TRAFFIC IMPACT STUDY

For

Fox Run Nature Center El Paso County, Colorado

May 2023

Prepared for:

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Prepared by:



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> Project Engineer: Megan Bock, EIT

Engineer in Responsible Charge: Fred Lantz, PE



Traffic Engineer's Statement

201 E Las Animas Street, Suite 113 Colorado Springs, Colorado 80903

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.

Just Last	05/03/2023
Fred Lantz, P.E. #23410	Date
Developer's Statement	
I, the Developer, have read and will comply with all co	mmitments made on my behalf within this report.
Sharon Allen	Date
TDG Architecture Inc	

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I. Introduction

Project Overview

This traffic impact study is provided as a planning document and addresses the capacity, geometric, and control requirements associated with the development entitled Fox Run Nature Center.

This proposed recreational development consists of a nature center. The development is located within the Fox Run Regional Park occupying the northwest corner of Stella Drive and Roller Coaster Road in El Paso County, Colorado.

Study Area Boundaries

The study area to be examined in this analysis encompasses the Stella Drive intersections with Roller Coaster Road and the existing Fox Run Regional Park south access drive (referred to as Access A), the Baptist Road intersection with Tari Drive, and the Roller Coaster Road intersection with the park's east site access drive (referred to as Access B).

Figure 1 illustrates location of the site and study intersections.

Site Description

Land for the development is currently occupied by Fox Run Regional Park and surrounded by open space and a mix of residential and recreational land uses.

The proposed development is understood to entail the new construction of an approximately 12,000 square foot nature center.

Existing access to the development is provided at the following locations: one full-movement access onto Stella Drive at Access A and one full-movement access onto Roller Coaster Road at Access B.

For purposes of this study, it is anticipated that development construction would be completed by end of Year 2025.

General site and access locations are shown on Figure 1.

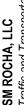
A conceptual site plan, as prepared by TDG Architecture, is shown on Figure 2. This plan is provided for illustrative purposes only.

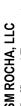


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Figure 2 CONCEPTUAL SITE PLAN









Existing and Committed Surface Transportation Network

Within the study area, Stella Drive is the primary roadway that will accommodate traffic to and from the proposed development. The secondary roadways include Roller Coaster Road, Baptist Road, and Tari Drive. A brief description of each roadway, based on the County's 2016 Major Transportation Corridors Plan (MTCP)¹ and Engineering Criteria Manual (ECM)², is provided below:

<u>Stella Drive</u> is an east-west collector roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersections within the study area. Stella Drive provides a posted speed limit of 30 MPH. Stella Drive ends at Roller Coaster Road and continues east as Evergreen Road.

Roller Coaster Road is a north-south collector roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Roller Coaster Road provides a posted speed limit of 35 MPH.

<u>Baptist Road</u> is generally an east-west principal arterial roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Baptist Road provides a posted speed limit of 40 MPH. Baptist Road ends at Roller Coaster Road and continues east as Hodgen Road.

<u>Tari Drive</u> is a north-south roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Tari Drive is unclassified in the County's MTCP. However, per Section 2.3.2, Table 2-5 of the County's ECM and the roadway's estimated right-of-way (ROW) width, Tari Drive is assumed to be classified as a local roadway with a posted speed limit of 20 MPH.

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

No regional or specific improvements for the above-described roadways are known to be planned or committed at this time. The study area roadways appear to be built to their ultimate cross-sections.

¹ El Paso County 2016 Major Transportation Corridors Plan Update, Felsburg Holt & Ullevig, December 2016.

² El Paso County Engineering Criteria Manual, El Paso County, December 2016.

II. Existing Traffic Conditions

Morning (AM) and afternoon (PM) peak hour traffic counts were collected at the Stella Drive intersections with Roller Coaster Road and the existing Fox Run Regional Park south access drive (Access A), the Baptist Road intersection with Tari Drive, and the Roller Coaster Road intersection with the park's east site access drive (Access B). Average daily traffic (ADT) volumes were collected over a 24-hour period on the existing south site access drive (Access A). Counts were collected on Wednesday, April 5, 2023, with AM peak hour counts being collected during the period of 7:00 a.m. to 9:00 a.m. and PM peak hour counts being collected during the period of 6:00 p.m.

Existing volumes and intersection geometry are shown on Figure 3. Traffic count data is included for reference in Appendix A.

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AM / PM Peak Hour (ADT): Average Daily Traffic

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Peak Hour Intersection Levels of Service – Existing Traffic

The Unsignalized Intersection Analysis technique, as published in the Highway Capacity Manual (HCM), 6th Edition, by the Transportation Research Board and as incorporated into the SYNCHRO computer program, was used to analyze the study intersections for existing and future traffic conditions. This nationally accepted technique allows for the determination of intersection level of service (LOS) based on the congestion and delay of each traffic movement.

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

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

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

Table 1 – Intersection Capacity Analysis Summary – Existing Traffic

INTERSECTION	LEVEL OF	SERVICE
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR
Baptist Road / Tari Drive (Stop-Controlled) Westbound Left and Through Northbound Left and Right	A B	A C
Stella Drive / Roller Coaster Road (Stop-Controlled) Eastbound Left, Through, and Right Westbound Left, Through, and Right Northbound Left, Through, and Right Southbound Left, Through, and Right	A A A	В В А А
Access A / Stella Drive (Stop-Controlled) Eastbound Left and Through Southbound Left and Right	A A	A A
Access B / Roller Coaster Road (Stop-Controlled) Eastbound Left and Right Northbound Left and Through	A A	A A

Key: Stop-Controlled Intersection: Level of Service

Existing Traffic Analysis Results

Under existing conditions, operational analysis shows that the stop-controlled intersection of Baptist Road with Tari Drive has turn movement operations at or better than LOS B during the morning peak traffic hour and LOS C or better during the afternoon peak traffic hour.

The stop-controlled intersection of Stella Drive with Roller Coaster Road has turn movement operations at LOS A during the AM peak traffic hour and LOS B or better during the PM peak traffic hour.

The stop-controlled intersection of Access A with Stella Drive has turn movement operations at LOS A during both peak traffic hours.

The stop-controlled intersection of Access B with Roller Coaster Road has turn movement operations at LOS A during both peak traffic hours.

III. Future Traffic Conditions Without Proposed Development

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

To account for projected increases in background traffic for Year 2025, a compounded annual growth rate was determined using historical traffic data for the surrounding area provided by the Colorado Department of Transportation's (CDOT) Online Transportation Information System (OTIS), which anticipates a 20-year growth rate between two and three percent. Therefore, in order to provide for a conservative analysis, a growth rate of three percent was applied to existing traffic volumes. This annual growth rate provides for a conservative analysis and is assumed to account for regional growth projections and the level of in-fill development expected within the area.

Pursuant to the non-committed area roadway improvements discussed in Section I, Year 2025 background traffic conditions assume no roadway improvements to accommodate regional transportation demands. This assumption provides for a conservative analysis.

Projected background traffic volumes and intersection geometry for Year 2025 are shown on Figure 4

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AM / PM Peak Hour (ADT): Average Daily Traffic

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Peak Hour Intersection Levels of Service - Background Traffic

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

Background traffic level of service analysis results for Year 2025 are listed in Table 2.

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

Table 2 – Intersection Capacity Analysis Summary – Background Traffic – Year 2025

INTERSECTION	LEVEL OF	SERVICE
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR
Baptist Road / Tari Drive (Stop-Controlled) Westbound Left and Through Northbound Left and Right	A B	A C
Stella Drive / Roller Coaster Road (Stop-Controlled) Eastbound Left, Through, and Right Westbound Left, Through, and Right Northbound Left, Through, and Right Southbound Left, Through, and Right	A A A	В В А А
Access A / Stella Drive (Stop-Controlled) Eastbound Left and Through Southbound Left and Right	A A	A A
Access B / Roller Coaster Road (Stop-Controlled) Eastbound Left and Right Northbound Left and Through	A A	A A

Key: Stop-Controlled Intersection: Level of Service

Background Traffic Analysis Results – Year 2025

Year 2025 background traffic analysis indicates that the stop-controlled intersection of Baptist Road with Tari Drive has turn movement operations at or better than LOS B during the morning peak traffic hour and LOS C or better during the afternoon peak traffic hour.

The stop-controlled intersection of Stella Drive with Roller Coaster Road projects turn movement operations at LOS A during the AM peak traffic hour and LOS B or better during the PM peak traffic hour.

The stop-controlled intersection of Access A with Stella Drive expects turn movement operations at LOS A during both peak traffic hours.

The stop-controlled intersection of Access B with Roller Coaster Road projects turn movement operations at LOS A during both peak traffic hours.

IV. Proposed Project Traffic

Trip Generation

Standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation Manual, 11th Edition, are generally applied to the proposed land use in order to estimate average daily traffic (ADT), AM Peak Hour, and PM Peak Hour vehicle trips. A vehicle trip is defined as a one-way vehicle movement from a point of origin to a point of destination.

However, ITE's Trip Generation Manual does not provide traffic generation information for this particular land use or similar land use. As such, average daily and weekday peak hour trip information was derived from data received from the County which represents yearly attendance at two other nature center land uses in the County.

Average daily traffic for the proposed nature center land use was calculated using the average threeyear attendance for the two referenced nature centers. Peak hour volumes were derived from standard relationships of ADT volumes versus peak hour volumes. Additionally, in reference to Chapter 3 of the HCM, a seasonal adjustment factor of 1.13 was then applied to site-generated trips in order to account for the higher traffic volumes which are expected to occur during the summer months.

Table 3 illustrates projected ADT, AM Peak Hour, and PM Peak Hour traffic volumes likely generated by the proposed development upon build-out.

Table 3 – Trip Generation Summary

					TOTAL T	RIPS GEN	ERATED		
ITE			24	AM	PEAK HO	DUR	PM	PEAK HO	UR
CODE	LAND USE	SIZE	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
-	Nature Center	12.0 KSF	56	3	2	5	3	4	7
		Total:	56	3	2	5	3	4	7

Key: KSF = Thousand Square Feet Gross Floor Area.

