EXHIBIT B

ChoiceOne Engineering

Village of Yellow Springs, Greene County

Struewing Property Subdivision Traffic Impact Study

Revised: January 2022

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Date
January 5, 2022

Attention
Greg Smith
gsmith@oberer.com

Address
Oberer Land Developers Ltd
3445 Newmark Drive
Miamisburg, OH 45342

Subject
Traffic Impact Study Submittal
Streuwing Property
GRE-YSP-2004

Dear Mr. Smith:

Enclosed is a Traffic Impact Study for the Struewing Property Subdivision. The results of the study indicate the following recommendations:

Layout 1

- Construct the proposed drive along Spillan Road approximately 315 feet north of East Hyde Road.
- Construct the proposed access tying into the existing subdivision at Southgate Avenue approximately 75 feet south of Edgefield Drive.

Layout 2

- Construct the proposed drive along Spillan Road approximately 315 feet north of East Hyde Road.
- Construct the proposed access tying into the existing subdivision at Southgate Avenue approximately 75 feet south of Edgefield Drive.
- Construct the proposed drive along Randall Road approximately 225 feet south of Edgefield Drive.

Layout 3

- Construct the proposed drive along Spillan Road approximately 315 feet north of East Hyde Road.
- Construct the proposed access typing into the existing subdivision at Southgate Avenue, approximately 75 feet south of Edgefield Drive.

If you have any questions, feel free to contact our office.

Sincerely,

Michael K. Goettemoeller, P.E. PTOE
Project Manager

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Traffic Impact Study

Analysis Snapshot

Choice One Engineering Corporation (COEC) was retained by Oberer Land Developers, Ltd. to analyze the traffic impact of a proposed residential development to be submitted to the Village of Yellow Springs. The Streuwing Property Subdivision is proposed to be on the northwest quadrant of Hyde Road and Spillan Road within the Village of Yellow Springs, Greene County, Ohio. This traffic impact study analyzes three (3) different potential layouts of the property. The purpose of this study is to identify the traffic-related impacts of the proposed development during typical weekday AM and PM Peak Hours.

This traffic impact study includes Existing Conditions, Existing Traffic Volumes, Proposed Layouts, Trip Generation, Directional Distribution, 2022 Opening Year Build Traffic Volumes, 2032 Design Year Build Traffic Volumes, Growth Rate, Capacity Analysis, Sight Distance Analysis, Turn Lane Analysis, and Pedestrian Analysis.

Existing Conditions

Hyde Road is a two-lane roadway segment (1 eastbound lane, 1 westbound lane) and is classified as a "Minor Collector" in ODOT's Functional Classification system. The speed limit on East Hyde Road is 35 mph and has a 2018 ADT of 1,957 at US Route 68 per the Greene County Traffic Count Database.

Spillan Road is a two-lane segment (1 northbound lane, 1 southbound lane) and is classified as a "Local Road" in ODOT's Functional Classification system. The speed limit on Spillan Road is 25 mph.

Because of potential impacts to US 68, which is just west of the proposed development, impacts to US 68 have also been included in this study. US 68 is a two-lane roadway segment (1 northbound lane, 1 southbound lane) and is classified as a "Principal Arterial" in ODOT's Functional Classification system. The speed limit on US 68 is 35 mph at Kahoe Lane and 55 mph at Hyde Road. US 68 has a 2018 ADT of 4,732 per ODOT's Transportation Information Mapping System (TIMS).

Existing Traffic Volumes

Video turning movement counts were collected by Choice One Engineering From 12:00 A.M. Tuesday, August 10, 2021, to 11:59 P.M. Wednesday, August 11, 2021, at the intersections of Spillan Road & Edgefield Drive and East Hyde Road & Spillan Road. Of the 48 hours of video data, it was determined to process the hours of 7:00 to 9:00 A.M. and 4:00 to 6:00 P.M. on Tuesday, August 10, 2021. Counts were also taken from 12:00 A.M. Wednesday, December 8, 2021, to 11:59 P.M. Thursday, December 9, 2021, at the intersections of US 68 & Kahoe Lane and US 68 & East Hyde Road. Of the 48 hours of video data, it was determined to process the hours of 6:00 A.M to 7:00 P.M. on Wednesday, December 8, 2021. The 2021 existing traffic volumes are attached in Appendix A. The peak hours of the intersections are summarized in the table below:

Intersection	A.M. Peak	P.M. Peak
Spillan Road & Edgefield Drive	7:15-8:15 A.M.	4:00-5:00 P.M.
East Hyde Road & Spillan Road	7:45-8:45 A.M.	4:30-5:30 P.M.
US 68 & Kahoe Lane	11:00 A.M.-12:00 P.M.	3:30-4:30 P.M.
US 68 & East Hyde Road	7:45-8:45 A.M.	3:15-4:15 P.M.

Proposed Development Layouts

Layout 1- The proposed site plan for Layout 1 has two (2) proposed access points. One (1) access point will be a full access drive along Spillan Road that is approximately 315 feet north of the intersection of Spillan Road & East Hyde Road. The site also has one (1) access point that will tie into the existing subdivision at Southgate Avenue, approximately 75 feet south of Edgefield Drive.

Layout 2- The proposed site plan for Layout 2 has three (3) proposed access points. One (1) access point will be a full access drive along Spillan Road that is approximately 315 feet north of the intersection of Spillan Road & East Hyde Road. The site also has one (1) access point that will tie into the existing subdivision at Southgate Avenue, approximately 75 feet south of Edgefield Drive, and one (1) access point along Randall Road, approximately 225 feet south of the intersection of Randall Road & Edgefield Drive.

Layout 3- The proposed site plan for Layout 3 has two (2) proposed access points. One (1) access point will be a full access drive along Spillan Road that is approximately 315 feet north of the intersection of Spillan Road & East Hyde Road. The site also has one (1) access point that will tie into the existing subdivision at Southgate Avenue, approximately 75 feet south of Edgefield Drive. The proposed site plan is attached in Appendix B.

Trip Generation

Using the average trip-generation rates given in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition*, the inbound and outbound trips for the proposed development were calculated for both proposed layouts.

Layout 1: The site generated trips were estimated using 60 Single-Family Detached Housing units (Land Use Code 210) and 91 Low-Rise Multifamily Housing units (Land Use Code 220). According to the *ITE Trip Generation Manual, 10th Edition*, the proposed development is estimated to generate 1,297 vehicular trips during a typical weekday, 91 trips during the A.M. Peak Hour (22 inbound and 69 outbound) and 116 trips during the P.M. Peak Hour (73 inbound and 43 outbound).

Layout 2: The site generated trips were estimated using 80 Single-Family Detached Housing units (Land Use Code 210) and 79 Low-Rise Multifamily Housing units (Land Use Code 220). According to the *ITE Trip Generation Manual, 10th Edition*, the proposed development is estimated to generate 1,403 Vehicular Trips during a typical weekday, 100 Trips during the A.M. Peak Hour (24 inbound and 76 outbound) and 130 trips during the P.M. Peak Hour (82 inbound and 48 outbound).

Layout 3: The site generated trips were estimated using 143 Single-Family Detached Housing units (Land Use Code 210). According to the *ITE Trip Generation Manual, 10th Edition*, the proposed development is estimated to generate 1,445 Vehicular Trips during a typical weekday, 106 Trips during the A.M. Peak Hour (27 inbound and 79 outbound) and 143 trips during the P.M. Peak Hour (90 inbound and 53 outbound).

Since Layout 3 is projected to produce the most trips out of all three layouts, to be conservative, the analysis for the proposed subdivision uses the trips proposed for Layout 3.

The forecasted generated trips are attached in Appendix C.

Directional Distribution

COEC analyzed the existing traffic volumes and population density to formulate the directional distribution. The directional distributions are attached in Appendix C; a summary is below.

Directional Distribution

Route	Approach/Departure Distribution
To/From the North on Spillan Road	5% / 5%
To/From the North on US 68	20% / 20%
To/From the South on US 68	50% / 50%
To/From the East on Hyde Road	15% / 15%
To/From the West on Hyde Road	10% / 10%
Total	**100% / 100%**

2022 Opening Year Build Traffic Volumes

The 2022 Opening Year Build Traffic Volumes were calculated from the Existing Traffic Volumes increased by an annual growth rate for one year and then adding the trips generated by the proposed development to each of the entering and exiting movements. The 2022 Opening Year Build Traffic Volumes are attached in Appendix C.

