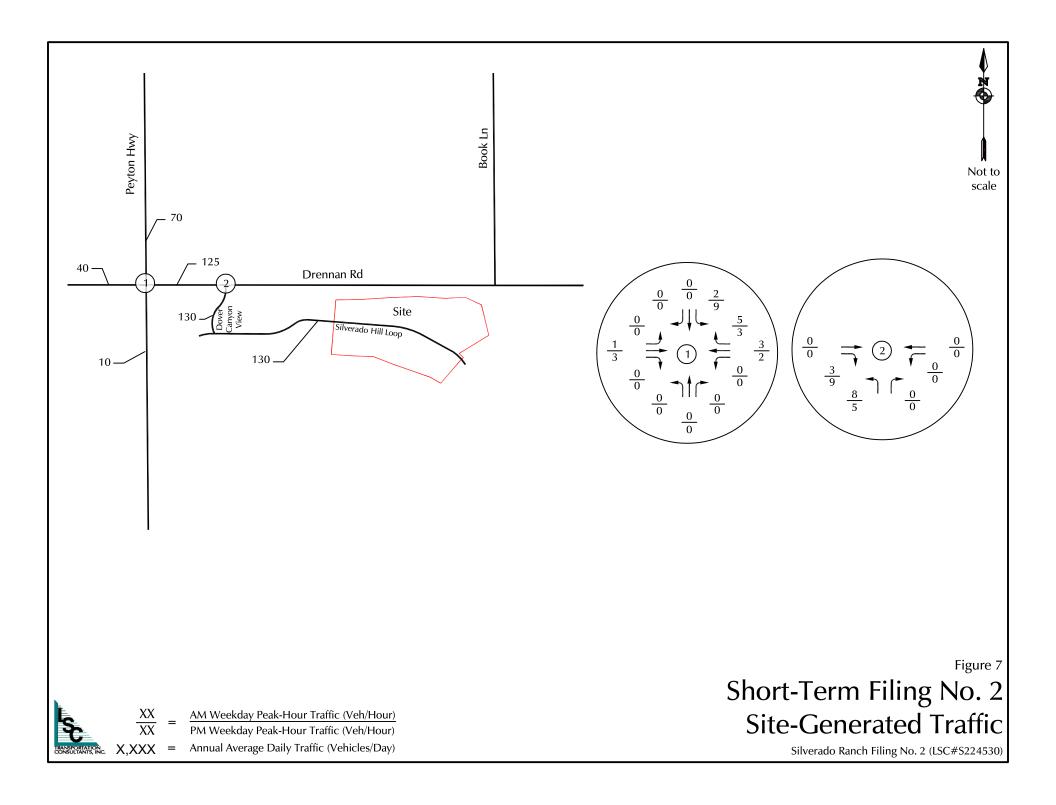
Traffic, Lane Geometry, Traffic Control, and LOS