Note: All data and calculations above are subject to being rounded to nearest value.

Upon build-out, Table 3 illustrates that the proposed development has the potential to generate approximately 56 daily vehicle trips during peak periods of tourism, with 5 of those occurring during the morning peak hour and 7 during the afternoon peak hour.

Adjustments to Trip Generation Rates

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

Trip Distribution

The overall directional distribution of site-generated traffic was determined based on the location of development site within the County, proposed and existing area land uses, allowed turning movements, available roadway network, and in reference to historical traffic count data provided by CDOT's Traffic Count Database System (TCDS)³.

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

Trip Assignment

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

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

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³ Transportation Data Management System, MS2, 2022.

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V. Future Traffic Conditions With Proposed Developments

Total traffic is the traffic projected to be on area roadways with consideration of the proposed development. Total traffic includes background traffic projections for Year 2025 with consideration of site-generated traffic. For analysis purposes, it was assumed that development construction would be completed by end of Year 2025.

Pursuant to area roadway improvement discussions provided in Section III, Year 2025 total traffic conditions assume no roadway improvements to accommodate regional transportation demands. Roadway improvements associated with site development are expected to be limited to site access and frontage as required by the governing agency.

Projected Year 2025 total traffic volumes and intersection geometry are shown in Figure 6.

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AM / PM Peak Hour

(ADT): Average Daily Traffic

VI. Project Impacts

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

Peak Hour Intersection Levels of Service - Total Traffic

As with background traffic, the operations of the study intersections were analyzed under projected total traffic conditions using the SYNCHRO computer program. Total traffic level of service analysis results for Year 2025 are summarized in Table 4.

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

Table 4 – Intersection Capacity Analysis Summary – Total Traffic – Year 2025

INTERSECTION	LEVEL OF	SERVICE
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR
Baptist Road / Tari Drive (Stop-Controlled) Westbound Left and Through Northbound Left and Right	A B	A C
Stella Drive / Roller Coaster Road (Stop-Controlled) Eastbound Left, Through, and Right Westbound Left, Through, and Right Northbound Left, Through, and Right Southbound Left, Through, and Right	A B A A	В В А А
Access A / Stella Drive (Stop-Controlled) Eastbound Left and Through Southbound Left and Right	A A	A A
Access B / Roller Coaster Road (Stop-Controlled) Eastbound Left and Right Northbound Left and Through	A A	A A

Key: Stop-Controlled Intersection: Level of Service

Total Traffic Analysis Results Upon Development Build-Out

Table 4 illustrates how, by Year 2025 and upon development build-out, the stop-controlled intersection of Baptist Road with Tari Drive continues to project turn movement operations at or better than LOS B during the morning peak traffic hour and LOS C or better during the afternoon peak traffic hour.

The stop-controlled intersection of Stella Drive with Roller Coaster Road projects turn movement operations at LOS B or better during both peak traffic hours.

The stop-controlled intersection of Access A with Stella Drive expects turn movement operations at LOS A during both peak traffic hours.

The stop-controlled intersection of Access B with Roller Coaster Road projects turn movement operations at LOS A during both peak traffic hours.

Compared to the background traffic analysis, the traffic generated by the proposed development is not expected to significantly change the operations of the study intersections. These intersection operations are similar to background conditions.

Parking Assessment

An analysis on parking requirements for the proposed Fox Run Nature Center development was considered against requirements set forth by the County's Land Development Code⁴.

The County's current zoning map shows the development site within zoning district RR-5 (Residential Rural (5 acres)). However, upon further review, it was noted that the County's Land Development Code does not state a minimum parking requirement for a public park or similar land use.

It is unknown if the County has parking concerns related to the proposed development. However, based on the land use proposed, parking is not expected to be an issue for the proposed nature center development.

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⁴ Land Development Code of El Paso County, Colorado, El Paso County Development, December 2021.

VII. Conclusion

This traffic impact study addressed the capacity, geometric, and control requirements associated with the development entitled Fox Run Nature Center. This proposed recreational development consists of a nature center. The development is located within the Fox Run Regional Park occupying the northwest corner of Stella Drive and Roller Coaster Road in El Paso County, Colorado.

The study area examined in this analysis encompassed the Stella Drive intersections with Roller Coaster Road and the existing Fox Run Regional Park south access drive, the Baptist Road intersection with Tari Drive, and the Roller Coaster Road intersection with the park's east site access drive.

Analysis was conducted for critical AM Peak Hour and PM Peak Hour traffic operations for existing traffic conditions, Year 2025 background traffic conditions, and Year 2025 total traffic conditions.

Analysis of existing traffic conditions indicates that the stop-controlled intersection of Baptist Road with Tari Drive has turn movement operations at or better than LOS B during the morning peak traffic hour and LOS C or better during the afternoon peak traffic hour. The stop-controlled intersection of Stella Drive with Roller Coaster Road has turn movement operations at LOS A during the AM peak traffic hour and LOS B or better during the PM peak traffic hour. The stop-controlled intersections of Access A and Access B with Stella Drive and Roller Coaster Road has turn movement operations at LOS A during both peak traffic hours.

Without the proposed development, Year 2025 background operational analysis shows that the stop-controlled intersection of Baptist Road with Tari Drive has turn movement operations at or better than LOS B during the morning peak traffic hour and LOS C or better during the afternoon peak traffic hour. The stop-controlled intersection of Stella Drive with Roller Coaster Road projects turn movement operations at LOS A during the AM peak traffic hour and LOS B or better during the PM peak traffic hour. The stop-controlled intersections of Access A and Access B with Stella Drive and Roller Coaster Road expect turn movement operations at LOS A during both peak traffic hours.

Analysis of future traffic conditions indicates that the addition of site-generated traffic is expected to create no negative impact to traffic operations for the existing and surrounding roadway system upon roadway and intersection control improvements assumed within this analysis. With all conservative assumptions defined in this analysis, the study intersections are projected to operate at future levels of service comparable to Year 2025 background traffic conditions. Existing site accesses have operations at LOS A during peak traffic periods and upon build-out.

APPENDIX A

Traffic Count Data



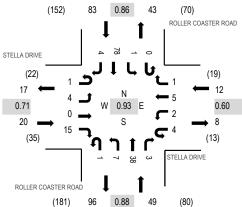
Location: 1 ROLLER COASTER ROAD & STELLA DRIVE AM

Date: Wednesday, April 5, 2023

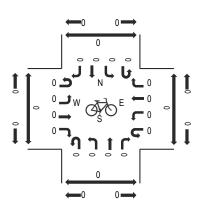
Peak Hour: 08:00 AM - 09:00 AM

Peak 15-Minutes: 08:15 AM - 08:30 AM

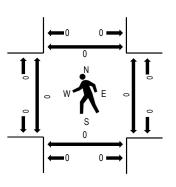
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

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	S	Ξ	ST		ROLLE	R COA	STER	ROAD	ROLLE	R COA	STER	ROAD										
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	lestriar	Crossir	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
7:00 AM	0	0	0	1	0	2	0	0	0	1	7	0	0	1	15	0	27	122	0	0	0	0
7:15 AM	0	1	0	2	0	0	0	0	0	2	7	0	0	1	12	0	25	127	0	0	0	0
7:30 AM	0	0	0	7	0	4	0	1	0	0	4	1	0	1	20	0	38	146	0	0	0	0
7:45 AM	0	0	1	3	0	0	0	0	0	2	7	0	0	0	19	0	32	152	0	0	0	0
8:00 AM	0	1	0	4	1	0	2	0	0	2	8	1	0	0	13	0	32	164	0	0	0	0
8:15 AM	0	0	0	3	2	1	1	0	0	1	11	2	0	0	22	1	44		0	0	0	0
8:30 AM	0	1	0	4	1	0	2	0	0	4	9	0	0	1	19	3	44		0	0	0	0
8:45 AM	1	2	0	4	0	1	0	1	1	0	10	0	0	0	24	0	44		0	0	0	0
Count Total	1	5	1	28	4	8	5	5 2	1	12	63	4	0	4	144	4	286		0	0	0	0
Peak Hour	1	4	0	15	4	2	5	5 1	1	7	38	3	0	1	1 78	} 4	4 16	64	0	0	0	0



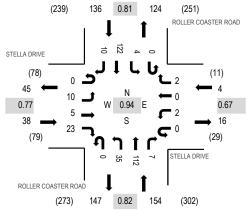
Location: 1 ROLLER COASTER ROAD & STELLA DRIVE PM

Date: Wednesday, April 5, 2023

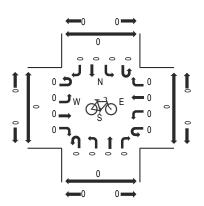
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

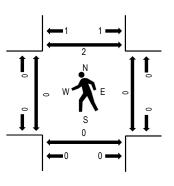




Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

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	S.	TELLA	DRIVE	Ξ	ST	ELLA	DRIVE		ROLLE	R COA	STER	ROAD	ROLLE	R COA	STER	ROAD						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	oound			Rolling	Ped	estriar	n Crossii	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM	0	1	2	8	0	1	0	2	0	8	32	2	0	3	28	2	89	328	0	0	0	0
4:15 PM	0	2	1	10	0	1	0	2	0	6	26	2	0	0	27	1	78	327	0	0	0	0
4:30 PM	0	2	1	5	0	1	0	1	0	5	28	2	0	0	30	2	77	332	0	0	0	0
4:45 PM	0	0	0	4	0	0	0	0	0	12	35	2	0	1	29	1	84	323	0	0	0	1
5:00 PM	0	6	2	4	0	1	0	1	0	6	24	2	0	1	37	4	88	303	0	0	0	0
5:15 PM	0	2	2	10	0	0	0	0	0	12	25	1	0	2	26	3	83		0	0	0	1
5:30 PM	0	2	0	8	0	0	1	0	0	5	28	0	0	0	23	1	68		0	0	0	0
5:45 PM	0	3	1	3	0	0	0	0	0	8	29	2	0	0	17	1	64		0	0	0	0
Count Total	0	18	9	52	0	4	1	6	0	62	227	13	0	7	217	15	631		0	0	0	2
Peak Hour	0	10	5	23	0	2	0	2	0	35	112	2 7	0	۷	122	2 1	0 33	2	0	0	0	2