2032 Design Year Build Traffic Volumes

The 2032 Design Year Build Traffic Volumes were calculated from the Existing Traffic Volumes increased by an annual growth rate for eleven years and then adding the additional trips generated by the proposed development to each of the entering and exiting movements. The 2032 Design Year Build Traffic Volumes are attached in Appendix C.

Growth Rate

To be conservative, it was determined to use a 1.00% growth rate for the surrounding roadways. Per ODOT's Transportation Information Mapping System, US 68 has a growth rate of 0.70%; therefore a 1.00% growth rate was deemed to be realistic for the roadways surrounding the site. Utilizing this 1.00% growth rate was also applied to cover any potential existing traffic loss due to the COVID-19 pandemic.

Capacity Analysis

Utilizing the Design Hourly Traffic Volumes, capacity calculations were performed for the studied intersections. The calculations employed procedures documented in the *Highway Capacity Manual (Transportation Research Board, Sixth Edition, Updated 2016)*. The capacity of an intersection (signalized or un-signalized) can best be described by its corresponding Level of Service (LOS). The LOS of an intersection is a qualitative measure of the various attributes of an intersection. There are six LOS ranging from "ideal" free flow conditions at LOS "A," to forced or "breakdown" conditions at LOS "F." The LOS for un-signalized intersections is based upon total delay. Total delay is defined in the *Highway Capacity Manual* as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position.

Capacity calculations were performed in Synchro 10 software for the studied intersections analyzing the 2022 Opening Year No-Build, 2022 Opening Year Build, 2032 Design Year No-Build and 2032 Design Year Build Traffic Volumes. The tables below show a summary of the AM and PM

Design Hour Capacity Analysis. **All approaches during the Opening Year 2022 No-Build/Build and Design Year 2032 No-Build/Build traffic scenarios operate at an acceptable level of service.** The 2022 Opening Year Capacity Analysis is attached in Appendix D. The 2032 Design Year Capacity Analysis is attached in Appendix E.

Summary of A.M. Peak Hour Capacity Analysis

Direction	A.M. Peak Hour			
	2022 No-Build	2022 Build	2032 No-Build	2032 Build
1 – Spillan Road & Edgefield Drive				
Eastbound Approach	A(9)	A(9)	A(9)	A(9)
Northbound Approach	A(1)	A(1)	A(1)	A(1)
Southbound Approach	A(0)	A(0)	A(0)	A(0)
Total Intersection LOS (Delay*)	**A(3)**	**A(2)**	**A(3)**	**A(2)**
2 – Spillan Road & East Hyde Road				
Eastbound Approach	A(1)	A(4)	A(1)	A(3)
Westbound Approach	A(0)	A(0)	A(0)	A(0)
Southbound Approach	A(9)	A(9)	A(9)	A(9)
Total Intersection LOS (Delay*)	**A(2)**	**A(5)**	**A(2)**	**A(5)**
3 – Spillan Road & Proposed Drive				
Eastbound Approach	-	A(9)	-	A(9)
Northbound Approach	-	A(6)	-	A(6)
Southbound Approach	-	A(0)	-	A(0)
Total Intersection LOS (Delay*)	**-**	**A(7)**	**-**	**A(7)**
4 – US 68 & Hyde Road				
Eastbound Approach	B(12)	B(12)	B(12)	B(12)
Westbound Approach	B(12)	B(13)	B(12)	B(13)
Northbound Approach	A(1)	A(1)	A(1)	A(1)
Southbound Approach	A(0)	A(0)	A(0)	A(0)
Total Intersection LOS (Delay*)	**A(4)**	**A(4)**	**A(3)**	**A(4)**
5 – US 68 & Kahoe Lane				
Westbound Approach	A(10)	B(10)	B(10)	B(10)
Northbound Approach	A(0)	A(0)	A(0)	A(0)
Southbound Approach	A(1)	A(2)	A(1)	A(2)
Total Intersection LOS (Delay*)	**A(2)**	**A(3)**	**A(2)**	**A(3)**

**Delay is measured in seconds per vehicle.*

Summary of P.M. Hour Capacity Analysis

Direction	P.M. Peak Hour			
	2022 No-Build	2022 Build	2032 No-Build	2032 Build
1 – Spillan Road & Edgefield Drive				
Eastbound Approach	A(9)	A(9)	A(9)	A(9)
Northbound Approach	A(1)	A(1)	A(1)	A(1)
Southbound Approach	A(0)	A(0)	A(0)	A(0)
Total Intersection LOS (Delay*)	**A(3)**	**A(2)**	**A(3)**	**A(2)**
2 – Spillan Road & East Hyde Road				
Eastbound Approach	A(2)	A(5)	A(2)	A(5)
Westbound Approach	A(0)	A(0)	A(0)	A(0)
Southbound Approach	A(9)	A(9)	A(9)	A(9)
Total Intersection LOS (Delay*)	**A(2)**	**A(5)**	**A(2)**	**A(5)**
3 – Spillan Road & Proposed Drive				
Eastbound Approach	-	A(9)	-	A(9)
Northbound Approach	-	A(6)	-	A(6)
Southbound Approach	-	A(0)	-	A(0)
Total Intersection LOS (Delay*)	**-**	**A(6)**	**-**	**A(6)**
4 – US 68 & Hyde Road				
Eastbound Approach	B(13)	B(14)	B(13)	B(14)
Westbound Approach	B(14)	C(16)	B(15)	C(17)
Northbound Approach	A(1)	A(1)	A(0)	A(0)
Southbound Approach	A(0)	A(0)	A(0)	A(0)
Total Intersection LOS (Delay*)	**A(4)**	**A(4)**	**A(4)**	**A(4)**
5 – US 68 & Kahoe Lane				
Westbound Approach	B(11)	B(11)	B(11)	B(12)
Northbound Approach	A(0)	A(0)	A(0)	A(0)
Southbound Approach	A(1)	A(1)	A(1)	A(1)
Total Intersection LOS (Delay*)	**A(2)**	**A(2)**	**A(2)**	**A(2)**

**Delay is measured in seconds per vehicle.*

Sight Distance Analysis

For the proposed driveway location along Spillan Road, a sight distance analysis was completed. Based on the analysis, **adequate horizontal and vertical sight distance is available for the proposed drive**. The sight distance analysis is attached in Appendix F.

Turn Lane Analysis

Turn Lane Analyses were completed for the free flow movements along Spillan Road, East Hyde Road, and US 68 using the 2022 Opening Year No-Build and Build Traffic Volumes and 2032 Design Year No-Build and Build Traffic Volumes. Turn lane warrants were checked against the 2-Lane Highway Left (or Right) Turn Lane Warrants figures in the ODOT Access Management Manual. As a result of the analysis, **there are no warranted turn lanes for the proposed subdivision**.

The turn lane analyses are attached in Appendix G.

Pedestrian Analysis

This subdivision will provide the opportunity for a pedestrian and cycling link between residents and local amenities with pedestrian access to various points within the Village. This network will also allow access to regional amenities due to the development's proximity to the Little Miami Scenic Trail (which has an ADT of 287 users in Yellow Springs). Amenities and points of interest reachable by walkers, joggers, and cyclists on the pedestrian network of the subdivision include:

- Downtown Yellow Springs, which includes restaurants, shopping, banking, and other service companies.
- Richard P. Eastman Covered Bridge.
- Cultural centers within in the Village including the John Bryan Community Center, Glen Helen Ecology Institute, Hopewell Indian Mound (at Glen Helen), YSAC Community Gallery, Senior Citizens Center, and the Trailside Museum.
- 340 miles of paved trails in the Miami Valley region including the Wolf Creek Trail, Mad River Trail, Stillwater Trail, Ohio-to-Indiana Trail, Miami-Little Trail, and Dayton-Kettering Connector via a nearby connection to the Little Miami Scenic Trail.
- Places of education including Yellow Springs Village Schools and Antioch College.
- Local and regional parks/recreation areas including Glen Helen Reserve and Gaunt Park.