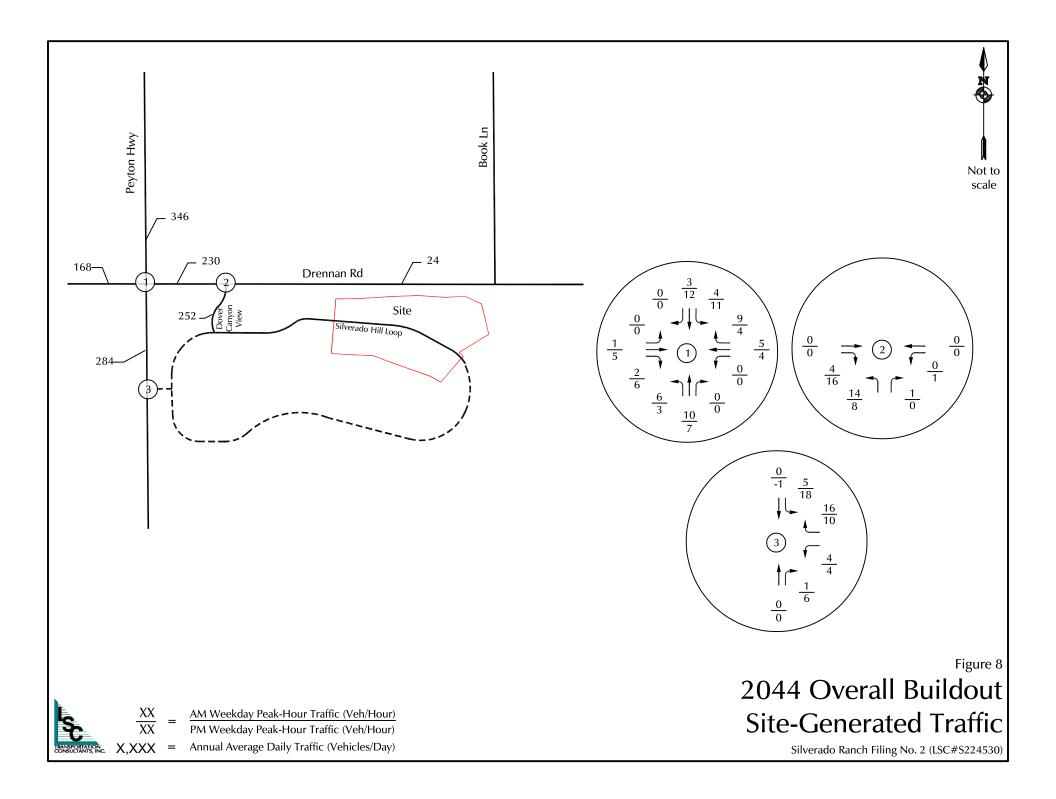
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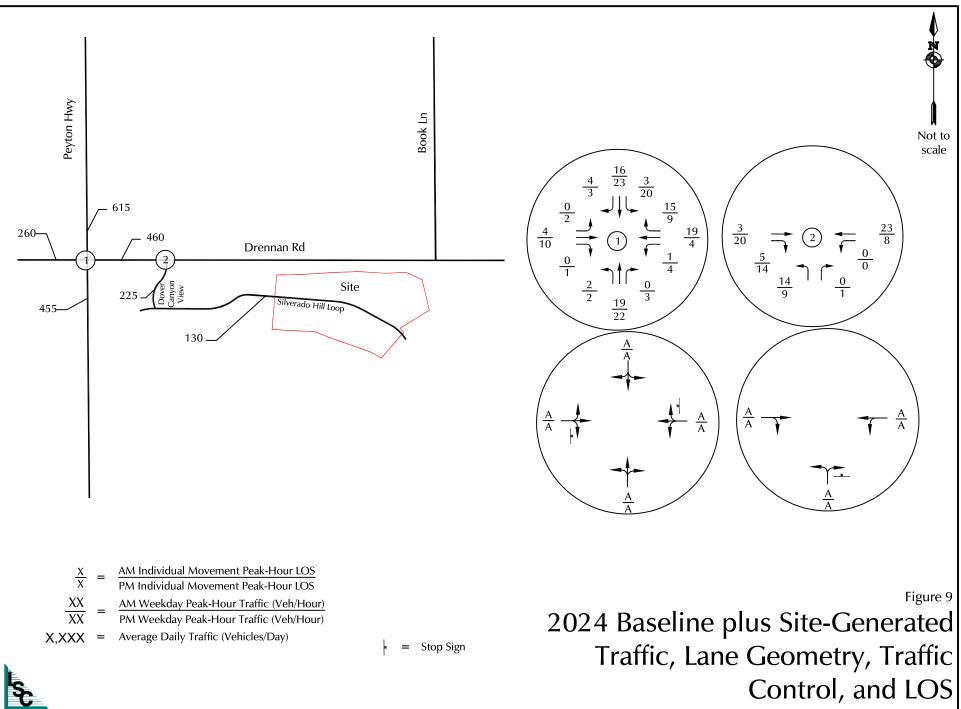
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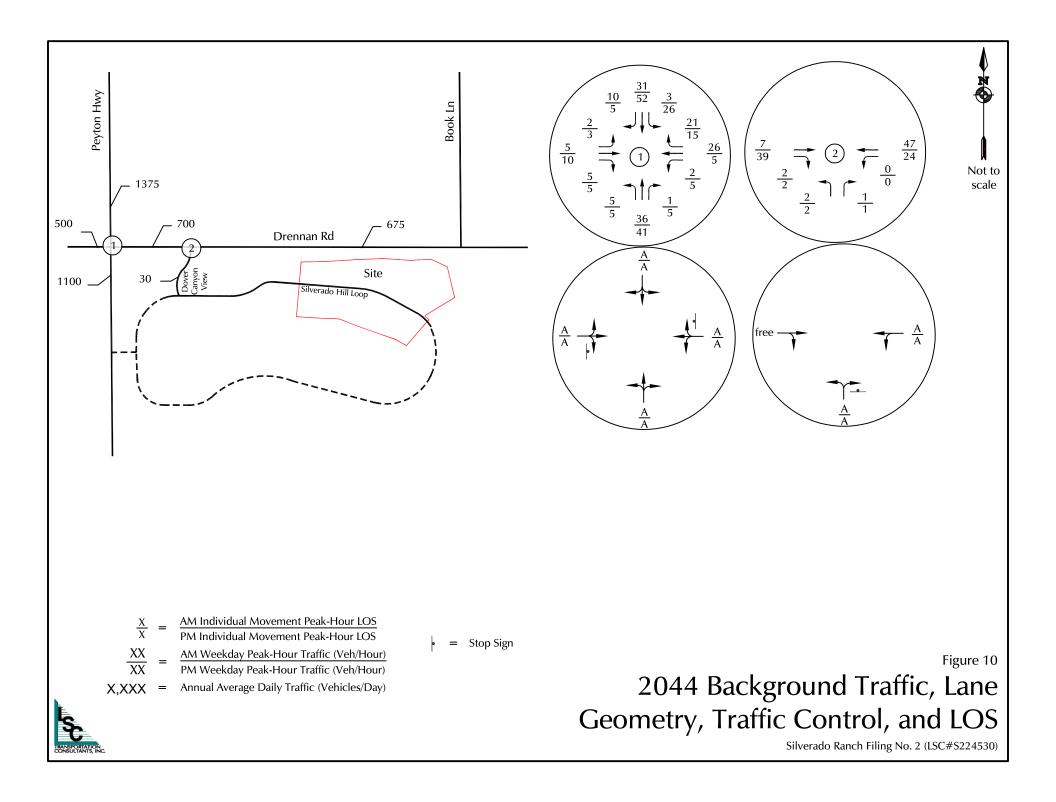