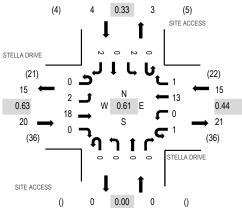
Location: 2 SITE ACCESS & STELLA DRIVE AM

Date: Wednesday, April 5, 2023

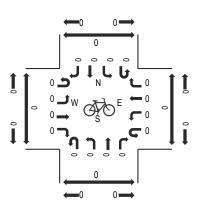
Peak Hour: 08:00 AM - 09:00 AM

Peak 15-Minutes: 08:30 AM - 08:45 AM

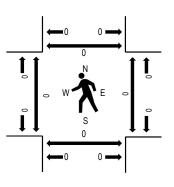
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

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	S.	TELLA	DRIVE	Ξ	ST	ELLA	DRIVE	=	9	SITE AC	CESS		9	SITE A	CCESS	;						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	lestriar	n Crossii	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
7:00 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	23	0	0	0	0
7:15 AM	0	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	6	30	0	0	0	0
7:30 AM	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8	27	0	0	0	0
7:45 AM	0	0	3	0	0	0	1	1	0	0	0	0	0	0	0	0	5	35	0	0	0	0
8:00 AM	0	1	4	0	0	0	3	0	0	0	0	0	0	2	0	1	11	39	0	0	0	0
8:15 AM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3		0	0	0	0
8:30 AM	0	1	5	0	1	0	7	1	0	0	0	0	0	0	0	1	16		0	0	0	0
8:45 AM	0	0	8	0	0	0	1	0	0	0	0	0	0	0	0	0	9		0	0	0	0
Count Total	0	3	33	0	1	0	19	9 2	0	0	0	0	0	2	0	2	62)	0	0	0	0
Peak Hour	0	2	18	0	1	0	13	3 1	0	0	0) (0	2	2 ()	2 :	39	0	0	0	0

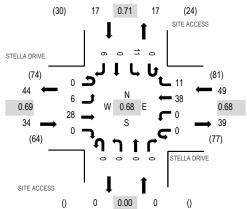


Location: 2 SITE ACCESS & STELLA DRIVE PM

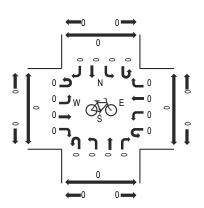
Date: Wednesday, April 5, 2023 **Peak Hour:** 04:45 PM - 05:45 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

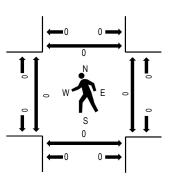
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Hui	no ocano	14100	71120	. u . u	,,,,,,,,,																		
		S	TELLA	DRIVE		ST	ELLA	DRIVE		5	SITE AC	CESS		5	SITE A	CESS							
	Interval		Eastb	ound			Westb	ound			Northb	ound			Southl	oound			Rolling	Ped	lestriar	n Crossir	ıgs
	Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South I	North
	4:00 PM	0	1	8	0	0	0	8	0	0	0	0	0	0	3	0	0	20	80	0	0	0	0
	4:15 PM	0	0	6	0	0	0	7	3	0	0	0	0	0	6	0	1	23	85	0	0	0	0
	4:30 PM	0	1	6	0	0	0	7	0	0	0	0	0	0	3	0	0	17	99	0	0	0	0
	4:45 PM	0	1	5	0	0	0	9	3	0	0	0	0	0	1	0	1	20	100	0	0	0	0
	5:00 PM	0	1	9	0	0	0	11	1	0	0	0	0	0	3	0	0	25	95	0	0	0	0
	5:15 PM	0	3	10	0	0	0	11	7	0	0	0	0	0	4	0	2	37		0	0	0	0
	5:30 PM	0	1	4	0	0	0	7	0	0	0	0	0	0	3	0	3	18		0	0	0	0
	5:45 PM	0	2	6	0	0	0	7	0	0	0	0	0	0	0	0	0	15		0	0	0	0
Со	ount Total	0	10	54	0	0	0	67	14	0	0	0	0	0	23	0	7	175		0	0	0	0
P	eak Hour	0	6	28	0	0	0	38	11	0	0	0	0	0	11	() (3 10	00	0	0	0	0



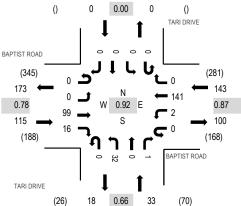
Location: 3 TARI DRIVE & BAPTIST ROAD AM

Date: Wednesday, April 5, 2023

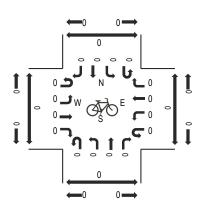
Peak Hour: 08:00 AM - 09:00 AM

Peak 15-Minutes: 08:45 AM - 09:00 AM

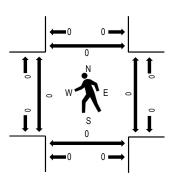
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

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	BA	APTIS1	ΓROAI)	BA	PTIST	ROAD			TARI D	RIVE			TARI [DRIVE							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	lestriar	n Crossii	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru I	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
7:00 AM	0	0	15	0	0	0	34	0	0	8	0	0	0	0	0	0	57	248	0	0	0	0
7:15 AM	0	0	13	3	0	0	26	0	0	9	0	0	0	0	0	0	51	258	0	0	0	0
7:30 AM	0	0	17	3	0	0	42	0	0	13	0	1	0	0	0	0	76	276	0	0	0	0
7:45 AM	0	0	21	1	0	1	35	0	0	5	0	1	0	0	0	0	64	276	0	0	0	0
8:00 AM	0	0	15	4	0	1	43	0	0	4	0	0	0	0	0	0	67	291	0	0	0	0
8:15 AM	0	0	24	6	0	0	31	0	0	8	0	0	0	0	0	0	69		0	0	0	0
8:30 AM	0	0	24	5	0	1	37	0	0	9	0	0	0	0	0	0	76		0	0	0	0
8:45 AM	0	0	36	1	0	0	30	0	0	11	0	1	0	0	0	0	79		0	0	0	0
Count Total	0	0	165	23	0	3	278	0	0	67	0	3	0	0	0	C	539)	0	0	0	0
Peak Hour	0	0	99	16	0	2	141	0	0	32	0) 1	0	() ()	0 29	91	0	0	0	0



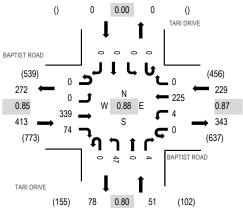
Location: 3 TARI DRIVE & BAPTIST ROAD PM

Date: Wednesday, April 5, 2023

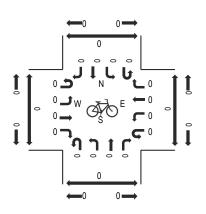
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

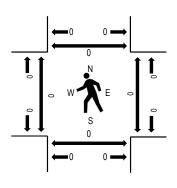
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

manne oour	100 141	Occ)	u vc	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,																		
		BA	APTIST	ROAI)	BA	PTIST	ROAD)		TARI D	RIVE			TARI [DRIVE							
Interval			Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	lestriar	n Crossir	ngs
Start Time	U-T	Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM		0	0	89	23	0	1	70	0	0	8	0	2	0	0	0	0	193	672	0	0	0	0
4:15 PM		0	0	67	22	0	0	64	0	0	9	0	1	0	0	0	0	163	677	0	0	0	0
4:30 PM		0	0	80	18	0	1	54	0	0	9	0	1	0	0	0	0	163	693	0	0	0	0
4:45 PM		0	0	64	22	0	0	56	0	0	11	0	0	0	0	0	0	153	664	0	0	0	0
5:00 PM		0	0	106	16	0	2	61	0	0	13	0	0	0	0	0	0	198	659	0	0	0	0
5:15 PM		0	0	89	18	0	1	54	0	0	14	0	3	0	0	0	0	179		0	0	0	0
5:30 PM		0	0	63	15	0	1	43	0	0	10	0	2	0	0	0	0	134		0	0	0	0
5:45 PM		0	0	69	12	0	3	45	0	0	18	0	1	0	0	0	0	148		0	0	0	0
Count Total		0	0	627	146	0	9	44	7 0	0	92	0	10	0	0	0	0	1,331		0	0	0	0
Peak Hour		0	0	339	74	0	4	225	5 0	0	47	C) 4	1 0	() () (0 69	93	0	0	0	0



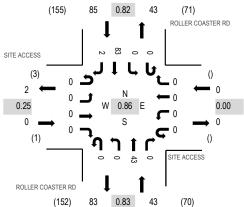
Location: 4 ROLLER COASTER RD & SITE ACCESS AM

Date: Wednesday, April 5, 2023

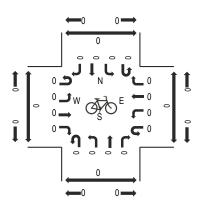
Peak Hour: 08:00 AM - 09:00 AM

Peak 15-Minutes: 08:15 AM - 08:30 AM

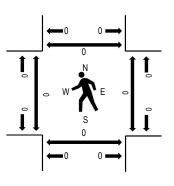




Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

	S	ITE AC	CESS		SI	TE AC	CESS		ROLL	ER CO	ASTER	RD	ROLL	ER CC	ASTER	RRD						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	oound			Rolling	Ped	estriar	n Crossir	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
7:00 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	16	1	24	98	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	13	0	20	97	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	6	0	0	0	21	0	28	114	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	19	0	26	117	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	13	1	23	128	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	25	1	37		0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	21	0	31		0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	13	0	0	0	24	0	37		0	0	0	0
Count Total	0	1	0	0	0	0	0	0	0	0	70	0	0	0	152	3	226		0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	43	0	0	C	83	3	2 12	28	0	0	0	0



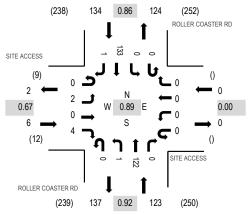
Location: 4 ROLLER COASTER RD & SITE ACCESS PM