This subdivision is situated within one mile of approximately 1,500 jobs within the Village, allowing local employees who reside in this new subdivision to use the pedestrian network to commute to work.

Recommendations

Based on the results of the analysis, the following recommendations are made for the surrounding roadway network:

Layout 1

- Construct the proposed drive along Spillan Road approximately 315 feet north of East Hyde Road.
- Construct the proposed access tying into the existing subdivision at Southgate Avenue approximately 75 feet south of Edgefield Drive.

Layout 2

- Construct the proposed drive along Spillan Road approximately 315 feet north of East Hyde Road.
- Construct the proposed access tying into the existing subdivision at Southgate Avenue approximately 75 feet south of Edgefield Drive.
- Construct the proposed drive along Randall Road approximately 225 feet south of Edgefield Drive.

Layout 3

- Construct the proposed drive along Spillan Road approximately 315 feet north of East Hyde Road.
- Construct the proposed access typing into the existing subdivision at Southgate Avenue, approximately 75 feet south of Edgefield Drive.

The following included attachments detail the findings of this report:

A. Turning Movement Counts
B. Concept Plan
C. Build Traffic Volumes
D. 2022 Opening Year Capacity Analysis
E. 2032 Design Year Capacity Analysis
F. Sight Distance Analysis
G. Turn Lane Analysis

APPENDIX

APPENDIX A - Turning Movement Counts

Study Name	Edgefield Dr and Spillian Rd
Start Date	Tuesday, August 10, 2021 7:00 AM
End Date	Tuesday, August 10, 2021 6:00 PM
Site Code	

Report Summary

		Southbound				Northbound				Eastbound				
Time Period	**Class.**	**R**	**T**	**I**	**O**	**T**	**L**	**I**	**O**	**R**	**L**	**I**	**O**	**Total**
Peak 1	Lights	0	2	2	7	5	1	6	4	2	2	4	1	12
Specified Period	%	0%	100%	100%	88%	83%	100%	86%	100%	100%	100%	100%	100%	92%
7:00 AM - 9:00 AM	Other Vehicles	0	0	0	1	1	0	1	0	0	0	0	0	1
One Hour Peak	%	0%	0%	0%	13%	17%	0%	14%	0%	0%	0%	0%	0%	8%
7:15 AM - 8:15 AM	**Total**	**0**	**2**	**2**	**8**	**6**	**1**	**7**	**4**	**2**	**2**	**4**	**1**	**13**
	PHF	0	0.25	0.25	0.67	0.75	0.25	0.88	0.33	0.5	0.5	1	0.25	0.65
	Approach %			15%	62%			54%	31%			31%	8%	
Peak 2	Lights	3	5	9	25	11	3	14	7	2	13	15	6	38
Specified Period	%	100%	100%	100%	96%	100%	100%	100%	100%	100%	93%	94%	100%	97%
4:00 PM - 6:00 PM	Other Vehicles	0	0	0	1	0	0	0	0	0	1	1	0	1
One Hour Peak	%	0%	0%	0%	4%	0%	0%	0%	0%	0%	7%	6%	0%	3%
4:00 PM - 5:00 PM	**Total**	**3**	**5**	**9**	**26**	**11**	**3**	**14**	**7**	**2**	**14**	**16**	**6**	**39**
	PHF	0.75	0.62	0.75	0.65	0.69	0.38	0.7	0.58	0.5	0.7	0.8	0.5	0.75
	Approach %			23%	67%			36%	18%			41%	15%	

Study Name	Hyde Rd & Spillan Rd
Start Date	Tuesday, August 10, 2021 7:00 AM
End Date	Tuesday, August 10, 2021 6:00 PM
Site Code	

Report Summary

		Southbound				Westbound				Eastbound				
Time Period	**Class.**	**R**	**L**	**I**	**O**	**R**	**T**	**I**	**O**	**T**	**L**	**I**	**O**	**Total**
Peak 1	Lights	8	1	9	3	1	24	25	16	15	2	17	32	51
Specified Period	%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
7:00 AM - 9:00 AM	Other Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
7:45 AM - 8:45 AM	**Total**	**8**	**1**	**9**	**3**	**1**	**24**	**25**	**16**	**15**	**2**	**17**	**32**	**51**
	PHF	0.5	0.25	0.56	0.75	0.25	0.75	0.78	0.67	0.62	0.5	0.61	0.89	0.8
	Approach %			18%	6%			49%	31%			33%	63%	
Peak 2	Lights	7	1	8	14	0	27	27	34	33	14	47	34	82
Specified Period	%	100%	100%	100%	100%	0%	96%	96%	100%	100%	100%	100%	97%	99%
4:00 PM - 6:00 PM	Other Vehicles	0	0	0	0	0	1	1	0	0	0	0	1	1
One Hour Peak	%	0%	0%	0%	0%	0%	4%	4%	0%	0%	0%	0%	3%	1%
4:30 PM - 5:30 PM	**Total**	**7**	**1**	**8**	**14**	**0**	**28**	**28**	**34**	**33**	**14**	**47**	**35**	**83**
	PHF	0.44	0.25	0.5	0.44	0	0.7	0.7	0.65	0.69	0.44	0.84	0.73	0.8
	Approach %			10%	17%			34%	41%			57%	42%	

Study Name	US 68 & Hyde Road
Start Date	Wednesday, December 08, 2021 6:00 AM
End Date	Wednesday, December 08, 2021 7:00 PM
Site Code	

Report Summary

		Southbound					Westbound					Northbound					Eastbound					
Time Period	**Class.**	**R**	**T**	**L**	**I**	**O**	**R**	**T**	**L**	**I**	**O**	**R**	**T**	**L**	**I**	**O**	**R**	**T**	**L**	**I**	**O**	**Total**
Peak 1	Lights	20	96	1	117	146	1	23	3	27	21	4	110	31	145	115	16	16	35	67	74	356
Specified Period	%	100%	91%	100%	93%	90%	100%	96%	100%	96%	91%	80%	87%	91%	88%	91%	89%	94%	100%	96%	95%	92%
6:00 AM - 12:00 PM	Other Vehicles	0	9	0	9	16	0	1	0	1	2	1	16	3	20	11	2	1	0	3	4	33
One Hour Peak	%	0%	9%	0%	7%	10%	0%	4%	0%	4%	9%	20%	13%	9%	12%	9%	11%	6%	0%	4%	5%	8%
7:45 AM - 8:45 AM	**Total**	**20**	**105**	**1**	**126**	**162**	**1**	**24**	**3**	**28**	**23**	**5**	**126**	**34**	**165**	**126**	**18**	**17**	**35**	**70**	**78**	**389**
	PHF	0.83	0.85	0.25	0.85	0.84	0.25	0.55	0.38	0.58	0.72	0.62	0.85	0.61	0.86	0.79	0.56	0.71	0.8	0.8	0.63	0.82
	Approach %				32%	42%				7%	6%				42%	32%				18%	20%	
Peak 2	Lights	68	184	4	256	170	3	40	18	61	41	9	140	13	162	245	43	28	27	98	121	577
Specified Period	%	99%	96%	100%	97%	92%	100%	100%	100%	100%	100%	100%	92%	100%	93%	97%	100%	100%	93%	98%	99%	96%
12:00 PM - 7:00 PM	Other Vehicles	1	8	0	9	15	0	0	0	0	0	0	13	0	13	8	0	0	2	2	1	24
One Hour Peak	%	1%	4%	0%	3%	8%	0%	0%	0%	0%	0%	0%	8%	0%	7%	3%	0%	0%	7%	2%	1%	4%
3:15 PM - 4:15 PM	**Total**	**69**	**192**	**4**	**265**	**185**	**3**	**40**	**18**	**61**	**41**	**9**	**153**	**13**	**175**	**253**	**43**	**28**	**29**	**100**	**122**	**601**
	PHF	0.82	0.84	0.5	0.86	0.77	0.38	0.71	0.41	0.56	0.79	0.75	0.75	0.54	0.74	0.81	0.54	0.78	0.81	0.76	0.76	0.85
	Approach %				44%	31%				10%	7%				29%	42%				17%	20%	

Study Name	US 68 & Kahoe Lane
Start Date	Wednesday, December 08, 2021 6:00 AM
End Date	Wednesday, December 08, 2021 7:00 PM
Site Code	