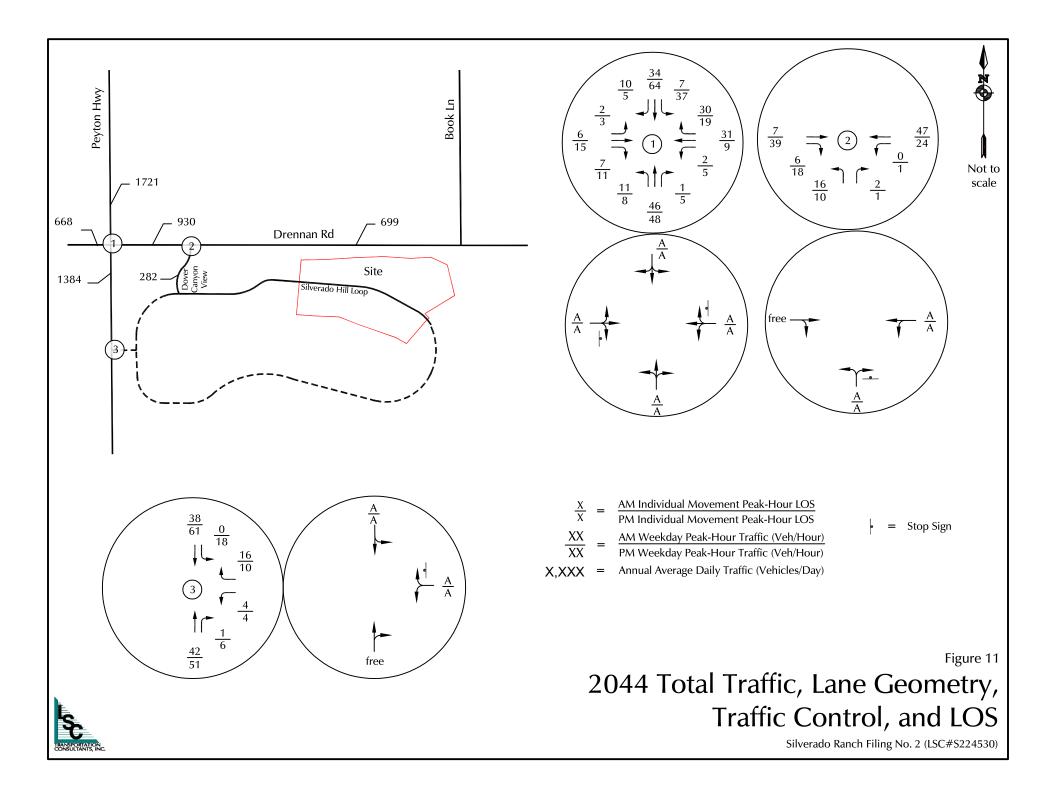






Silverado Ranch Filing No. 2 (LSC#S224530)







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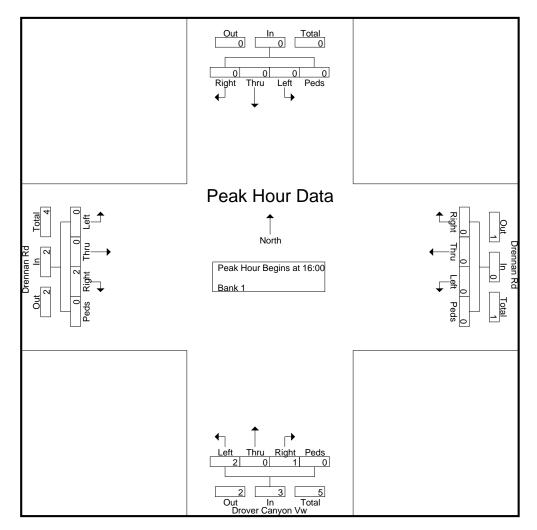
File Name : Drover Canyon Vw - Drennan Rd PM TM Site Code : S224530 Start Date : 8/9/2023 Page No : 1

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							Dre	ennar	n Rd			Dro	ver C	anyon	Vw		Dre	ennar	n Rd		
		So	uthbo	und			We	estbo	und				North	bound			Ea	stbou	und		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
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Apprch %	0	0	0	0		0	0	0	0		33.3	0	66.7	0		100	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	22.2	0	44.4	0	66.7	33.3	0	0	0	33.3	

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File Name : Drover Canyon Vw - Drennan Rd PM TM Site Code : S224530 Start Date : 8/9/2023 Page No : 2

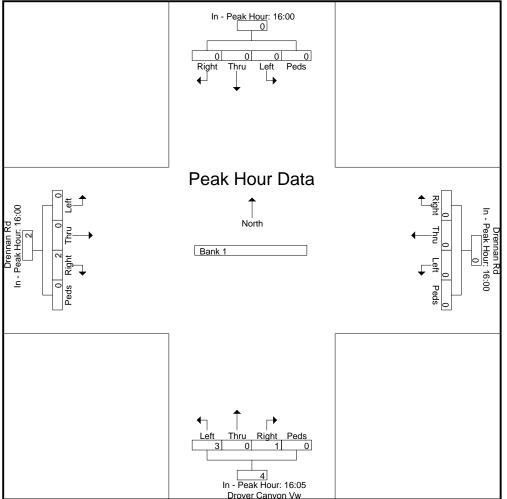
							Dre	ennar	Rd			Dro	ver Ca	anyon	Vw		Dr	ennar	n Rd		
		So	uthbo	und			We	estbo	und				North	bound			Ea	astbou	und		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	Analys	is Fro	m 16:0	00 to 1	7:55 - F	Peak 1	of 1														
Peak Hour f	or Ent	ire Inte	ersecti	ion Be	gins at	16:00															
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
16:05	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	2
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16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:40	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	2	0	3	2	0	0	0	2	5
% App. Total	0	0	0	0		0	0	0	0		33.3	0	66.7	0		100	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.083	.000	.167	.000	.125	.167	.000	.000	.000	.167	.208



719-633-2868

File Name : Drover Canyon Vw - Drennan Rd PM TM Site Code : S224530 Start Date : 8/9/2023 Page No : 3

							Dre	ennan	Rd			Dro	ver Ca	anyon	Vw		Dre	ennar	n Rd		
		So	uthbo	und			We	estbo	und			1	North	bound			Ea	Istbou	und		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Tot
Peak Hour A	Analysi	is Froi	m 16:0	00 to 1	7:55 - F	Peak 1	of 1														
Peak Hour fe	or Eac	h App	roach	Begin	s at:																
	16:00					16:00					16:05					16:00					
+0 mins.	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	1	
+5 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+10 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+20 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+25 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+35 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	
+40 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+50 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+55 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	3	0	4	2	0	0	0	2	
% App. Total	0	0	0	0		0	0	0	0		25	0	75	0		100	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.083	.000	.250	.000	.167	.167	.000	.000	.000	.167	
		Г																			