Date: Wednesday, April 5, 2023

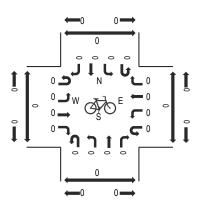
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

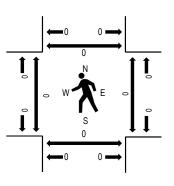
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

manno ocanico	11100	J. 120	u , ,	,,,,,,,,,																		
	S	ITE A	CESS	;	SI	TE AC	CESS		ROLL	ER CO	ASTER	RD	ROLL	ER CC)ASTE	R RD						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	lestriar	n Crossi	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM	0	2	0	1	0	0	0	0	0	1	34	0	0	0	34	2	74	262	0	0	0	0
4:15 PM	0	1	0	1	0	0	0	0	0	1	28	0	0	0	25	1	57	262	0	0	0	0
4:30 PM	0	0	0	2	0	0	0	0	0	0	32	0	0	0	30	0	64	263	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	33	0	0	0	32	1	67	256	0	0	0	0
5:00 PM	0	0	0	2	0	0	0	0	0	0	33	0	0	0	39	0	74	238	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	1	24	0	0	0	32	0	58		0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0	0	0	32	0	0	0	22	2	57		0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	31	0	0	0	18	0	49		0	0	0	0
Count Total	0	5	0	7	0	0	0	0	0	3	247	0	0	0	232	6	500		0	0	0	0
Peak Hour	0	2	0	4	0	0	0	0	0	1	122	2 0	0	() 133	3	1 26	3	0	0	0	0

All Traffic Data Services



5. SITE ACCESS NORTH OF STELLA DRIVE

Time	NB	SB	Total
4/5/2023	0	0	0
4/5/2023 12:15:00 AM	0	0	0
4/5/2023 12:30:00 AM	0	0	0
4/5/2023 12:45:00 AM	0	0	0
4/5/2023 1:00:00 AM	0	0	0
4/5/2023 1:15:00 AM	0	0	0
4/5/2023 1:30:00 AM	0	0	0
4/5/2023 1:45:00 AM	0	0	0
4/5/2023 2:00:00 AM	0	0	0
4/5/2023 2:15:00 AM	0	0	0
4/5/2023 2:30:00 AM	0	0	0
4/5/2023 2:45:00 AM	0	0	0
4/5/2023 3:00:00 AM	0	0	0
4/5/2023 3:15:00 AM	0	0	0
4/5/2023 3:30:00 AM	0	0	0
4/5/2023 3:45:00 AM	0	0	0
4/5/2023 4:00:00 AM	0	0	0
4/5/2023 4:15:00 AM	0	0	0
4/5/2023 4:30:00 AM	0	0	0
4/5/2023 4:45:00 AM	0	0	0
4/5/2023 5:00:00 AM	0	0	0
4/5/2023 5:15:00 AM	0	0	0
4/5/2023 5:30:00 AM	0	0	0
4/5/2023 5:45:00 AM	0	0	0
4/5/2023 6:00:00 AM	2	0	2
4/5/2023 6:15:00 AM	0	0	0
4/5/2023 6:30:00 AM	0	2	2
4/5/2023 6:45:00 AM	0	0	0
4/5/2023 7:00:00 AM	0	0	0
4/5/2023 7:15:00 AM	1	0	1
4/5/2023 7:30:00 AM	0	0	0
4/5/2023 7:45:00 AM	1	0	1
4/5/2023 8:00:00 AM	1	3	4
4/5/2023 8:15:00 AM	0	0	0
4/5/2023 8:30:00 AM	2	1	3
4/5/2023 8:45:00 AM	0	0	0
4/5/2023 9:00:00 AM	1	0	1
4/5/2023 9:15:00 AM	3	2	5
4/5/2023 9:30:00 AM	3	1	4
4/5/2023 9:45:00 AM	3	3	6
4/5/2023 10:00:00 AM	2	3	5
4/5/2023 10:15:00 AM	2	3 2 3	4
4/5/2023 10:30:00 AM	3	3	6
4/5/2023 10:45:00 AM	0	3	3
4/5/2023 11:00:00 AM	3	2	5
4/5/2023 11:15:00 AM	3	1	4
4/5/2023 11:30:00 AM	2	3	5
4/5/2023 11:45:00 AM	2	2	4
Total	34	31	65
Percentage	52.3%	47.7%	
Peak Hour	9:15 AM	9:45 AM	9:45 AM
Volume	11	11	21
PHF	0.917	0.917	0.875

All Traffic Data Services



5. SITE ACCESS NORTH OF STELLA DRIVE

Time	NB	SB	Total
4/5/2023 12:00:00 PM	3	1	4
4/5/2023 12:15:00 PM	4	6	10
4/5/2023 12:30:00 PM	3	0	3
4/5/2023 12:45:00 PM	5	5	10
4/5/2023 1:00:00 PM	6	2	8
4/5/2023 1:15:00 PM	3	7	10
4/5/2023 1:30:00 PM	5	2	7
4/5/2023 1:45:00 PM	4	4	8
4/5/2023 2:00:00 PM	7	5	12
4/5/2023 2:15:00 PM	6	3	9
4/5/2023 2:30:00 PM	2	5	7
4/5/2023 2:45:00 PM	0	3	3
4/5/2023 3:00:00 PM	5	5	10
4/5/2023 3:15:00 PM	3	6	9
4/5/2023 3:30:00 PM	4	7	11
4/5/2023 3:45:00 PM	5	3	8
4/5/2023 4:00:00 PM	1	3	4
4/5/2023 4:15:00 PM	3	7	10
4/5/2023 4:30:00 PM	1	3	4
4/5/2023 4:45:00 PM	4	2	6
4/5/2023 5:00:00 PM	2	3	5
4/5/2023 5:15:00 PM	10	6	16
4/5/2023 5:30:00 PM	1	6	7
4/5/2023 5:45:00 PM	2	0	2
4/5/2023 6:00:00 PM	2	1	3
4/5/2023 6:15:00 PM	1	3	4
4/5/2023 6:30:00 PM	3	0	3
4/5/2023 6:45:00 PM	3	1	4
4/5/2023 7:00:00 PM	1	9	10
4/5/2023 7:15:00 PM	2	1	3
4/5/2023 7:30:00 PM	1	2	3
4/5/2023 7:45:00 PM	2	1	3
4/5/2023 8:00:00 PM	0	0	0
4/5/2023 8:15:00 PM	0	1	1
4/5/2023 8:30:00 PM	0	0	0
4/5/2023 8:45:00 PM	0	1	1
4/5/2023 9:00:00 PM	0	0	0
4/5/2023 9:15:00 PM	0	0	0
4/5/2023 9:30:00 PM	0	0	0
4/5/2023 9:45:00 PM	0	0	0
4/5/2023 10:00:00 PM	0	0	0
4/5/2023 10:15:00 PM	1	0	1
4/5/2023 10:30:00 PM	0	2	2
4/5/2023 10:45:00 PM	0	0	0
4/5/2023 11:00:00 PM	1	0	1
4/5/2023 11:15:00 PM	0	0	0
4/5/2023 11:30:00 PM	0	0	0
4/5/2023 11:45:00 PM	0	0	0
Total	106	116	222
Percentage	47.7%	52.3%	
Peak Hour	1:30 PM	2:45 PM	3:00 PM
Volume	22	21	38
PHF	0.786	0.750	0.864
Grand Total	140	147	287
Percentage	48.8%	51.2%	

APPENDIX B

Level of Service Definitions

The following information can be found in the <u>Highway Capacity Manual</u>. Transportation Research Board, 2016: Chapter 19 – Signalized Intersections and Chapter 20 – Two-Way Stop Controlled Intersections.

<u>Automobile Level of Service (LOS) for Signalized Intersections</u>

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

LOS A

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

LOS B

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

LOS C

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

LOS D

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

LOS E

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

LOS F

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

Level of Service (LOS) for Unsignalized TWSC Intersections

Level of Service (v/c ≤ 1.0)	Average Control Delay (s/veh)
А	0 - 10
В	> 10 - 15
С	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

APPENDIX C Capacity Worksheets

Intersection						
Int Delay, s/veh	1.2					
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	^			4	¥	
Traffic Vol, veh/h	112	18	2	159	36	1
Future Vol. veh/h	112	18	2	159	36	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	122	20	2	173	39	1
IVIVIIIL I IUW	IZZ	20		173	03	
Major/Minor M	lajor1	1	Major2	1	Minor1	
Conflicting Flow All	0	0	142	0	309	132
Stage 1	-	-	-	-	132	-
Stage 2	-	-	-	-	177	-
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	_	-	1441	-	683	917
Stage 1	_	-	-	_	894	-
Stage 2	_	-	-	_	854	-
Platoon blocked, %	_	_		_	007	
Mov Cap-1 Maneuver	_	_	1441	-	682	917
Mov Cap-1 Maneuver	-	-	1441	_	682	917
	-	_	-	-	894	-
Stage 1		-				
Stage 2	-	-	-	-	852	-
Approach	EB		WB		NW	
HCM Control Delay, s	0		0.1		10.6	
HCM LOS			V .,		В	
1.5141 £00					U	
Minor Lane/Major Mvmt	N	IWLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		687	-	-	1441	-
HCM Lane V/C Ratio		0.059	-	-	0.002	-
HCM Control Delay (s)		10.6	-	-	7.5	0
HCM Lane LOS		В	-	-	Α	Α
HCM 95th %tile Q(veh)		0.2	-	-	0	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		44			4			4			4	
Traffic Vol, veh/h	6	0	17	7	6	1	9	43	3	1	88	5
Future Vol, veh/h	6	0	17	7	6	1	9	43	3	1	88	5
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	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	0	18	8	7	1	10	47	3	1	96	5
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	174	171	99	179	172	49	101	0	0	50	0	0
Stage 1	101	101	-	69	69	-	-	-	-	-	-	-
Stage 2	73	70	-	110	103	-	-	-	-	-	-	-
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	789	722	957	783	721	1020	1491	-	-	1557	-	-
Stage 1	905	811	-	941	837	-	-	-	-	-	-	-
Stage 2	937	837	-	895	810	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	778	716	957	763	715	1020	1491	-	-	1557	-	-
Mov Cap-2 Maneuver	778	716	-	763	715	-	-	-	-	-	-	-
Stage 1	899	810	-	934	831	-	-	-	-	-	-	-
Stage 2	922	831	-	877	809	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	9.1			9.9			1.2			0.1		
HCM LOS	Α			Α								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1491	-	-	903	755	1557	-	-			
HCM Lane V/C Ratio		0.007	-	-	0.028		0.001	-	-			
HCM Control Delay (s)		7.4	0	-	9.1	9.9	7.3	0	-			
HCM Lane LOS		Α	A	-	Α	Α	Α	A	-			
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-			