Report Summary

		Southbound				Westbound				Northbound				
Time Period	**Class.**	**T**	**L**	**I**	**O**	**R**	**L**	**I**	**O**	**R**	**T**	**I**	**O**	**Total**
Peak 1	Lights	100	23	123	151	29	16	45	35	12	122	136	118	304
Specified Period	%	94%	100%	95%	90%	97%	100%	98%	95%	86%	88%	88%	95%	92%
6:00 AM - 12:00 PM	Other Vehicles	6	0	6	17	1	0	1	2	2	16	18	6	25
One Hour Peak	%	6%	0%	5%	10%	3%	0%	2%	5%	14%	12%	12%	5%	8%
11:00 AM - 12:00 PM	**Total**	**106**	**23**	**129**	**168**	**30**	**16**	**46**	**37**	**14**	**138**	**154**	**124**	**329**
	PHF	0.85	0.64	0.81	0.82	0.62	0.8	0.72	0.77	0.5	0.88	0.9	0.84	0.85
	Approach %			39%	51%			14%	11%			47%	38%	
Peak 2	Lights	210	32	242	215	35	13	48	52	20	180	201	224	491
Specified Period	%	96%	100%	96%	93%	97%	100%	98%	100%	100%	92%	93%	96%	95%
12:00 PM - 7:00 PM	Other Vehicles	9	0	9	16	1	0	1	0	0	15	15	9	25
One Hour Peak	%	4%	0%	4%	7%	3%	0%	2%	0%	0%	8%	7%	4%	5%
3:30 PM - 4:30 PM	**Total**	**219**	**32**	**251**	**231**	**36**	**13**	**49**	**52**	**20**	**195**	**216**	**233**	**516**
	PHF	0.87	0.89	0.87	0.81	0.9	0.46	0.77	0.87	0.83	0.77	0.78	0.83	0.95
	Approach %			49%	45%			9%	10%			42%	45%	

APPENDIX B - Concept Plan

Alternate 1

Park Space
0.9 Ac.

Park Space
2.2 Ac.

Detention

Storm Water Detention,
Rain Garden &
Constructed Wetland
3.8 Ac.

1.2 Ac.

Detention

SOUTHGATE AVE.

SPILLAN RD.

E. HYDE RD.

SCALE IN FEET
0 50 100 200

GENERAL LOT SETBACKS

FRONT = 25'; REAR = 25'
EACH SIDE = 7.5'

ChoiceOne Engineering
SIDNEY, OHIO 937.497.0200
LOVELAND, OHIO 513.239.8554
www.CHOICEONEENGINEERING.com

SUBDIVISION CONCEPT
VILLAGE OF YELLOW SPRINGS
CONCEPT

REVISIONS:

FILE NAME	CONCEPT
DRAWN BY	JLH
CHECKED BY	JSP
PROJECT No.	GREYSP2004
DATE	03-22-2021
SHEET NUMBER	1 OF 1

Alternate 2

Park Space
0.9 Ac.

Park Space
2.2 Ac.

20 Tiny Hoodes

SOUTHGATE AVE.

Detention
1.2 Ac.

Storm Water Detention,
Rain Garden &
Constructed Wetland
3.8 Ac.

SPILLAN RD.

E. HYDE RD.

Detention

SCALE IN FEET
0 50 100 200

GENERAL LOT SETBACKS

FRONT = 25'; REAR = 25'
EACH SIDE = 7.5'

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SIDNEY, OHIO 937.497.0200
LOVELAND, OHIO 513.239.8554
www.CHOICEONEENGINEERING.com

SUBDIVISION CONCEPT
VILLAGE OF YELLOW SPRINGS
CONCEPT

REVISIONS:

FILE NAME	CONCEPT
DRAWN BY	JLH
CHECKED BY	JSP
PROJECT No.	GREYSP2004
DATE	03-22-2021
SHEET NUMBER	1 OF 1

Alternate 3

SCALE IN FEET

0 60 120 240

TYPICAL LOT LAYOUT

PROPOSED ZONING: R-A
MIN. LOT SIZE: 7,500 S.F.
MIN. FRONTAGE: 60'
FRONT SETBACK: 25'
REAR SETBACK: 25'
SIDE SETBACK: 10' MINIMUM
NUMBER OF RESIDENTIAL LOTS: 143
NUMBER OF GREEN SPACE LOTS: 3
TYPICAL LOT SIZE: 60'X125' MINIMUM

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SIDNEY, OHIO 937.497.0200
LOVELAND, OHIO 513.239.8554
www.CHOICEONEENGINEERING.com

SUBDIVISION CONCEPT
VILLAGE OF YELLOW SPRINGS
PRELIMINARY DEVELOPMENT PLAN

REVISIONS:

FILE NAME	CONCEPT
DRAWN BY	brg
CHECKED BY	JSP
PROJECT No.	GREYSP2004
DATE	12-22-2021
SHEET NUMBER	1 OF 1

APPENDIX C - Build Traffic Volumes

STRUEWING PROPERTY SUBDIVISION

VILLAGE OF YELLOW SPRINGS, GREENE COUNTY, OHIO

Proposed Subdivision Trips - Layout 1

Land Use Description	ITE Code	Size	Unit	Weekday				AM Peak Hour				PM Peak Hour			
				Total Trips	Primary Trips			Total Trips	Primary Trips			Total Trips	Primary Trips		
					Total	Entering	Exiting		Total	Entering	Exiting		Total	Entering	Exiting
Single Family Detatched Housing	210	60	Dwelling Units	650	650	325	325	47	47	12	35	62	62	39	23
Directional Distributions						*50%*	*50%*			*25%*	*75%*			*63%*	*37%*
Low-Rise Multifamily Housing	220	91	Dwelling Units	647	647	324	323	44	44	10	34	54	54	34	20
Directional Distributions						*50%*	*50%*			*23%*	*77%*			*63%*	*37%*
Totals				**1,297**	**1,297**	**649**	**648**	**91**	**91**	**22**	**69**	**116**	**116**	**73**	**43**

Proposed Subdivision Trips - Layout 2

Land Use Description	ITE Code	Size	Unit	Weekday				AM Peak Hour				PM Peak Hour			
				Total Trips	Primary Trips			Total Trips	Primary Trips			Total Trips	Primary Trips		
					Total	Entering	Exiting		Total	Entering	Exiting		Total	Entering	Exiting
Single Family Detatched Housing	210	80	Dwelling Units	847	847	423	424	62	62	15	47	82	82	52	30
Directional Distributions						*50%*	*50%*			*25%*	*75%*			*63%*	*37%*
Low-Rise Multifamily Housing	220	79	Dwelling Units	556	556	278	278	38	38	9	29	48	48	30	18
Directional Distributions						*50%*	*50%*			*23%*	*77%*			*63%*	*37%*
Totals				**1,403**	**1,403**	**701**	**702**	**100**	**100**	**24**	**76**	**130**	**130**	**82**	**48**

Proposed Subdivision Trips - Layout 3

Land Use Description	ITE Code	Size	Unit	Weekday				AM Peak Hour				PM Peak Hour			
				Total Trips	Primary Trips			Total Trips	Primary Trips			Total Trips	Primary Trips		
					Total	Entering	Exiting		Total	Entering	Exiting		Total	Entering	Exiting
Single Family Detatched Housing	210	143	Dwelling Units	1,445	1,445	722	723	106	106	27	79	143	143	90	53
Directional Distributions						*50%*	*50%*			*25%*	*75%*			*63%*	*37%*
Totals				**1,445**	**1,445**	**722**	**723**	**106**	**106**	**27**	**79**	**143**	**143**	**90**	**53**