719-633-2868

File Name : Peyton Hwy - Drennan Rd AM Site Code : S224530 Start Date : 8/9/2023

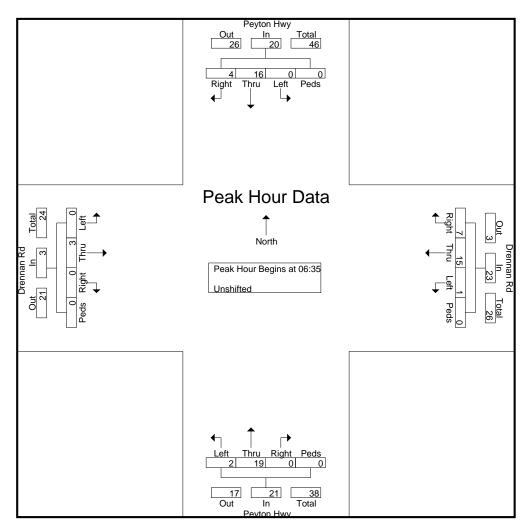
Page No : 1

								G	roups	Printe	d- Uns	shifted	ł								
			yton l					ennar					yton l					ennar			
			uthbo					estbo					rthbo					astbo			
Start Time	Right	Thru	Left		App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left		App. Total	Int. Total
06:30	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
06:35	1	2	0	0	3	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	6
06:40	0	3	0	0	3	0	2	0	0	2	0	2	0	0	2	0	1	0	0	1	8
06:45	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	4
06:50	1	2 2	0	0	3	2	5	1	0	8	0	2	0	0	2	0	0	0	0	0	13
<u>06:55</u> Total	0	10	0	0	<u>2</u> 13	0	<u>1</u> 10	0	0	<u>1</u> 14	0	<u>1</u> 8	0	0	1 8	0	0	0	0	0	<u>4</u> 37
Total	3	10	0	0	13	3	10	1	0	14	0	8	0	0	8	0	2	0	0	2	37
07:00	0	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	3
07:05	0	3	0	0	3	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	5
07:10	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	3
07:15	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	2
07:20	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	5
07:25	0	2	0	0	2	0	1	0	0	1	0	2	0	0	2	0	1	0	0	1	6
07:30	1	0	0	0	1	3	0	0	0	3	0	4	0	0	4	0	0	0	0	0	8
07:35	0	0	0	0	0	3	0	0	0	3	0	1	0	0	1	0	0	0	0	0	4
07:40	0	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	3
07:45	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	5
07:50	0	1	0	0	1	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	4
07:55	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
Total	2	12	0	0	14	9	6	0	0	15	0	20	2	0	22	0	2	0	0	2	53
08:00	0	2	0	0	2	1	0	0	0	1	0	1	0	0	1	1	0	0	0	1	5
08:05	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	3
08:10	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	4
08:15	0	1	0	0	1	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	4
08:20	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
08:25	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	3
*** BREAK '	***																				
Grand Total	5	29	0	0	34	14	18	1	0	33	0	34	2	0	36	1	5	2	0	8	111
Apprch %	14.7	85.3	0	0		42.4	54.5	3	0		0	94.4	5.6	0		12.5	62.5	25	0		
Total %	4.5	26.1	0	0	30.6	12.6	16.2	0.9	0	29.7	0	30.6	1.8	0	32.4	0.9	4.5	1.8	0	7.2	

719-633-2868

File Name : Peyton Hwy - Drennan Rd AM Site Code : S224530 Start Date : 8/9/2023 Page No : 2

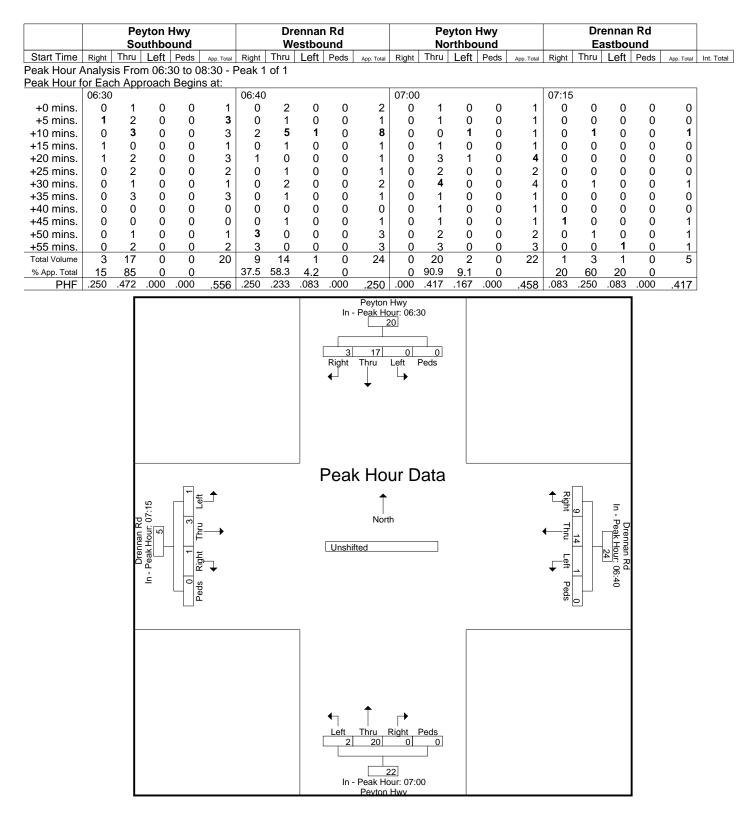
		Pe	yton I	Hwy			Dr	ennar	n Rd			Pe	yton l	Hwy			Dr	ennar	n Rd		
		So	uthbo	und			We	estbo	und			No	rthbo	und			Ea	astbou	und		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	Analys	is Fro	m 06:3	30 to 0	8:30 - F	Peak 1	of 1														
Peak Hour f	or Ent	ire Inte	ersecti	ion Beg	gins at	06:35															
06:35	1	2	0	0	3	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	6
06:40	0	3	0	0	3	0	2	0	0	2	0	2	0	0	2	0	1	0	0	1	8
06:45	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	4
06:50	1	2	0	0	3	2	5	1	0	8	0	2	0	0	2	0	0	0	0	0	13
06:55	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4
07:00	0	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	3
07:05	0	3	0	0	3	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	5
07:10	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	3
07:15	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	2
07:20	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	5
07:25	0	2	0	0	2	0	1	0	0	1	0	2	0	0	2	0	1	0	0	1	6
07:30	1	0	0	0	1	3	0	0	0	3	0	4	0	0	4	0	0	0	0	0	8
Total Volume	4	16	0	0	20	7	15	1	0	23	0	19	2	0	21	0	3	0	0	3	67
% App. Total	20	80	0	0		30.4	65.2	4.3	0		0	90.5	9.5	0		0	100	0	0		
PHF	.333	.444	.000	.000	.556	.194	.250	.083	.000	.240	.000	.396	.167	.000	.438	.000	.250	.000	.000	.250	.429