Intersection						
Int Delay, s/veh	1.2					
		EDT	WET	WED	CDI	CDD
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		ન			**	
Traffic Vol, veh/h	2	20	15	1	2	2
Future Vol, veh/h	2	20	15	1	2	2
Conflicting Peds, #/hr	_ 0	_ 0	0	_ 0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	
Storage Length	-	-	-	-	0	-
Veh in Median Storage	e,# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	22	16	1	2	2
M = i = =/M i= :	NA-: 4		4-1- 0		\.d: C	
	Major1		Major2		Minor2	
Conflicting Flow All	17	0	-	0	43	17
Stage 1	-	-	-	-	17	-
Stage 2	-	-	-	-	26	-
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	1600	-	-	-	968	1062
Stage 1	-	-	-	-	1006	-
Stage 2	-	-	-	-	997	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1600	_	_	-	967	1062
Mov Cap 1 Maneuver	-	_	_	-	967	-
Stage 1	_	_	_	_	1005	_
•	-	-	-	-	997	-
Stage 2	-	-	-	-	331	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.7		0		8.6	
HCM LOS					Α	
				14/5-	14/5-	001
Minor Lane/Major Mvm	nt	EBL	EBT	WBT		SBLn1
Capacity (veh/h)		1600	-	-		1012
HCM Lane V/C Ratio		0.001	-	-	-	0.004
HCM Control Delay (s)		7.3	0	-	-	8.6
HCM Lane LOS		Α	Α	-	-	Α
HCM 95th %tile Q(veh)	0	-	-	-	0
.,	,					

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			4	1	
Traffic Vol, veh/h	0	0	0	49	94	2
Future Vol, veh/h	0	0	0	49	94	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	_	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	53	102	2
	0					
	Minor2		Major1		Major2	
Conflicting Flow All	156	103	104	0	-	0
Stage 1	103	-	-	-	-	-
Stage 2	53	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318		-	-	-
Pot Cap-1 Maneuver	835	952	1488	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	835	952	1488	-	-	-
Mov Cap-2 Maneuver	835	-	-	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	970	-	-	_	-	-
Olugo 2	310					
Approach	EB		NB		SB	
HCM Control Delay, s	0		0		0	
HCM LOS	Α					
Minor Lane/Major Mvm	nt	NBL	NRT	EBLn1	SBT	SBR
	IL.	1488				
Capacity (veh/h) HCM Lane V/C Ratio		1400	-	-	-	-
		-	-	-	-	-
HCM Long LOS		0	-	0	-	-
HCM Lane LOS HCM 95th %tile Q(veh	١	A	-	Α	-	-
HUIVI 95TN %TIIE (J(Veh)	0	-	-	-	-

Intersection						
Int Delay, s/veh	1.2					
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	1>			4	¥	
Traffic Vol, veh/h	383	84	5	254	53	5
Future Vol, veh/h	383	84	5	254	53	5
Conflicting Peds, #/hr	0	0	0	0	0	0
_	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None		None		None
Storage Length		-	_	-	0	-
Veh in Median Storage,		_	_	0	0	_
Grade, %	# 0 0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
	92	92		92	92	92
Heavy Vehicles, %			2			
Mvmt Flow	416	91	5	276	58	5
Major/Minor M	ajor1	N	Major2	1	Minor1	
Conflicting Flow All	0	0	507	0	748	462
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	286	-
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	-	_	1058	-	380	600
	_	-	1000	-	634	-
Stage 1	-	-	-			
Stage 2	-	-	-	-	763	-
Platoon blocked, %	-	-	4050	-	270	000
Mov Cap-1 Maneuver	-	-	1058	-	378	600
Mov Cap-2 Maneuver	-	-	-	-	378	-
Stage 1	-	-	-	-	634	-
Stage 2	-	-	-	-	758	-
Approach	EB		WB		NW	
HCM Control Delay, s	0		0.2		16	
HCM LOS	U		U.Z		C	
I IOWI LOG					U	
Minor Lane/Major Mvmt	N	IWLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		390	-	-	1058	-
HCM Lane V/C Ratio		0.162	-		0.005	-
HCM Control Delay (s)		16	-	-	8.4	0
HCM Lane LOS		C	_	_	A	A
HCM 95th %tile Q(veh)		0.6	-	-	0	-
HOW JOHN JULIE Q(VEII)		0.0			U	

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		44			4			4			4	
Traffic Vol, veh/h	11	6	26	2	0	2	40	127	8	5	138	11
Future Vol, veh/h	11	6	26	2	0	2	40	127	8	5	138	11
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	-	<u>-</u>	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	7	28	2	0	2	43	138	9	5	150	12
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	396	399	156	413	401	143	162	0	0	147	0	0
Stage 1	166	166	-	229	229	-	-	-	-	-	-	-
Stage 2	230	233	-	184	172	-	-	-	-	-	-	-
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	564	539	890	549	538	905	1417	-	-	1435	-	-
Stage 1	836	761	-	774	715	-	-	-	-	-	-	-
Stage 2	773	712	-	818	756	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	547	519	890	512	518	905	1417	-	-	1435	-	-
Mov Cap-2 Maneuver	547	519	-	512	518	-	-	-	-	-	-	-
Stage 1	808	758	-	748	691	-	-	-	-	-	-	-
Stage 2	746	689	-	782	753	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.5			10.5			1.7			0.2		
HCM LOS	В			В								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1417	-	-	706	654	1435	-	-			
HCM Lane V/C Ratio		0.031	_	_	0.066			_	_			
HCM Control Delay (s)		7.6	0	-	10.5	10.5	7.5	0	-			
HCM Lane LOS		Α	Ā	_	В	В	Α	A	_			
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0	0	-	-			
	,	V. 1			0.2							

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		ર્ન	f)		N/F	
Traffic Vol, veh/h	7	32	43	12	12	7
Future Vol, veh/h	7	32	43	12	12	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	e, # -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	35	47	13	13	8
	Major1		Major2		Minor2	
Conflicting Flow All	60	0	-	0	105	54
Stage 1	-	-	-	-	54	-
Stage 2	-	-	-	-	51	-
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	1544	-	-	-	893	1013
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %		_	_	_		
Mov Cap-1 Maneuver	1544	_	-	-	889	1013
Mov Cap-1 Maneuver	-	_	_	-	889	-
Stage 1	-		-	_	964	-
· ·	-	-	_	_	971	-
Stage 2	_	-	-	-	311	-
Approach	EB		WB		SB	
HCM Control Delay, s	1.3		0		9	
HCM LOS					A	
Minor Long /Maior M		EDI	EDT	WDT	WED	ODL 4
Minor Lane/Major Mvm	IL	EBL	EBT	WBT	WBR :	
Capacity (veh/h)		1544	-	-	-	931
HCM Lane V/C Ratio		0.005	-	-	-	0.022
HCM Control Delay (s)		7.3	0	-	-	9
HCM Lane LOS		Α	Α	-	-	Α
HCM 95th %tile Q(veh))	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	0.2					
					•==	
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			4	₽	
Traffic Vol, veh/h	2	4	1	138	150	1
Future Vol, veh/h	2	4	1	138	150	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	4	1	150	163	1
				_		
	Minor2		Major1		Major2	
Conflicting Flow All	316	164	164	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	152	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	677	881	1414	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	876	-	-	-	-	-
Platoon blocked, %	J. J			_	-	_
Mov Cap-1 Maneuver	676	881	1414	_	_	_
Mov Cap-2 Maneuver	676	-	-	<u>-</u>	_	_
Stage 1	864					-
· ·	876	-		-	-	-
Stage 2	010	-	-	_	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	9.5		0.1		0	
HCM LOS	Α					
	- '					
Minor Long /Maior M		NDI	NDT	CDL 4	CDT	CDD
Minor Lane/Major Mvm	IL	NBL		EBLn1	SBT	SBR
Capacity (veh/h)		1414	-	800	-	-
HCM Lane V/C Ratio		0.001		0.008	-	-
HCM Control Delay (s)		7.5	0	9.5	-	-
HCM Lane LOS		Α	Α	Α	-	-
HCM 95th %tile Q(veh)		0	-	0	-	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	6	0	18	7	6	1	10	46	3	1	93	5
Future Vol, veh/h	6	0	18	7	6	1	10	46	3	1	93	5
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	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	0	20	8	7	1	11	50	3	1	101	5
Major/Minor	Minor2			Minor1			Major1		[Major2		
Conflicting Flow All	184	181	104	190	182	52	106	0	0	53	0	0
Stage 1	106	106	-	74	74	-	-	-	-	-	-	-
Stage 2	78	75	-	116	108	-	-	-	-	-	-	-
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	777	713	951	770	712	1016	1485	-	-	1553	-	-
Stage 1	900	807	-	935	833	-	-	-	-	-	-	-
Stage 2	931	833	-	889	806	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	765	707	951	749	706	1016	1485	-	-	1553	-	-
Mov Cap-2 Maneuver	765	707	-	749	706	-	-	-	-	-	-	-
Stage 1	893	806	-	928	826	-	-	-	-	-	-	-
Stage 2	915	826	-	870	805	-	-	-	-	-	-	-
Ŭ												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	9.1			9.9			1.3			0.1		
HCM LOS	Α			Α								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1485	-	-	897	744	1553	-	-			
HCM Lane V/C Ratio		0.007	_		0.029		0.001	_	_			
HCM Control Delay (s)		7.4	0	-	9.1	9.9	7.3	0	-			
HCM Lane LOS		A	A	-	A	A	A	A	-			
HCM 95th %tile Q(veh))	0	-	-	0.1	0.1	0	-	-			
						• • •						