TRIP ASSIGNMENT ROUTINGS - LAYOUT 3

ORIGIN	DESTINATION	TRIP ROUTINGS O-D PERCENT	TRIP ROUTINGS ROUTE SPLIT	AFFECTED MOVEMENTS BY TRIPS	AM TRIPS	PM TRIPS
Entering Trips						
Spillan Road (North)	3	5%	100%	1SBT 3SBR	1	5
US 68 (North)	Edgefield Drive (Connection)	20%	100%	5SBL	5	18
US 68 (South)	3	50%	75%	4NBR 2EBL 3NBL	10	34
US 68 (South)	Edgefield Drive (Connection)	50%	25%	4NBT 5NBR	3	11
Hyde Road (East)	3	15%	100%	2WBR 3NBL	4	14
Hyde Road (West)	3	10%	100%	4EBT 2EBL 3NBL	3	9
					26	91
TOTAL ENTERING TRIPS				→	26	91
Exiting Trips						
3	Spillan Road (North)	5%	100%	3EBL 1NBT	4	3
Edgefield Drive (Connection)	US 68 (North)	20%	100%	5WBR	16	11
3	US 68 (South)	50%	75%	3EBR 2SBR 4WBL	30	20
4	Edgefield Drive (Connection)	50%	25%	5WBL 4SBT	10	7
3	Hyde Road (East)	15%	100%	3EBR 2SBL	12	8
3	Hyde Road (West)	10%	100%	3EBR 2SBR 4WBT	8	5
					80	54
TOTAL EXITING TRIPS				→	80	54

Intersection Legend
1-Spillan Road & Edgefield Drive
2-Spillan Road & Hyde Road
3-Spillan Road & Proposed Drive
4-US 68 & Hyde Road
5-US 68 & Kahoe Lane

TRAFFIC PROJECTIONS - AM PEAK HOUR

Int. #	Movement		2021	2022	Trips-Layout 3		2022	2032	2032
		Annual Growth Rate	Existing Counts	Opening Year No-Build Volumes	Primary Trips IN	Primary Trips OUT	Opening Year Build Volumes	Design Year No-Build Volumes	Design Year Build Volumes
1	EBL	1.00%	2	2			2	2	2
1	EBR	1.00%	2	2			2	2	2
1	NBL	1.00%	1	1			1	1	1
1	NBT	1.00%	6	6		4	10	7	11
1	SBT	1.00%	2	2	1		3	2	3
1	SBR	1.00%	0	0			0	0	0
2	EBL	1.00%	2	2	13		15	2	15
2	EBT	1.00%	15	15			15	17	17
2	WBT	1.00%	24	24			24	27	27
2	WBR	1.00%	1	1	4		5	1	5
2	SBL	1.00%	1	1		12	13	1	13
2	SBR	1.00%	8	8		38	46	9	47
3	EBL	0.00%	0	0		4	4	0	4
3	EBR	0.00%	0	0		50	50	0	50
3	NBL	0.00%	0	0	17		17	0	17
3	NBT	1.00%	3	3			3	3	3
3	SBT	1.00%	4	4			4	4	4
3	SBR	0.00%	0	0	1		1	0	1
4	EBL	0.00%	35	35			35	35	35
4	EBT	0.00%	17	17	3		20	17	20
4	EBR	0.00%	18	18			18	18	18
4	WBL	0.00%	3	3		30	33	3	33
4	WBT	0.00%	24	24		8	32	24	32
4	WBR	0.00%	1	1			1	1	1
4	NBL	0.00%	34	34			34	34	34
4	NBT	1.00%	126	127	3		130	140	143
4	NBR	0.00%	5	5	10		15	5	15
4	SBL	0.00%	1	1			1	1	1
4	SBT	1.00%	105	106		10	116	117	127
4	SBR	0.00%	20	20			20	20	20
5	WBL	0.00%	16	16		10	26	16	26
5	WBR	0.00%	30	30		16	46	30	46
5	NBT	1.00%	138	139			139	153	153
5	NBR	0.00%	14	14	3		17	14	17
5	SBL	0.00%	23	23	5		28	23	28
5	SBT	1.00%	106	107			107	118	118

Intersection Legend

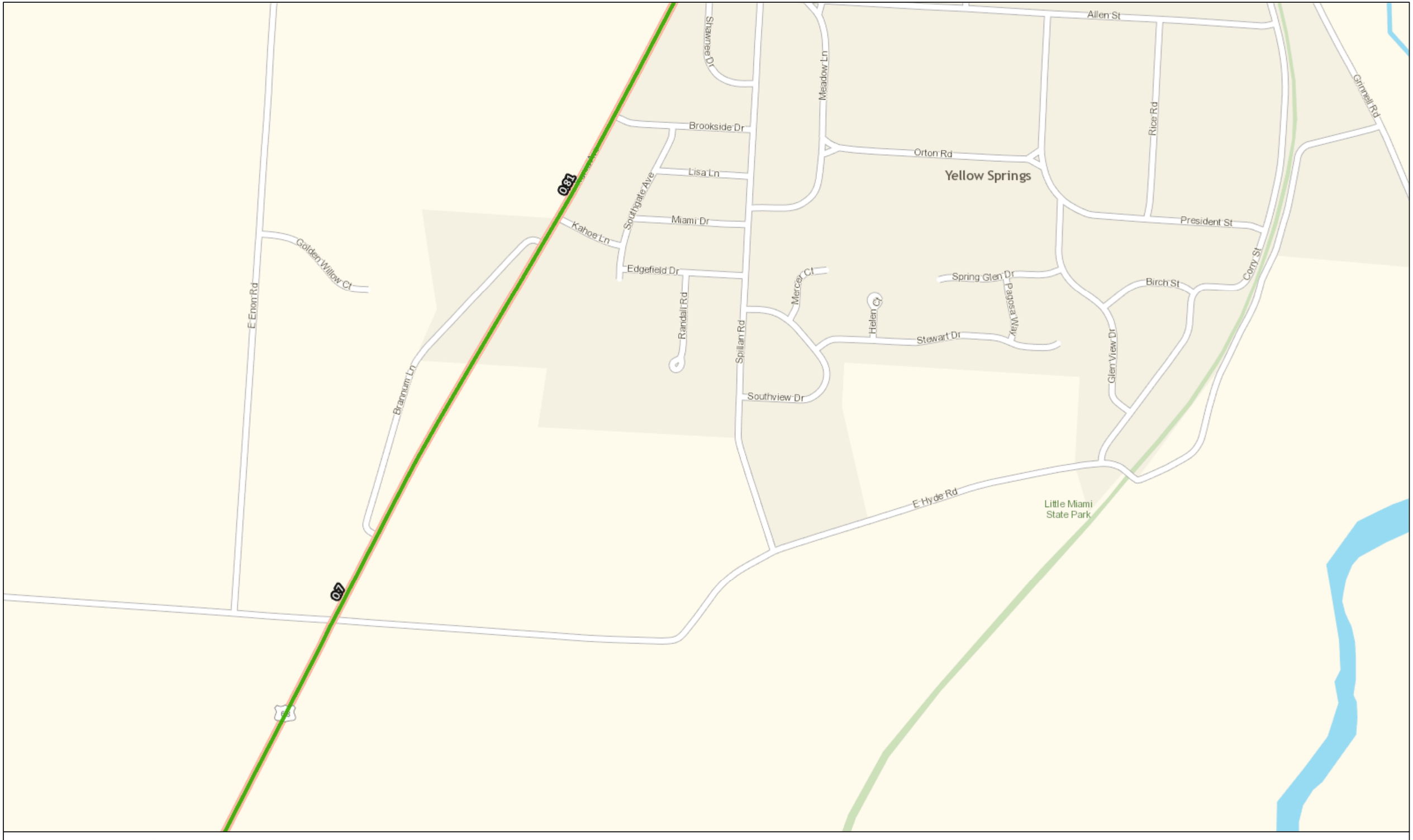
1-Spillan Road & Edgefield Drive
2-Spillan Road & Hyde Road
3-Spillan Road & Proposed Drive
4-US 68 & Hyde Road
5-US 68 & Kahoe Lane