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> File Name : Peyton Hwy - Drennan Rd AM Site Code : S224530 Start Date : 8/9/2023 Page No : 3



719-633-2868

File Name : Peyton Hwy - Drennan Rd PM Site Code : S224530 Start Date : 8/9/2023

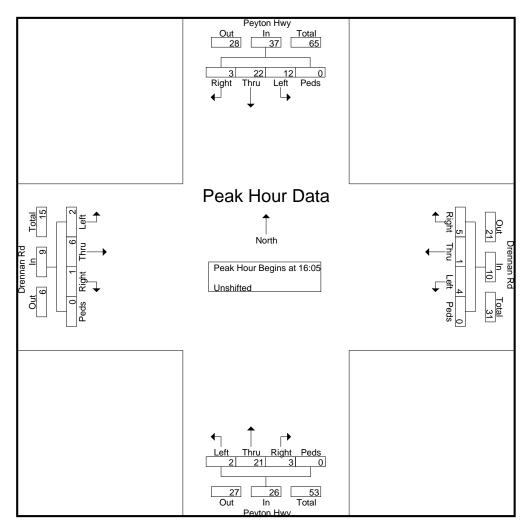
Page No : 1

										Printe	d- Uns										
			yton				Dr	ennai	n Rd				yton				Dr	ennar	n Rd		
			uthbo					estbo					rthbo					astbo			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
16:00	0	0	1	0	1	0	0	2	0	2	0	2	0	0	2	0	1	0	0	1	6
16:05	0	3	1	0	4	0	0	2	0	2	0	4	0	0	4	0	1	0	0	1	11
16:10	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
16:15	0	3	0	0	3	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	6
16:20	1	1	1	0	3	0	0	0	0	0	1	2	0	0	3	0	0	1	0	1	7
16:25	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	4
16:30	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	5
16:35	0	0	2	0	2	3	1	0	0	4	0	3	0	0	3	0	0	1	0	1	10
16:40	0	4	4	0	8	0	0	1	0	1	0	2	0	0	2	0	1	0	0	1	12
16:45	1	2	2	0	5	0	0	0	0	0	1	1	1	0	3	0	0	0	0	0	8
16:50	1	1	0	0	2	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	5
16:55	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	4
Total	3	20	12	0	35	3	1	6	0	10	3	23	2	0	28	1	5	2	0	8	81
17:00	0	2	1	0	3	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	7
17:05	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	3
17:10	0	5	1	0	6	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	8
17:15	0	1	0	0	1	0	1	0	0	1	1	3	0	0	4	0	1	0	0	1	7
17:20	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4
17:25	0	2	1	0	3	0	0	0	0	0	0	2	0	0	2	0	1	1	0	2	7
17:30	0	3	3	0	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	7
17:35	1	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	4
17:40	0	7	1	0	8	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	11
17:45	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17:50	0	3	1	0	4	0	0	0	0	0	0	1	0	0	1	0	3	2	0	5	10
17:55	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	6
Total	1	28	10	0	39	2	3	2	0	7	2	10	0	0	12	0	14	4	0	18	76
Grand Total	4	48	22	0	74	5	4	8	0	17	5	33	2	0	40	1	19	6	0	26	157
Apprch %	5.4	64.9	29.7	0		29.4	23.5	47.1	0		12.5	82.5	5	0		3.8	73.1	23.1	0		
Total %	2.5	30.6	14	0	47.1	3.2	2.5	5.1	0	10.8	3.2	21	1.3	0	25.5	0.6	12.1	3.8	0	16.6	

719-633-2868

File Name : Peyton Hwy - Drennan Rd PM Site Code : S224530 Start Date : 8/9/2023 Page No : 2

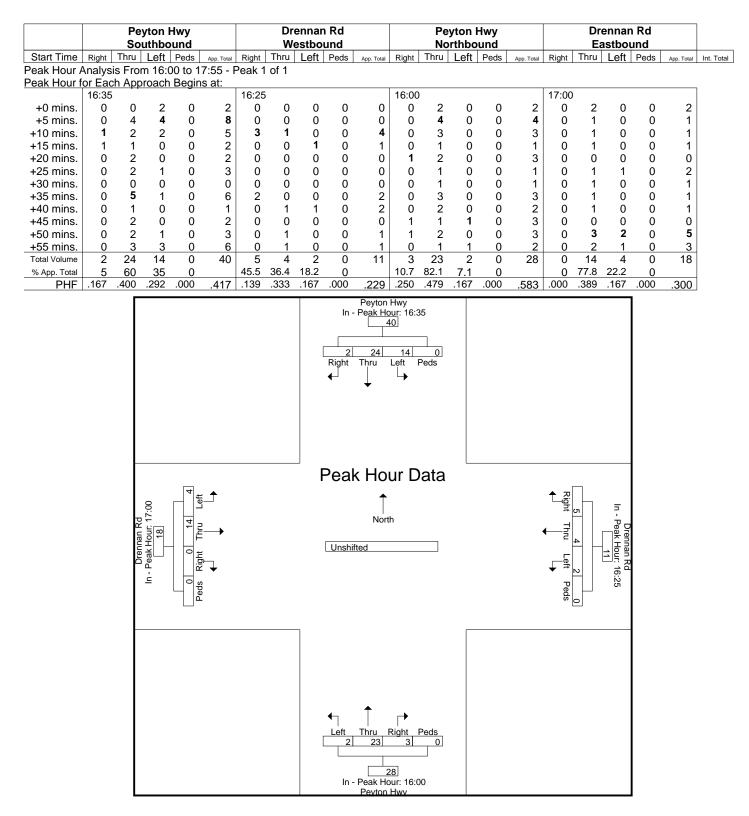
	Peyton Hwy					Drennan Rd					Peyton Hwy					Drennan Rd]
	Southbound					Westbound					Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	Analys	is Fro	m 16:0	00 to 1	7:55 - F	Peak 1	of 1														
Peak Hour f	or Ent	ire Inte	ersecti	on Beg	gins at	16:05															
16:05	0	3	1	0	4	0	0	2	0	2	0	4	0	0	4	0	1	0	0	1	11
16:10	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
16:15	0	3	0	0	3	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	6
16:20	1	1	1	0	3	0	0	0	0	0	1	2	0	0	3	0	0	1	0	1	7
16:25	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	4
16:30	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	5
16:35	0	0	2	0	2	3	1	0	0	4	0	3	0	0	3	0	0	1	0	1	10
16:40	0	4	4	0	8	0	0	1	0	1	0	2	0	0	2	0	1	0	0	1	12
16:45	1	2	2	0	5	0	0	0	0	0	1	1	1	0	3	0	0	0	0	0	8
16:50	1	1	0	0	2	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	5
16:55	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	4
17:00	0	2	1	0	3	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	7
Total Volume	3	22	12	0	37	5	1	4	0	10	3	21	2	0	26	1	6	2	0	9	82
% App. Total	8.1	59.5	32.4	0		50	10	40	0		11.5	80.8	7.7	0		11.1	66.7	22.2	0		
PHF	.250	.458	.250	.000	.385	.139	.083	.167	.000	.208	.250	.438	.167	.000	.542	.083	.250	.167	.000	.375	.569