Intersection						
Int Delay, s/veh	1.1					
		ED-	WOT	WDD	ODi	ODD
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	_	€	}		**	
Traffic Vol, veh/h	2	21	16	1	2	2
Future Vol, veh/h	2	21	16	1	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-			None	-	
Storage Length	-	-	-	-	0	-
Veh in Median Storage		0	0	-	0	-
Grade, %	- 02	0	0	- 02	0	- 02
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	23	17	1	2	2
Major/Minor I	Major1	ı	Major2		Minor2	
Conflicting Flow All	18	0	-	0	45	18
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	27	-
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	1599	-	-	-	965	1061
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	996	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1599	-	-	-	964	1061
Mov Cap-2 Maneuver	-	-	-	-	964	-
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	996	-
					200	
Annrasal	ED		ME		0.0	
Approach	EB		WB		SB	
HCM Control Delay, s	0.6		0		8.6	
HCM LOS					Α	
Minor Lane/Major Mvm	ıt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)		1599	-	-		1010
HCM Lane V/C Ratio		0.001	-	-		0.004
HCM Control Delay (s)		7.3	0	-	-	8.6
HCM Lane LOS		Α.	A	-	-	Α
HCM 95th %tile Q(veh))	0	-	-	-	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			ની	f)	
Traffic Vol, veh/h	0	0	0	52	100	2
Future Vol, veh/h	0	0	0	52	100	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	e, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	57	109	2
IVIVIIIL I IOVV	U	0	U	- 31	103	
Major/Minor	Minor2		Major1	<u> </u>	//ajor2	
Conflicting Flow All	167	110	111	0	-	0
Stage 1	110	-	-	-	-	-
Stage 2	57	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-		_	_	_
Critical Hdwy Stg 2	5.42			_	_	_
Follow-up Hdwy		3.318	2.218	_	_	_
Pot Cap-1 Maneuver	823	943	1479	-		
•	915		14/9	-	-	
Stage 1		-	-	-	-	-
Stage 2	966	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	823	943	1479	-	-	-
Mov Cap-2 Maneuver	823	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	966	-	-	-	-	-
Annroach	EB		NB		SB	
Approach						
HCM Control Delay, s	0		0		0	
HCM LOS	Α					
Minor Lane/Major Mvm	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		1479	-		UD,	UDIT
HCM Lane V/C Ratio				<u>-</u>	_	_
		-	-	-	-	-
HCM Control Delay (s)		0	-	0	-	-
HCM Lane LOS	\	A	-	Α	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection						
Int Delay, s/veh	1.3					
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	<u> </u>				¥	
Traffic Vol, veh/h	406	89	5	269	56	5
Future Vol, veh/h	406	89	5	269	56	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-			None		None
Storage Length	_	-	_	-	0	-
Veh in Median Storag	e,# 0	_	-	0	0	_
Grade, %	0, 11	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	441	97	5	292	61	5
WIVIIILIOW	771	31	5	202	O I	J
Major/Minor	Major1		Major2	ı	Minor1	
Conflicting Flow All	0	0	538	0	792	490
Stage 1	-	-	-	-	490	-
Stage 2	-	-	-	-	302	-
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	-	-	1030	-	358	578
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	750	-
Platoon blocked, %	_	_		_		
Mov Cap-1 Maneuver			1030	-	356	578
Mov Cap-1 Maneuver		_		-	356	-
Stage 1	-		_	-	616	-
•	_	-	-	-	746	-
Stage 2	-	-	-	-	740	-
Approach	EB		WB		NW	
HCM Control Delay, s	0		0.2		16.9	
HCM LOS					С	
1 (84 : 24		11.471 4	EDT	EDD	MD	MA
Minor Lane/Major Mvr	nt r	WLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		368	-		1030	-
HCM Lane V/C Ratio		0.18	-	-	0.005	-
HCM Control Delay (s)	16.9	-	-	8.5	0
HCM Lane LOS		С	-	-	Α	Α
HCM 95th %tile Q(veh	1)	0.6	-	-	0	-

Intersection							-						
Int Delay, s/veh	2.2												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	,
Lane Configurations	LDL	4	LDIN	WDL	₩	WDIX	NDL	4	NDIX	JDL	- ♣	ODIN	
Traffic Vol, veh/h	12	6	28	2	0	2	42	135	9	5	146	12)
Future Vol, veh/h	12	6	28	2	0	2	42	135	9	5	146	12	
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	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	-	-	-	_	-	-	-	-	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	13	7	30	2	0	2	46	147	10	5	159	13	,
Major/Minor I	Minor2			Minor1			Major1			Major2			
Conflicting Flow All	421	425	166	438	426	152	172	0	0	157	0	0	_
Stage 1	176	176	-	244	244	-	-	-	-	-	-	-	
Stage 2	245	249	-	194	182	-	-	-	-	-	-	-	
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	543	521	878	529	520	894	1405	-	-	1423	-	-	-
Stage 1	826	753	-	760	704	-	-	-	-	-	-	-	
Stage 2	759	701	-	808	749	-	-	-	-	-	-	-	
Platoon blocked, %								-	-		-	-	
Mov Cap-1 Maneuver	525	500	878	490	499	894	1405	-	-	1423	-	-	•
Mov Cap-2 Maneuver	525	500	-	490	499	-	-	-	-	-	-	-	
Stage 1	796	750	-	733	679	-	-	-	-	-	-	-	
Stage 2	730	676	-	770	746	-	-	-	-	-	-	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	10.6			10.7			1.7			0.2			
HCM LOS	В			В									
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR				
Capacity (veh/h)		1405	-	-	689	633	1423	-	-				
HCM Lane V/C Ratio		0.032	-	-	0.073			-	-				
HCM Control Delay (s)		7.6	0	-	10.6	10.7	7.5	0	-				
HCM Lane LOS		Α	Α	-	В	В	Α	Α	-				
HCM 95th %tile Q(veh))	0.1	-	-	0.2	0	0	-	-				

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	f		¥	
Traffic Vol, veh/h	7	34	46	13	13	7
Future Vol, veh/h	7	34	46	13	13	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	,# -	0	0	-	0	-
Grade, %	_	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	37	50	14	14	8
Maior/Mina	\		Anie -O		Min s = O	
	Major1		Major2		Minor2	
Conflicting Flow All	64	0	-	0	110	57
Stage 1	-	-	-	-	57	-
Stage 2	-	-	-	-	53	-
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	1538	-	-	-	887	1009
Stage 1	-	-	-	-	966	-
Stage 2	-	-	-	-	970	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1538	-	-	-	883	1009
Mov Cap-2 Maneuver	-	-	-	-	883	-
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	970	-
Approach	EB		WB		SB	
HCM Control Delay, s	1.3		0		9	
HCM LOS	1.3		U		A	
TICIVI LOS					Α	
Minor Lane/Major Mvm	ıt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)		1538	-	-	-	923
HCM Lane V/C Ratio		0.005	-	-	-	0.024
HCM Control Delay (s)		7.4	0	-	-	9
HCM Lane LOS		Α	Α	-	-	Α
HCM 95th %tile Q(veh))	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	0.2					
					05-	05.5
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	Դ	
Traffic Vol, veh/h	2	4	1	146	159	1
Future Vol, veh/h	2	4	1	146	159	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	e, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	2	4	1	159	173	1
		7		100	.10	
Major/Minor	Minor2		Major1	N	Major2	
Conflicting Flow All	335	174	174	0	-	0
Stage 1	174	-	-	-	-	-
Stage 2	161	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	_	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	_	-	_	-
Follow-up Hdwy	3.518	3.318	2.218	_	_	_
Pot Cap-1 Maneuver	660	869	1403	_	_	_
Stage 1	856	-	- 100	_	_	_
Stage 2	868	-	_	-		-
Platoon blocked, %	000	-	-	-	-	_
	GEO.	000	1402		-	-
Mov Cap-1 Maneuver	659	869	1403	-	-	-
Mov Cap-2 Maneuver	659	-	-	-	-	-
Stage 1	855	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	9.6		0.1		0	
HCM LOS			U. I		U	
HOWI LOS	A					
Minor Lane/Major Mvn	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		1403	_		_	_
HCM Lane V/C Ratio		0.001	-	0.008	-	_
HCM Control Delay (s))	7.6	0	9.6	-	-
HCM Lane LOS		Α.	A	3.0 A	_	-
HCM 95th %tile Q(veh	1	0		0	_	-
HOW SOUL WILLS OF VEN)	U	-	U	-	-

Intersection						
Int Delay, s/veh	1.3					
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	<u></u>			4	¥,f	
Traffic Vol, veh/h	119	20	2	169	39	1
Future Vol, veh/h	119	20	2	169	39	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	_	-	-		0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	129	22	2	184	42	1
INIVITIL FIOW	129	22	2	104	42	
Major/Minor N	1ajor1		Major2		Minor1	
Conflicting Flow All	0	0	151	0	328	140
Stage 1	-	_	-	-	140	-
Stage 2	-	-	-	-	188	-
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	_	_	1430	_	666	908
Stage 1	_	_	-	_	887	300
Stage 1	-	-		-	844	-
		-	-		044	-
Platoon blocked, %	-	-	4.400	-	005	000
Mov Cap-1 Maneuver	-	-	1430	-	665	908
Mov Cap-2 Maneuver	-	-	-	-	665	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	842	-
Approach	EB		WB		NW	
HCM Control Delay, s	0		0.1		10.8	
HCM LOS	U		0.1			
I IOIVI LOS					В	
Minor Lane/Major Mvmt	N	IWLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		669	-	-	1430	-
HCM Lane V/C Ratio		0.065	-	-	0.002	-
HCM Control Delay (s)		10.8	-	-	7.5	0
HCM Lane LOS		В	-	-	Α	A
HCM 95th %tile Q(veh)		0.2	-	_	0	-
		7.2				