TRAFFIC PROJECTIONS - PM PEAK HOUR

Int. #	Movement		2021	2022	Trips-Layout 3		2022	2032	2032
		Annual Growth Rate	Existing Counts	Opening Year No-Build Volumes	Primary Trips IN	Primary Trips OUT	Opening Year Build Volumes	Design Year No-Build Volumes	Design Year Build Volumes
1	EBL	1.00%	2	2			2	2	2
1	EBR	1.00%	2	2			2	2	2
1	NBL	1.00%	1	1			1	1	1
1	NBT	1.00%	6	6		3	9	7	10
1	SBT	1.00%	2	2	5		7	2	7
1	SBR	1.00%	0	0			0	0	0
2	EBL	1.00%	14	14	43		57	16	59
2	EBT	1.00%	33	33			33	37	37
2	WBT	1.00%	28	28			28	31	31
2	WBR	1.00%	0	0	14		14	0	14
2	SBL	1.00%	1	1		8	9	1	9
2	SBR	1.00%	7	7		25	32	8	33
3	EBL	0.00%	0	0		3	3	0	3
3	EBR	0.00%	0	0		33	33	0	33
3	NBL	0.00%	0	0	57		57	0	57
3	NBT	1.00%	14	14			14	16	16
3	SBT	1.00%	4	4			4	4	4
3	SBR	0.00%	0	0	5		5	0	5
4	EBL	0.00%	29	29			29	29	29
4	EBT	0.00%	28	28	9		37	28	37
4	EBR	0.00%	43	43			43	43	43
4	WBL	0.00%	18	18		20	38	18	38
4	WBT	0.00%	40	40		5	45	40	45
4	WBR	0.00%	3	3			3	3	3
4	NBL	0.00%	13	13			13	13	13
4	NBT	1.00%	153	155	11		166	170	181
4	NBR	0.00%	9	9	34		43	9	43
4	SBL	0.00%	4	4			4	4	4
4	SBT	1.00%	192	194		7	201	213	220
4	SBR	0.00%	69	69			69	69	69
5	WBL	0.00%	13	13		7	20	13	20
5	WBR	0.00%	36	36		11	47	36	47
5	NBT	1.00%	195	197			197	216	216
5	NBR	0.00%	20	20	11		31	20	31
5	SBL	0.00%	32	32	18		50	32	50
5	SBT	1.00%	219	221			221	243	243

Intersection Legend

1-Spillan Road & Edgefield Drive
2-Spillan Road & Hyde Road
3-Spillan Road & Proposed Drive
4-US 68 & Hyde Road
5-US 68 & Kahoe Lane



TIMS TRANSPORTATION INFORMATION MAPPING SYSTEM

Date: 9/10/2021

APPENDIX D – 2022 Opening Year Capacity Analysis

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	1	6	2	0
Future Vol, veh/h	2	2	1	6	2	0
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	2	1	7	2	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	11	2	2	0	-	0
Stage 1	2	-	-	-	-	-
Stage 2	9	-	-	-	-	-
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	1009	1082	1620	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1014	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1008	1082	1620	-	-	-
Mov Cap-2 Maneuver	1008	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1014	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1620	-	1044	-	-
HCM Lane V/C Ratio	0.001	-	0.004	-	-
HCM Control Delay (s)	7.2	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	15	24	1	1	8
Future Vol, veh/h	2	15	24	1	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	16	26	1	1	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	27	0	-	0	47	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	20	-
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	1587	-	-	-	963	1048
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	1003	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1587	-	-	-	962	1048
Mov Cap-2 Maneuver	-	-	-	-	962	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	1003	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1587	-	-	-	1038
HCM Lane V/C Ratio	0.001	-	-	-	0.009
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	35	17	18	3	24	1	34	127	5	1	106	20
Future Vol, veh/h	35	17	18	3	24	1	34	127	5	1	106	20
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	38	18	20	3	26	1	37	138	5	1	115	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	356	345	126	362	354	141	137	0	0	143	0	0
Stage 1	128	128	-	215	215	-	-	-	-	-	-	-
Stage 2	228	217	-	147	139	-	-	-	-	-	-	-
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	599	578	924	594	571	907	1447	-	-	1440	-	-
Stage 1	876	790	-	787	725	-	-	-	-	-	-	-
Stage 2	775	723	-	856	782	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	564	561	924	554	554	907	1447	-	-	1440	-	-
Mov Cap-2 Maneuver	564	561	-	554	554	-	-	-	-	-	-	-
Stage 1	851	789	-	765	705	-	-	-	-	-	-	-
Stage 2	725	703	-	817	781	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	11.8	1.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1447	-	-	626	562	1440	-	-
HCM Lane V/C Ratio	0.026	-	-	0.122	0.054	0.001	-	-
HCM Control Delay (s)	7.6	0	-	11.5	11.8	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.2	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	30	139	14	23	107
Future Vol, veh/h	16	30	139	14	23	107
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	17	33	151	15	25	116

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	325	159	0	0	166	0
Stage 1	159	-	-	-	-	-
Stage 2	166	-	-	-	-	-
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	669	886	-	-	1412	-
Stage 1	870	-	-	-	-	-
Stage 2	863	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	656	886	-	-	1412	-
Mov Cap-2 Maneuver	656	-	-	-	-	-
Stage 1	870	-	-	-	-	-
Stage 2	847	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	1.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	790	1412	-
HCM Lane V/C Ratio	-	-	0.063	0.018	-
HCM Control Delay (s)	-	-	9.9	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	1	10	3	0
Future Vol, veh/h	2	2	1	10	3	0
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	2	1	11	3	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	16	3	3	0	-	0
Stage 1	3	-	-	-	-	-
Stage 2	13	-	-	-	-	-
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	1002	1081	1619	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1010	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1001	1081	1619	-	-	-
Mov Cap-2 Maneuver	1001	-	-	-	-	-
Stage 1	1019	-	-	-	-	-
Stage 2	1010	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1619	-	1039	-	-
HCM Lane V/C Ratio	0.001	-	0.004	-	-
HCM Control Delay (s)	7.2	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	15	24	5	13	46
Future Vol, veh/h	15	15	24	5	13	46
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	16	16	26	5	14	50

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	31	0	-	0	77	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	48	-
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	1582	-	-	-	926	1046
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	974	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1582	-	-	-	917	1046
Mov Cap-2 Maneuver	-	-	-	-	917	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	974	-

Approach	EB	WB	SB
HCM Control Delay, s	3.6	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1582	-	-	-	1015
HCM Lane V/C Ratio	0.01	-	-	-	0.063
HCM Control Delay (s)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	50	17	3	4	1
Future Vol, veh/h	4	50	17	3	4	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	4	54	18	3	4	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	44	5	5	0	-	0
Stage 1	5	-	-	-	-	-
Stage 2	39	-	-	-	-	-
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	967	1078	1616	-	-	-
Stage 1	1018	-	-	-	-	-
Stage 2	983	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	956	1078	1616	-	-	-
Mov Cap-2 Maneuver	956	-	-	-	-	-
Stage 1	1007	-	-	-	-	-
Stage 2	983	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	6.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1616	-	1068	-	-
HCM Lane V/C Ratio	0.011	-	0.055	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	20	18	33	32	1	34	130	15	1	116	20
Future Vol, veh/h	35	20	18	33	32	1	34	130	15	1	116	20
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	38	22	20	36	35	1	37	141	16	1	126	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	380	370	137	383	373	149	148	0	0	157	0	0
Stage 1	139	139	-	223	223	-	-	-	-	-	-	-
Stage 2	241	231	-	160	150	-	-	-	-	-	-	-
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	578	560	911	575	557	898	1434	-	-	1423	-	-
Stage 1	864	782	-	780	719	-	-	-	-	-	-	-
Stage 2	762	713	-	842	773	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	537	544	911	534	541	898	1434	-	-	1423	-	-
Mov Cap-2 Maneuver	537	544	-	534	541	-	-	-	-	-	-	-
Stage 1	840	781	-	758	699	-	-	-	-	-	-	-
Stage 2	703	693	-	800	772	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.9	12.7	1.4	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1434	-	-	600	541	1423	-	-
HCM Lane V/C Ratio	0.026	-	-	0.132	0.133	0.001	-	-
HCM Control Delay (s)	7.6	0	-	11.9	12.7	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.5	0	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	46	139	14	28	107
Future Vol, veh/h	26	46	139	14	28	107
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	28	50	151	15	30	116