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> File Name : Peyton Hwy - Drennan Rd PM Site Code : S224530 Start Date : 8/9/2023 Page No : 3





4

Intersection

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			\$			\$			\$	
Traffic Vol, veh/h	0	3	0	1	16	8	2	19	0	1	16	4
Future Vol, veh/h	0	3	0	1	16	8	2	19	0	1	16	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	4	0	1	21	10	3	24	0	1	21	5

Major/Minor	Minor2			Minor1			Major1			Major2			
Conflicting Flow All	72	56	24	58	58	24	26	0	0	24	0	0	
Stage 1	26	26	-	30	30	-	-	-	-	-	-	-	
Stage 2	46	30	-	28	28	-	-	-	-	-	-	-	
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-	
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-	
Pot Cap-1 Maneuver	919	835	1052	939	833	1052	1588	-	-	1591	-	-	
Stage 1	992	874	-	987	870	-	-	-	-	-	-	-	
Stage 2	968	870	-	989	872	-	-	-	-	-	-	-	
Platoon blocked, %								-	-		-	-	
Mov Cap-1 Maneuver	891	832	1052	933	831	1052	1588	-	-	1591	-	-	
Mov Cap-2 Maneuver	891	832	-	933	831	-	-	-	-	-	-	-	
Stage 1	990	873	-	985	868	-	-	-	-	-	-	-	
Stage 2	934	868	-	984	871	-	-	-	-	-	-	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	9.3	9.2	0.7	0.3	
HCM LOS	А	А			

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1\	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1588	-	-	832	895	1591	-	-
HCM Lane V/C Ratio	0.002	-	-	0.005	0.036	0.001	-	-
HCM Control Delay (s)	7.3	0	-	9.3	9.2	7.3	0	-
HCM Lane LOS	А	А	-	Α	А	А	А	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1.			÷.	Y	
Traffic Vol, veh/h	3	1	0	23	2	0
Future Vol, veh/h	3	1	0	23	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	0	29	3	0

Major/Minor	Major1	Ν	Major2		Minor1	
Conflicting Flow All	0	0	5	0	34	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	29	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	•••-	-
Follow-up Hdwy	-	-	2.218	-	3.518	
Pot Cap-1 Maneuver	-	-	1616	-	0.0	1078
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1616	-	979	1078
Mov Cap-2 Maneuver	-	-	-	-	979	-
Stage 1	-	-	-	-	1010	-
Stage 2	-	-	-	-	994	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.7	
HCM LOS					A	
Minor Lane/Major Mvm	.+ N	VBLn1	EBT	EBR	WBL	WBT
	IL I	979	EDI		1616	
Capacity (veh/h) HCM Lane V/C Ratio		0.003	-	-		-
HCM Control Delay (s)		0.003 8.7	-	-	- 0	-
HCM Lane LOS		0.7 A	-	-	A	-
HCM 95th %tile Q(veh)	١	0	-	-	0	-
)	0	_	-	0	-

Intersection

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		4			4			\$			4		_
Traffic Vol, veh/h	2	6	1	4	1	5	2	21	3	12	23	2	
Future Vol, veh/h	2	6	1	4	1	5	2	21	3	12	23	2	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	None										
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	3	8	1	5	1	6	3	27	4	15	29	3	

Major/Minor	Minor2			Minor1			Major1			Major2			
Conflicting Flow All	100	98	31	100	97	29	32	0	0	31	0	0	
Stage 1	61	61	-	35	35	-	-	-	-	-	-	-	
Stage 2	39	37	-	65	62	-	-	-	-	-	-	-	
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-	
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-	
Pot Cap-1 Maneuver	881	792	1043	881	793	1046	1580	-	-	1582	-	-	
Stage 1	950	844	-	981	866	-	-	-	-	-	-	-	
Stage 2	976	864	-	946	843	-	-	-	-	-	-	-	
Platoon blocked, %								-	-		-	-	
Mov Cap-1 Maneuver	867	782	1043	865	783	1046	1580	-	-	1582	-	-	
Mov Cap-2 Maneuver	867	782	-	865	783	-	-	-	-	-	-	-	
Stage 1	948	836	-	979	864	-	-	-	-	-	-	-	
Stage 2	967	862	-	927	835	-	-	-	-	-	-	-	
										00			

Approach	EB	WB	NB	SB	
HCM Control Delay, s	9.4	8.9	0.6	2.4	
HCM LOS	А	А			

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1\	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1580	-	-	823	936	1582	-	-
HCM Lane V/C Ratio	0.002	-	-	0.014	0.014	0.01	-	-
HCM Control Delay (s)	7.3	0	-	9.4	8.9	7.3	0	-
HCM Lane LOS	А	А	-	Α	Α	Α	А	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	T.			÷.	Y	
Traffic Vol, veh/h	19	2	0	8	2	1
Future Vol, veh/h	19	2	0	8	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	3	0	10	3	1