2: Roller Coaster Road & Stella D	Orive/Evergreen Road

Intersection													
Int Delay, s/veh	2.3												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		44			4			4			4		
Traffic Vol, veh/h	6	0	19	7	6	1	11	46	3	1	93	5	
Future Vol, veh/h	6	0	19	7	6	1	11	46	3	1	93	5	
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	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	7	0	21	8	7	1	12	50	3	1	101	5	
Major/Minor I	Minor2			Minor1			Major1			Major2			
Conflicting Flow All	186	183	104	192	184	52	106	0	0	53	0	0	
Stage 1	106	106	-	76	76	-	-	-	-	-	-	-	
Stage 2	80	77	-	116	108	-	-	-	-	-	-	-	
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	775	711	951	768	710	1016	1485	-	-	1553	-	-	
Stage 1	900	807	-	933	832	-	-	-	-	-	-	-	
Stage 2	929	831	-	889	806	-	-	-	-	-	-	-	
Platoon blocked, %								-	-		-	-	
Mov Cap-1 Maneuver	763	705	951	746	704	1016	1485	-	-	1553	-	-	
Mov Cap-2 Maneuver	763	705	-	746	704	-	-	-	-	-	-	-	
Stage 1	893	806	-	926	825	-	-	-	-	-	-	-	
Stage 2	913	824	-	869	805	-	-	-	-	-	-	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	9.1			10			1.4			0.1			
HCM LOS	A			В			1.1			J. 1			
	,,												
Minor Lane/Major Mvm	ıt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR				
Capacity (veh/h)		1485	-	-	898	741	1553	-					
HCM Lane V/C Ratio		0.008	_	-		0.021		-	-				
HCM Control Delay (s)		7.4	0	_	9.1	10	7.3	0	-				
HCM Lane LOS		Α	Ā	-	A	В	Α	Ā	-				
HCM 95th %tile Q(veh))	0	-	-	0.1	0.1	0	-	-				
					J. /	0.1							

Int Delay, s/veh	Intersection						
Movement		1.5					
Lane Configurations			EDT	WDT	WDD	CDI	CDD
Traffic Vol, veh/h 3 21 16 2 3 3 Future Vol, veh/h 3 21 16 2 3 3 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Free Free Free Free Free Free Stop Stop RT Channelized - None - 0 - 0 - 0 - 0 - 0 - 0 0 -<		ERL			WBK		SRK
Future Vol, veh/h 3 21 16 2 3 3 Conflicting Peds, #/hr 0 - None - 0 - 0 - 0 - 0 - 0 0 - 0 - 0 2 2 2 2 2		-			0		2
Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Stop None							
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 92 92 92 92 92 92 Heavy Vehicles, % 2							
RT Channelized							
Storage Length - - - 0 - 0 - O A 7 18 Stage D Longton Major/Window Major/Window A - - A - A - A - A - - A -							
Veh in Median Storage, # - 0 0 - 0 - 0 - 0 - O - O - O - O - O - O - O - O - O - O - O - O - O - O - O Per							
Grade, % - 0 0 - 0 - Peak Hour Factor 92 93 93 3 Mayor Minor Major Minor Major Minor Major Minor Major Minor Major Minor Minor Major Minor Min							
Peak Hour Factor 92 93 Minor Early Vehicles, % 2 2 2 2 2 2 2 3 3 Major Minor Malor 19 0 - 0 47 18		э,# -			-		-
Heavy Vehicles, % 2 2 2 2 2 2 2 2 2 Mvmt Flow 3 23 17 2 3 3 3 Major/Minor							
Momental Flow 3 23 17 2 3 3 Major/Minor Major1 Major2 Minor2 Conflicting Flow All 19 0 - 0 47 18 Stage 1 - - - 18 - Stage 2 - - - 29 - Critical Hdwy 4.12 - - 6.42 6.22 Critical Hdwy Stg 1 - - - 5.42 - Critical Hdwy Stg 2 - - - 5.42 - Critical Hdwy Stg 2 - - - 5.42 - Critical Hdwy Stg 2 - - - 5.42 - Critical Hdwy Stg 2 - - - 5.42 - Follow-up Hdwy 2.218 - - 3.518 3.318 Pot Cap-1 Maneuver 1597 - - 963 1061 Mov Cap-2 Maneuver -							
Major/Minor Major1 Major2 Minor2 Conflicting Flow All 19 0 - 0 47 18 Stage 1 - - - - 18 - 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 - - 5.42 - Follow-up Hdwy 2.218 - - 963 1061 Stage 1 - - - 963 1061 Stage 1 - - - 994 - Mov Cap-1 Maneuver 1597 - - 961 - Mov Cap-2 Maneuver - - - 961 - Stage 2 - - <td>Heavy Vehicles, %</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Heavy Vehicles, %						
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Conflicting Flow All 19 0 - 0 47 18 Stage 1 - - - - 18 - 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 1597 - - 963 1061 Stage 1 - - - 994 - Platoon blocked, % - - - 994 - Mov Cap-1 Maneuver 1597 - - 961 - Mov Cap-2 Maneuver - - 961 - Stage 2 - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 <							
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Stage 1 - - - 18 - Stage 2 - - - - 29 - Critical Hdwy Stg 1 - - - 5.42 - - Critical Hdwy Stg 2 - - - 5.42 - - Follow-up Hdwy 2.218 - - - 5.42 - Follow-up Hdwy 2.218 - - - 5.42 - Follow-up Hdwy 2.218 - - - 963 1061 Stage 1 - - - 963 1061 Stage 2 - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM Control Delay, s 0.9 0 8.6 HCM Control Delay (s) 7.3 0 - - 0.006 HCM Control Delay (s) 7.3 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>40</td></td<>							40
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 1597 - - 963 1061 Stage 1 - - - 1005 - Stage 2 - - - 994 - Platoon blocked, % - - - 994 - Mov Cap-1 Maneuver 1597 - - 961 1061 Mov Cap-2 Maneuver - - - 961 - Stage 1 - - - 904 - Stage 2 - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM Lane V/C Ratio<				-			
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 1597 - - 963 1061 Stage 1 - - - 994 - Platoon blocked, % - - - 994 - Mov Cap-1 Maneuver 1597 - - 961 1061 Mov Cap-2 Maneuver - - - 961 - Stage 1 - - - 1003 - Stage 2 - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 - - - - 0.006			-	-			
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 1597 - - 963 1061 Stage 1 - - - 994 - Platoon blocked, % - - - 994 - Mov Cap-1 Maneuver 1597 - - 961 1061 Mov Cap-2 Maneuver - - - 961 - Stage 1 - - - 1003 - Stage 2 - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 - - - 1009 HCM Lane V/C Ratio 0.002 - - - 0.006			-	-	-		
Critical Hdwy Stg 2 - - - 5.42 - Follow-up Hdwy 2.218 - - 3.518 3.318 Pot Cap-1 Maneuver 1597 - - 963 1061 Stage 1 - - - 1005 - Stage 2 - - - 994 - Platoon blocked, % - - - - Mov Cap-1 Maneuver 1597 - - 961 1061 Mov Cap-2 Maneuver - - - 961 - - 961 - - 961 - - 961 - - 961 - - 961 - - 961 - - 961 - - 961 - - 961 - - 961 - - - 961 - - - 961 - - - - - - -	•		-	-	-		6.22
Follow-up Hdwy 2.218 3.518 3.318 Pot Cap-1 Maneuver 1597 963 1061		-	-	-	-		-
Pot Cap-1 Maneuver 1597 963 1061 Stage 1 1005 - Stage 2 994 - Platoon blocked, % 961 1061 Mov Cap-1 Maneuver 1597 961 1061 Mov Cap-2 Maneuver 961 - Stage 1 961 - Stage 2 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM LOS A Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 1009 HCM Lane V/C Ratio 0.002 0.006 HCM Control Delay (s) 7.3 0 - 8.6 HCM Lane LOS A A			-	-	-		-
Stage 1 - - - 1005 - Stage 2 - - - 994 - Platoon blocked, % - - - - Mov Cap-1 Maneuver 1597 - - 961 1061 Mov Cap-2 Maneuver - - - 961 - Stage 1 - - - 1003 - Stage 2 - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM LOS A - - 1009 Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 - - - 0.006 HCM Lane V/C Ratio 0.002 - - - 0.006 HCM Control Delay (s) 7.3 0 - - 8.6 HCM Lane LOS A A - - A				-	-		
Stage 2 - - 994 - Platoon blocked, % - - - - Mov Cap-1 Maneuver 1597 - - 961 1061 Mov Cap-2 Maneuver - - - 961 - Stage 1 - - - 1003 - Stage 2 - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM LOS A A Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 1009 HCM Lane V/C Ratio 0.002 0.006 HCM Control Delay (s) 7.3 0 - 8.6 HCM Lane LOS A A - A	Pot Cap-1 Maneuver	1597	-	-	-		1061
Platoon blocked, %	Stage 1				-		-
Mov Cap-1 Maneuver 1597 - - 961 1061 Mov Cap-2 Maneuver - - - 961 - Stage 1 - - - - 1003 - Stage 2 - - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM LOS A A Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 1009 HCM Lane V/C Ratio 0.002 0.006 HCM Control Delay (s) 7.3 0 8.6 HCM Lane LOS A A A	Stage 2	-	-	-	-	994	-
Mov Cap-2 Maneuver - - - 961 - Stage 1 - - - - 1003 - Stage 2 - - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM LOS A A Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 1009 HCM Lane V/C Ratio 0.002 0.006 HCM Control Delay (s) 7.3 0 8.6 HCM Lane LOS A A A	Platoon blocked, %		-	-	-		
Mov Cap-2 Maneuver - - - 961 - Stage 1 - - - - 1003 - Stage 2 - - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM LOS A A Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 1009 HCM Lane V/C Ratio 0.002 0.006 HCM Control Delay (s) 7.3 0 8.6 HCM Lane LOS A A A	Mov Cap-1 Maneuver	1597	-	-	-	961	1061
Stage 1 - - - 1003 - Stage 2 - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM LOS A A Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 1009 HCM Lane V/C Ratio 0.002 0.006 HCM Control Delay (s) 7.3 0 - 8.6 HCM Lane LOS A A - A	Mov Cap-2 Maneuver		-	-	-		-
Stage 2 - - - 994 - Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM LOS A Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 - - 1009 HCM Lane V/C Ratio 0.002 - - 0.006 HCM Control Delay (s) 7.3 0 - - 8.6 HCM Lane LOS A A - - A			-	-	_		-
Approach EB WB SB HCM Control Delay, s 0.9 0 8.6 HCM LOS A A Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 - - 1009 HCM Lane V/C Ratio 0.002 - - 0.006 HCM Control Delay (s) 7.3 0 - - 8.6 HCM Lane LOS A A - - A			_	_	_		
HCM Control Delay, s 0.9 0 8.6 HCM LOS	Olugo Z					JJ-1	
HCM Control Delay, s 0.9 0 8.6 HCM LOS							
Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 - - 1009 HCM Lane V/C Ratio 0.002 - - - 0.006 HCM Control Delay (s) 7.3 0 - - 8.6 HCM Lane LOS A A - - A							
Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 - - - 1009 HCM Lane V/C Ratio 0.002 - - - 0.006 HCM Control Delay (s) 7.3 0 - - 8.6 HCM Lane LOS A A - - A	HCM Control Delay, s	0.9		0		8.6	
Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 Capacity (veh/h) 1597 - - - 1009 HCM Lane V/C Ratio 0.002 - - - 0.006 HCM Control Delay (s) 7.3 0 - - 8.6 HCM Lane LOS A A - - A	HCM LOS					Α	
Capacity (veh/h) 1597 - - 1009 HCM Lane V/C Ratio 0.002 - - 0.006 HCM Control Delay (s) 7.3 0 - - 8.6 HCM Lane LOS A A - - A							
Capacity (veh/h) 1597 - - 1009 HCM Lane V/C Ratio 0.002 - - 0.006 HCM Control Delay (s) 7.3 0 - - 8.6 HCM Lane LOS A A - - A	Minor Lone (Mairy M	-4	EDI	EDT	WDT	WDD	CDL 4
HCM Lane V/C Ratio 0.002 - - - 0.006 HCM Control Delay (s) 7.3 0 - - 8.6 HCM Lane LOS A A - - A		ri(FRI	MRI		
HCM Control Delay (s) 7.3 0 - 8.6 HCM Lane LOS A A - A				-	-		
HCM Lane LOS A A A					-		
)			-	-	
HCM 95th %tile O(veh) 0 0				Α	-	-	
TION OUT AUTO CONT.	HCM 95th %tile Q(veh	1)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			<u>-115.</u>	<u>\$2.</u>	
Traffic Vol, veh/h	0	0	0	52	100	3
Future Vol, veh/h	0	0	0	52	100	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	_	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	57	109	3
WWW.				- 01	100	
	Minor2		Major1		Major2	
Conflicting Flow All	168	111	112	0	-	0
Stage 1	111	-	-	-	-	-
Stage 2	57	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	822	942	1478	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	966	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	822	942	1478	-	-	-
Mov Cap-2 Maneuver	822			-	-	_
Stage 1	914	_	_	_	_	_
Stage 2	966	_	_	_	_	_
Olaye 2	300	-	-	_	_	-
Approach	EB		NB		SB	
HCM Control Delay, s	0		0		0	
HCM LOS	Α					
Minor Lane/Major Mvm	nt	NBL	MRT	EBLn1	SBT	SBR
	IL					
Capacity (veh/h)		1478	-	-	-	-
HCM Lane V/C Ratio		-	-	-	-	-
		0	-	0	-	-
HCM Control Delay (s)						
HCM Control Delay (s) HCM Lane LOS HCM 95th %tile Q(veh		A 0	-	A -	-	-

Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NWL	NWR
		LDK	VVDL			INVVIX
Lane Configurations		00	-	ે	Y	-
Traffic Vol, veh/h	406	90	5	269	58	5
Future Vol, veh/h	406	90	5	269	58	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	e, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	441	98	5	292	63	5
WOITE TOW	441	90	5	232	03	5
Major/Minor	Major1		Major2	J	Minor1	
Conflicting Flow All	0	0	539	0	792	490
Stage 1	-	-	-	-	490	-
Stage 2	_	_	_	-	302	-
Critical Hdwy	_	_	4.12	_	6.42	6.22
Critical Hdwy Stg 1		-	4.12	-	5.42	0.22
, ,	-	-	-			
Critical Hdwy Stg 2	-	-	0.040	-	5.42	-
Follow-up Hdwy	-		2.218			3.318
Pot Cap-1 Maneuver	-	-	1029	-	358	578
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	750	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1029	-	356	578
Mov Cap-2 Maneuver	-	-	-	-	356	-
Stage 1	_	-	-	-	616	-
Stage 2	_	_	_	_	746	-
Olaye 2	_	_	_	_	7-10	_
Approach	EB		WB		NW	
HCM Control Delay, s	0		0.2		17	
HCM LOS			7.2		C	
TIOWI LOO					J	
Minor Lane/Major Mvr	nt N	IWLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		367	-		1029	-
HCM Lane V/C Ratio		0.187	_		0.005	-
HCM Control Delay (s)	17		_	8.5	0
HCM Lane LOS		C	_	-	Α	A
HCM 95th %tile Q(veh	.)	0.7	-	-	0	-
	1)	0.7	-	-	U	•

2: Roller Coaster Road & Stella Drive/Evergreen Road

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		44			4			4			4	
Traffic Vol, veh/h	12	6	29	2	0	2	43	135	9	5	146	12
Future Vol, veh/h	12	6	29	2	0	2	43	135	9	5	146	12
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	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	7	32	2	0	2	47	147	10	5	159	13
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	423	427	166	441	428	152	172	0	0	157	0	0
Stage 1	176	176	-	246	246	-		-	_	-	-	_
Stage 2	247	251	_	195	182	_	_	_	_	_	_	_
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	541	520	878	527	519	894	1405	-	-	1423	_	-
Stage 1	826	753	-	758	703	-	-	-	_	-	-	_
Stage 2	757	699	-	807	749	-	-	-	_	-	_	_
Platoon blocked, %		300		301	. 10			_	_		_	_
Mov Cap-1 Maneuver	523	499	878	487	498	894	1405	-	-	1423	-	-
Mov Cap-2 Maneuver	523	499	-	487	498	-		-	-	-	-	-
Stage 1	795	750	-	730	677	-	_	-	-	-	-	-
Stage 2	727	673	-	768	746	-	_	_	_	_	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.6			10.7			1.8			0.2		
HCM LOS	В			В			1.0			0.2		
Minor Lane/Major Mvm	nt	NBL	NBT	NRR	EBLn1V	VBI n1	SBL	SBT	SBR			
Capacity (veh/h)		1405	-	-	691	631	1423	-				
HCM Lane V/C Ratio		0.033	_	-	0.074							
HCM Control Delay (s)		7.7	0	-	10.6	10.7	7.5	0	-			
HCM Lane LOS		Α.	A	-	10.0 B	10.7 B	7.5 A	A	_			
HCM 95th %tile Q(veh	1	0.1	-	-	0.2	0	0	-	-			
HOW JOHN JOHN Q(VEI)		0.1		_	0.2							

Intersection						
Int Delay, s/veh	2.1					
		EST	MOT	14/55	051	055
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	₽		¥	
Traffic Vol, veh/h	8	34	46	14	14	9
Future Vol, veh/h	8	34	46	14	14	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	,# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	37	50	15	15	10
	Major1		Major2		Minor2	
Conflicting Flow All	65	0	-	0	113	58
Stage 1	-	-	-	-	58	-
Stage 2	-	-	-	-	55	-
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	1537	-	-	-	884	1008
Stage 1	-	-	-	-	965	-
Stage 2	-	-	_	-	968	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1537	_	_	_	879	1008
Mov Cap-1 Maneuver	-	_	_	_	879	-
Stage 1	_		_	_	959	-
Stage 2		-	_	_	968	_
Slaye 2	-	_	_	_	900	_
Approach	EB		WB		SB	
HCM Control Delay, s	1.4		0		9	
HCM LOS					Α	
Minor Long /Maior M		EDI	EDT	MOT	WED	ODL 4
Minor Lane/Major Mvm	ı	EBL	EBT	WBT	WBR	
Capacity (veh/h)		1537	-	-	-	925
HCM Lane V/C Ratio		0.006	-	-	-	0.027
HCM Control Delay (s)		7.4	0	-	-	9
HCM Lane LOS		Α	Α	-	-	Α
HCM 95th %tile Q(veh)		0	-	-	-	0.1

Intersection						
Int Delay, s/veh	0.3					
		EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y	,		₹	- ∱	_
Traffic Vol, veh/h	3	4	1	146	159	2
Future Vol, veh/h	3	4	1	146	159	2
Conflicting Peds, #/hr	0	0	_ 0	_ 0	_ 0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	4	1	159	173	2
Major/Minor	Minor2		Major1		/aior?	
			Major1		/lajor2	^
Conflicting Flow All	335	174	175	0	-	0
Stage 1	174	-	-	-	-	-
Stage 2	161	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	660	869	1401	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	659	869	1401	-	-	-
Mov Cap-2 Maneuver	659	-	-	-	-	-
Stage 1	855	-	-	-	-	-
Stage 2	868	_	_	_	_	_
	300					
Approach	EB		NB		SB	
HCM Control Delay, s	9.8		0.1		0	
HCM LOS	Α					
Minor Lane/Major Mvm	+	NBL	NDT	EBLn1	SBT	SBR
	t e					
Capacity (veh/h)		1401	-	765	-	-
HCM Lane V/C Ratio		0.001	-	0.01	-	-
HCM Control Delay (s)		7.6	0	9.8	-	-
HCM Lane LOS		A	Α	A	-	-
HCM 95th %tile Q(veh)		0	-	0	-	-