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	335	159	0	0	166	0
Stage 1	159	-	-	-	-	-
Stage 2	176	-	-	-	-	-
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	886	-	-	1412	-
Stage 1	870	-	-	-	-	-
Stage 2	855	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	645	886	-	-	1412	-
Mov Cap-2 Maneuver	645	-	-	-	-	-
Stage 1	870	-	-	-	-	-
Stage 2	835	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	1.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	781	1412	-
HCM Lane V/C Ratio	-	-	0.1	0.022	-
HCM Control Delay (s)	-	-	10.1	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	1	6	2	0
Future Vol, veh/h	2	2	1	6	2	0
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	2	1	7	2	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	11	2	2	0	-	0
Stage 1	2	-	-	-	-	-
Stage 2	9	-	-	-	-	-
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	1009	1082	1620	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1014	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1008	1082	1620	-	-	-
Mov Cap-2 Maneuver	1008	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1014	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1620	-	1044	-	-
HCM Lane V/C Ratio	0.001	-	0.004	-	-
HCM Control Delay (s)	7.2	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	33	28	0	1	7
Future Vol, veh/h	14	33	28	0	1	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	36	30	0	1	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	30	0	-	0	96	30
Stage 1	-	-	-	-	30	-
Stage 2	-	-	-	-	66	-
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	1583	-	-	-	903	1044
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	957	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1583	-	-	-	894	1044
Mov Cap-2 Maneuver	-	-	-	-	894	-
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	957	-

Approach	EB	WB	SB
HCM Control Delay, s	2.2	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1583	-	-	-	1023
HCM Lane V/C Ratio	0.01	-	-	-	0.009
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	28	43	18	40	3	13	155	9	4	194	69
Future Vol, veh/h	29	28	43	18	40	3	13	155	9	4	194	69
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	32	30	47	20	43	3	14	168	10	4	211	75

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	481	463	249	496	495	173	286	0	0	178	0	0
Stage 1	257	257	-	201	201	-	-	-	-	-	-	-
Stage 2	224	206	-	295	294	-	-	-	-	-	-	-
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	495	496	790	484	476	871	1276	-	-	1398	-	-
Stage 1	748	695	-	801	735	-	-	-	-	-	-	-
Stage 2	779	731	-	713	670	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	453	489	790	429	469	871	1276	-	-	1398	-	-
Mov Cap-2 Maneuver	453	489	-	429	469	-	-	-	-	-	-	-
Stage 1	739	693	-	791	726	-	-	-	-	-	-	-
Stage 2	721	722	-	639	668	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.8	14	0.6	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1276	-	-	569	467	1398	-	-
HCM Lane V/C Ratio	0.011	-	-	0.191	0.142	0.003	-	-
HCM Control Delay (s)	7.9	0	-	12.8	14	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.5	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	36	197	20	32	221
Future Vol, veh/h	13	36	197	20	32	221
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	14	39	214	22	35	240

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	535	225	0	0	236	0
Stage 1	225	-	-	-	-	-
Stage 2	310	-	-	-	-	-
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	506	814	-	-	1331	-
Stage 1	812	-	-	-	-	-
Stage 2	744	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	491	814	-	-	1331	-
Mov Cap-2 Maneuver	491	-	-	-	-	-
Stage 1	812	-	-	-	-	-
Stage 2	722	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	693	1331	-
HCM Lane V/C Ratio	-	-	0.077	0.026	-
HCM Control Delay (s)	-	-	10.6	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	1	9	7	0
Future Vol, veh/h	2	2	1	9	7	0
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	2	1	10	8	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	20	8	8	0	-	0
Stage 1	8	-	-	-	-	-
Stage 2	12	-	-	-	-	-
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	997	1074	1612	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	996	1074	1612	-	-	-
Mov Cap-2 Maneuver	996	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	1011	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1612	-	1034	-	-
HCM Lane V/C Ratio	0.001	-	0.004	-	-
HCM Control Delay (s)	7.2	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	57	33	28	14	9	32
Future Vol, veh/h	57	33	28	14	9	32
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	62	36	30	15	10	35

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	45	0	-	0	198	38
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	160	-
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	1563	-	-	-	791	1034
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	869	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1563	-	-	-	759	1034
Mov Cap-2 Maneuver	-	-	-	-	759	-
Stage 1	-	-	-	-	945	-
Stage 2	-	-	-	-	869	-

Approach	EB	WB	SB
HCM Control Delay, s	4.7	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1563	-	-	-	958
HCM Lane V/C Ratio	0.04	-	-	-	0.047
HCM Control Delay (s)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	33	57	14	4	5
Future Vol, veh/h	3	33	57	14	4	5
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	3	36	62	15	4	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	146	7	9	0	-	0
Stage 1	7	-	-	-	-	-
Stage 2	139	-	-	-	-	-
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	846	1075	1611	-	-	-
Stage 1	1016	-	-	-	-	-
Stage 2	888	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	813	1075	1611	-	-	-
Mov Cap-2 Maneuver	813	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	888	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	5.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1611	-	1047	-	-
HCM Lane V/C Ratio	0.038	-	0.037	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	29	37	43	38	45	3	13	166	43	4	201	69
Future Vol, veh/h	29	37	43	38	45	3	13	166	43	4	201	69
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	32	40	47	41	49	3	14	180	47	4	218	75

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	522	519	256	539	533	204	293	0	0	227	0	0
Stage 1	264	264	-	232	232	-	-	-	-	-	-	-
Stage 2	258	255	-	307	301	-	-	-	-	-	-	-
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	465	461	783	453	453	837	1269	-	-	1341	-	-
Stage 1	741	690	-	771	713	-	-	-	-	-	-	-
Stage 2	747	696	-	703	665	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	419	453	783	392	445	837	1269	-	-	1341	-	-
Mov Cap-2 Maneuver	419	453	-	392	445	-	-	-	-	-	-	-
Stage 1	731	687	-	761	704	-	-	-	-	-	-	-
Stage 2	683	687	-	620	662	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.7	15.8	0.5	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1269	-	-	530	426	1341	-	-
HCM Lane V/C Ratio	0.011	-	-	0.224	0.219	0.003	-	-
HCM Control Delay (s)	7.9	0	-	13.7	15.8	7.7	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.8	0	-	-

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	47	197	31	50	221
Future Vol, veh/h	20	47	197	31	50	221
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	22	51	214	34	54	240

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	579	231	0	0	248	0
Stage 1	231	-	-	-	-	-
Stage 2	348	-	-	-	-	-
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	477	808	-	-	1318	-
Stage 1	807	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	455	808	-	-	1318	-
Mov Cap-2 Maneuver	455	-	-	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	681	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	1.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	656	1318	-
HCM Lane V/C Ratio	-	-	0.111	0.041	-
HCM Control Delay (s)	-	-	11.2	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

APPENDIX E - 2032 Design Year Capacity Analysis

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	1	7	2	0
Future Vol, veh/h	2	2	1	7	2	0
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	2	1	8	2	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	12	2	2	0	-	0
Stage 1	2	-	-	-	-	-
Stage 2	10	-	-	-	-	-
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	1008	1082	1620	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1013	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1007	1082	1620	-	-	-
Mov Cap-2 Maneuver	1007	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1013	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1620	-	1043	-	-
HCM Lane V/C Ratio	0.001	-	0.004	-	-
HCM Control Delay (s)	7.2	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	17	27	1	1	9
Future Vol, veh/h	2	17	27	1	1	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	2	18	29	1	1	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	30	0	-	0	52	30
Stage 1	-	-	-	-	30	-
Stage 2	-	-	-	-	22	-
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	1583	-	-	-	957	1044
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1583	-	-	-	956	1044
Mov Cap-2 Maneuver	-	-	-	-	956	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	1001	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1583	-	-	-	1034
HCM Lane V/C Ratio	0.001	-	-	-	0.011
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	35	17	18	3	24	1	34	140	5	1	117	20
Future Vol, veh/h	35	17	18	3	24	1	34	140	5	1	117	20
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	38	18	20	3	26	1	37	152	5	1	127	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	382	371	138	388	380	155	149	0	0	157	0	0
Stage 1	140	140	-	229	229	-	-	-	-	-	-	-
Stage 2	242	231	-	159	151	-	-	-	-	-	-	-
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	576	559	910	571	552	891	1432	-	-	1423	-	-
Stage 1	863	781	-	774	715	-	-	-	-	-	-	-
Stage 2	762	713	-	843	772	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	542	543	910	532	536	891	1432	-	-	1423	-	-
Mov Cap-2 Maneuver	542	543	-	532	536	-	-	-	-	-	-	-
Stage 1	839	780	-	752	695	-	-	-	-	-	-	-
Stage 2	712	693	-	805	771	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.8	12	1.4	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1432	-	-	605	543	1423	-	-
HCM Lane V/C Ratio	0.026	-	-	0.126	0.056	0.001	-	-
HCM Control Delay (s)	7.6	0	-	11.8	12	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.2	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	30	153	14	23	118
Future Vol, veh/h	16	30	153	14	23	118
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	17	33	166	15	25	128