Major/Minor N	1ajor1	Ν	Major2		Minor1	
Conflicting Flow All	0	0	27	0	36	26
Stage 1	-	-	-	-	26	- 20
Stage 2	_	-	_	_	10	-
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 3 1 8
Pot Cap-1 Maneuver	_	_	1587	-	977	1050
Stage 1	_		1507	-	997	-
Stage 2	_		-	-	1013	-
Platoon blocked, %	_	_	_	-	1015	_
Mov Cap-1 Maneuver			1587	-	977	1050
Mov Cap-1 Maneuver Mov Cap-2 Maneuver	-		1507	-	977	-
Stage 1	-	-	-	-	~~-	-
Stage 2	-	-	-	-	1013	-
Slaye Z	-	-	-	-	1015	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.6	
HCM LOS					А	
Minor Long/Major Myrat	. N	IDI n 1	ГРТ			
Minor Lane/Major Mvmt	. IN	IBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		1000	-	-	1587	-
HCM Lane V/C Ratio		0.004	-	-	-	-
HCM Control Delay (s)		8.6	-	-	0	-
HCM Lane LOS		A	-	-	A	-

0

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HCM 95th %tile Q(veh)

0

Intersection

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	0	3	0	1	16	8	2	20	0	1	16	4
Future Vol, veh/h	0	3	0	1	16	8	2	20	0	1	16	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	4	0	1	21	10	3	26	0	1	21	5

Major/Minor	Minor2			Minor1			Major1		Ν	/lajor2			
Conflicting Flow All	74	58	24	60	60	26	26	0	0	26	0	0	
Stage 1	26	26	-	32	32	-	-	-	-	-	-	-	
Stage 2	48	32	-	28	28	-	-	-	-	-	-	-	
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-	
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-	
Pot Cap-1 Maneuver	916	833	1052	936	831	1050	1588	-	-	1588	-	-	
Stage 1	992	874	-	984	868	-	-	-	-	-	-	-	
Stage 2	965	868	-	989	872	-	-	-	-	-	-	-	
Platoon blocked, %								-	-		-	-	
Mov Cap-1 Maneuver	888	831	1052	930	829	1050	1588	-	-	1588	-	-	
Mov Cap-2 Maneuver	888	831	-	930	829	-	-	-	-	-	-	-	
Stage 1	990	873	-	982	866	-	-	-	-	-	-	-	
Stage 2	931	866	-	984	871	-	-	-	-	-	-	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	9.4	9.2	0.7	0.3	
HCM LOS	А	А			

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR
Capacity (veh/h)	1588	-	-	831	893	1588	-	-
HCM Lane V/C Ratio	0.002	-	-	0.005	0.036	0.001	-	-
HCM Control Delay (s)	7.3	0	-	9.4	9.2	7.3	0	-
HCM Lane LOS	A	А	-	А	А	А	А	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Int Delay, s/veh	1.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	ħ			ŧ	Y	
Traffic Vol, veh/h	2	2	0	23	6	0
Future Vol, veh/h	2	2	0	23	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	3	0	29	8	0

Major/Minor	Major1	Ν	Major2		Minor1	
Conflicting Flow All	0	0	6	0	34	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	29	-
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	-	-	1615	-	979	1078
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver		-	1615	-	979	1078
Mov Cap-2 Maneuver	-	-	-	-	979	-
Stage 1	-	-	-	-		-
Stage 2	-	-	-	-	994	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.7	
HCM LOS					А	
Minor Lane/Major Mvn	nt l	VBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		979		-	1615	-
HCM Lane V/C Ratio		0.008	-	-	-	-
HCM Control Delay (s))	8.7	-	-	0	-
HCM Lane LOS	/	A	-	-	A	-
HCM 95th %tile Q(veh	ı)	0	-	-	0	-
	/					

Intersection

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		\$			\$			\$			\$		
Traffic Vol, veh/h	2	7	1	4	2	6	2	22	3	14	24	2	
Future Vol, veh/h	2	7	1	4	2	6	2	22	3	14	24	2	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	None										
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	3	9	1	5	3	8	3	28	4	18	31	3	

0 - - -	32 - 4.12 -	0 - -	0 - - -		
	- - 4.12	-			
-	4.12	-	-		
-	4.12 -	-	-		
-	-				
_		-	-		
	-	-	-		
- 2	2.218	-	-		
-	1580	-	-		
-	-	-	-		
-	-	-	-		
-		-	-		
-	1580	-	-		
-	-	-	-		
-	-	-	-		
-	-	-	-		
	- - -	 	· · ·	· · · ·	· · · ·

Approach	EB	WB	NB	SB	
HCM Control Delay, s	9.5	9	0.5	2.6	
HCM LOS	А	А			

Minor Lane/Major Mvmt	NBL	NBT	NBR I	EBLn1V	VBLn1	SBL	SBT	SBR
Capacity (veh/h)	1578	-	-	808	920	1580	-	-
HCM Lane V/C Ratio	0.002	-	-	0.016	0.017	0.011	-	-
HCM Control Delay (s)	7.3	0	-	9.5	9	7.3	0	-
HCM Lane LOS	Α	А	-	А	А	А	А	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1.			÷.	Y	
Traffic Vol, veh/h	3	1	0	23	2	0
Future Vol, veh/h	3	1	0	23	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	0	29	3	0

Major/Minor N	/lajor1	Ν	Major2		Minor1	
Conflicting Flow All	0	0	5	0	34	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	29	-
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	-	-	1616	-	979	1078
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1616	-	979	1078
Mov Cap-2 Maneuver	-	-	-	-	979	-
Stage 1	-	-	-	-		-
Stage 2	-	-	-	-	994	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.7	
HCM LOS					A	
Minor Lane/Major Mvm	+ N	VBLn1	EBT	EBR	WBL	WBT
		979	LDI		1616	
Capacity (veh/h) HCM Lane V/C Ratio		0.003	-	-	- 1010	-
HCM Control Delay (s)		8.7	-	-	0	-
HCM Lane LOS		0.7 A	-	-	A	-
HCM 95th %tile Q(veh)		0	-	-	0	_
		0	-	-	0	

Intersection

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	0	4	0	1	19	15	2	19	0	3	16	4
Future Vol, veh/h	0	4	0	1	19	15	2	19	0	3	16	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	5	0	1	24	19	3	24	0	4	21	5

Major/Minor	Minor2			Minor1			Major1			Major2			
Conflicting Flow All	84	62	24	64	64	24	26	0	0	24	0	0	
Stage 1	32	32	-	30	30	-	-	-	-	-	-	-	
Stage 2	52	30	-	34	34	-	-	-	-	-	-	-	
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-	
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-	
Pot Cap-1 Maneuver	903	829	1052	930	827	1052	1588	-	-	1591	-	-	
Stage 1	984	868	-	987	870	-	-	-	-	-	-	-	
Stage 2	961	870	-	982	867	-	-	-	-	-	-	-	
Platoon blocked, %								-	-		-	-	
Mov Cap-1 Maneuver	863	825	1052	922	823	1052	1588	-	-	1591	-	-	
Mov Cap-2 Maneuver	863	825	-	922	823	-	-	-	-	-	-	-	
Stage 1	982	865	-	985	868	-	-	-	-	-	-	-	
Stage 2	915	868	-	973	864	-	-	-	-	-	-	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	9.4	9.2	0.7	0.9	
HCM LOS	А	А			

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR
Capacity (veh/h)	1588	-	-	825	911	1591	-	-
HCM Lane V/C Ratio	0.002	-	-	0.006	0.049	0.002	-	-
HCM Control Delay (s)	7.3	0	-	9.4	9.2	7.3	0	-
HCM Lane LOS	А	А	-	Α	Α	Α	А	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Int Delay, s/veh	2.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	ħ			ŧ	Y	
Traffic Vol, veh/h	3	5	0	23	14	0
Future Vol, veh/h	3	5	0	23	14	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	6	0	29	18	0

Major/Minor Ma	ajor1	Ν	/lajor2	ſ	Minor1		
Conflicting Flow All	0	0	10	0	36	7	7
Stage 1	-	-	-	-	7	-	
Stage 2	-	-	-	-	29	-	-
Critical Hdwy	-	-	4.12	-	6.42	6.22)
Critical Hdwy Stg 1	-	-	-	-	5.42	-	
Critical Hdwy Stg 2	-	-	-	-	5.42	-	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318	}
Pot Cap-1 Maneuver	-	-	1610	-	977	1075	
Stage 1	-	-	-	-	1016	-	
Stage 2	-	-	-	-	994	-	-
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	1610	-	977	1075	5
Mov Cap-2 Maneuver	-	-	-	-	977	-	-
Stage 1	-	-	-	-	1016	-	-
Stage 2	-	-	-	-	994	-	-
Approach	EB		WB		NB		
Approach							
HCM Control Delay, s	0		0		8.8		
HCM LOS					A		
Minor Lane/Major Mvmt	N	BLn1	EBT	EBR	WBL	WBT	-
Capacity (veh/h)		977	-	-	1610	-	-
HCM Lane V/C Ratio	(0.018	-	-	-	-	-
HCM Control Delay (s)		8.8	-	-	0	-	-
HCM Lane LOS		Α			А		

0

-

HCM 95th %tile Q(veh)

0.1

Intersection

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		4			4			\$			\$		
Traffic Vol, veh/h	2	10	1	4	4	9	2	22	3	20	24	2	
Future Vol, veh/h	2	10	1	4	4	9	2	22	3	20	24	2	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	None										
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	3	13	1	5	5	12	3	28	4	26	31	3	

Major/Minor	Minor2			Minor1			Major1		Ν	lajor2			
Conflicting Flow All	130	123	33	128	122	30	34	0	0	32	0	0	
Stage 1	85	85	-	36	36	-	-	-	-	-	-	-	
Stage 2	45	38	-	92	86	-	-	-	-	-	-	-	
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-	
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-	
Pot Cap-1 Maneuver	843	767	1041	845	768	1044	1578	-	-	1580	-	-	
Stage 1	923	824	-	980	865	-	-	-	-	-	-	-	
Stage 2	969	863	-	915	824	-	-	-	-	-	-	-	
Platoon blocked, %								-	-		-	-	
Mov Cap-1 Maneuver	818	752	1041	821	753	1044	1578	-	-	1580	-	-	
Mov Cap-2 Maneuver	818	752	-	821	753	-	-	-	-	-	-	-	
Stage 1	921	810	-	978	863	-	-	-	-	-	-	-	
Stage 2	951	861	-	884	810	-	-	-	-	-	-	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	9.7	9.1	0.5	3.2	
HCM LOS	А	А			

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR
Capacity (veh/h)	1578	-	-	778	904	1580	-	-
HCM Lane V/C Ratio	0.002	-	-	0.021	0.024	0.016	-	-
HCM Control Delay (s)	7.3	0	-	9.7	9.1	7.3	0	-
HCM Lane LOS	А	А	-	Α	А	А	А	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Int Delay, s/veh	1.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	f,			ŧ	Y	
Traffic Vol, veh/h	20	14	0	8	8	1
Future Vol, veh/h	20	14	0	8	8	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	18	0	10	10	1

Major/Minor	Major1	1	Major2	1	Minor1	
Conflicting Flow All	0	0	44	0	45	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	10	-
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	
Pot Cap-1 Maneuver	-	-	1564	-	965	1038
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	1013	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver		-	1564	-	965	1038
Mov Cap-2 Maneuver	-	-	-	-	965	-
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	1013	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.7	
HCM LOS			-		A	
Miner Lene /Meier Mur	t I		грт			
Minor Lane/Major Mvr	nt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		973	-	-	1564	-
HCM Lane V/C Ratio	、	0.012	-	-	-	-
HCM Control Delay (s)	8.7	-	-	0	-
HCM Lane LOS		A	-	-	A 0	-
HCM 95th %tile Q(veh	1)	0	-	-	0	-