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	352	174	0	0	181	0
Stage 1	174	-	-	-	-	-
Stage 2	178	-	-	-	-	-
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	646	869	-	-	1394	-
Stage 1	856	-	-	-	-	-
Stage 2	853	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	634	869	-	-	1394	-
Mov Cap-2 Maneuver	634	-	-	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	837	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	770	1394	-
HCM Lane V/C Ratio	-	-	0.065	0.018	-
HCM Control Delay (s)	-	-	10	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	1	11	3	0
Future Vol, veh/h	2	2	1	11	3	0
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	2	1	12	3	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	17	3	3	0	-	0
Stage 1	3	-	-	-	-	-
Stage 2	14	-	-	-	-	-
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	1001	1081	1619	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1009	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1000	1081	1619	-	-	-
Mov Cap-2 Maneuver	1000	-	-	-	-	-
Stage 1	1019	-	-	-	-	-
Stage 2	1009	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1619	-	1039	-	-
HCM Lane V/C Ratio	0.001	-	0.004	-	-
HCM Control Delay (s)	7.2	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	17	27	5	13	47
Future Vol, veh/h	15	17	27	5	13	47
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	16	18	29	5	14	51

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	34	0	-	0	82	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	50	-
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	1578	-	-	-	920	1042
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	972	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1578	-	-	-	911	1042
Mov Cap-2 Maneuver	-	-	-	-	911	-
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	972	-

Approach	EB	WB	SB
HCM Control Delay, s	3.4	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1578	-	-	-	1011
HCM Lane V/C Ratio	0.01	-	-	-	0.065
HCM Control Delay (s)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	50	17	3	4	1
Future Vol, veh/h	4	50	17	3	4	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	4	54	18	3	4	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	44	5	5	0	-	0
Stage 1	5	-	-	-	-	-
Stage 2	39	-	-	-	-	-
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	967	1078	1616	-	-	-
Stage 1	1018	-	-	-	-	-
Stage 2	983	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	956	1078	1616	-	-	-
Mov Cap-2 Maneuver	956	-	-	-	-	-
Stage 1	1007	-	-	-	-	-
Stage 2	983	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	6.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1616	-	1068	-	-
HCM Lane V/C Ratio	0.011	-	0.055	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	20	18	33	32	1	34	143	15	1	127	20
Future Vol, veh/h	35	20	18	33	32	1	34	143	15	1	127	20
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	38	22	20	36	35	1	37	155	16	1	138	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	406	396	149	409	399	163	160	0	0	171	0	0
Stage 1	151	151	-	237	237	-	-	-	-	-	-	-
Stage 2	255	245	-	172	162	-	-	-	-	-	-	-
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	555	541	898	553	539	882	1419	-	-	1406	-	-
Stage 1	851	772	-	766	709	-	-	-	-	-	-	-
Stage 2	749	703	-	830	764	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	514	525	898	512	523	882	1419	-	-	1406	-	-
Mov Cap-2 Maneuver	514	525	-	512	523	-	-	-	-	-	-	-
Stage 1	826	771	-	744	688	-	-	-	-	-	-	-
Stage 2	690	683	-	788	763	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.2	13	1.3	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1419	-	-	578	521	1406	-	-
HCM Lane V/C Ratio	0.026	-	-	0.137	0.138	0.001	-	-
HCM Control Delay (s)	7.6	0	-	12.2	13	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.5	0	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	46	153	17	28	118
Future Vol, veh/h	26	46	153	17	28	118
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	28	50	166	18	30	128

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	363	175	0	0	184	0
Stage 1	175	-	-	-	-	-
Stage 2	188	-	-	-	-	-
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	636	868	-	-	1391	-
Stage 1	855	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	621	868	-	-	1391	-
Mov Cap-2 Maneuver	621	-	-	-	-	-
Stage 1	855	-	-	-	-	-
Stage 2	825	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	1.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	759	1391	-
HCM Lane V/C Ratio	-	-	0.103	0.022	-
HCM Control Delay (s)	-	-	10.3	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	1	7	2	0
Future Vol, veh/h	2	2	1	7	2	0
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	2	1	8	2	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	12	2	2	0	-	0
Stage 1	2	-	-	-	-	-
Stage 2	10	-	-	-	-	-
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	1008	1082	1620	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1013	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1007	1082	1620	-	-	-
Mov Cap-2 Maneuver	1007	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1013	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1620	-	1043	-	-
HCM Lane V/C Ratio	0.001	-	0.004	-	-
HCM Control Delay (s)	7.2	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	37	31	0	1	8
Future Vol, veh/h	16	37	31	0	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	17	40	34	0	1	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	34	0	-	0	108	34
Stage 1	-	-	-	-	34	-
Stage 2	-	-	-	-	74	-
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	1578	-	-	-	889	1039
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	949	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1578	-	-	-	879	1039
Mov Cap-2 Maneuver	-	-	-	-	879	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	949	-

Approach	EB	WB	SB
HCM Control Delay, s	2.2	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1578	-	-	-	1018
HCM Lane V/C Ratio	0.011	-	-	-	0.01
HCM Control Delay (s)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	28	43	18	40	3	13	170	9	4	213	69
Future Vol, veh/h	29	28	43	18	40	3	13	170	9	4	213	69
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	32	30	47	20	43	3	14	185	10	4	232	75

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	519	501	270	534	533	190	307	0	0	195	0	0
Stage 1	278	278	-	218	218	-	-	-	-	-	-	-
Stage 2	241	223	-	316	315	-	-	-	-	-	-	-
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	467	472	769	457	453	852	1254	-	-	1378	-	-
Stage 1	728	680	-	784	723	-	-	-	-	-	-	-
Stage 2	762	719	-	695	656	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	425	464	769	403	445	852	1254	-	-	1378	-	-
Mov Cap-2 Maneuver	425	464	-	403	445	-	-	-	-	-	-	-
Stage 1	719	677	-	774	714	-	-	-	-	-	-	-
Stage 2	704	710	-	621	653	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	14.6	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1254	-	-	542	442	1378	-	-
HCM Lane V/C Ratio	0.011	-	-	0.201	0.15	0.003	-	-
HCM Control Delay (s)	7.9	0	-	13.3	14.6	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.5	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	36	216	20	32	243
Future Vol, veh/h	13	36	216	20	32	243
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	14	39	235	22	35	264

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	580	246	0	0	257	0
Stage 1	246	-	-	-	-	-
Stage 2	334	-	-	-	-	-
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	477	793	-	-	1308	-
Stage 1	795	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	462	793	-	-	1308	-
Mov Cap-2 Maneuver	462	-	-	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	703	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	666	1308	-
HCM Lane V/C Ratio	-	-	0.08	0.027	-
HCM Control Delay (s)	-	-	10.9	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	1	10	7	0
Future Vol, veh/h	2	2	1	10	7	0
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	2	1	11	8	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	21	8	8	0	-	0
Stage 1	8	-	-	-	-	-
Stage 2	13	-	-	-	-	-
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	996	1074	1612	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1010	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	995	1074	1612	-	-	-
Mov Cap-2 Maneuver	995	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	1010	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1612	-	1033	-	-
HCM Lane V/C Ratio	0.001	-	0.004	-	-
HCM Control Delay (s)	7.2	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	59	37	31	14	9	33
Future Vol, veh/h	59	37	31	14	9	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	64	40	34	15	10	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	49	0	-	0	210	42
Stage 1	-	-	-	-	42	-
Stage 2	-	-	-	-	168	-
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	1558	-	-	-	778	1029
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	862	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1558	-	-	-	745	1029
Mov Cap-2 Maneuver	-	-	-	-	745	-
Stage 1	-	-	-	-	939	-
Stage 2	-	-	-	-	862	-

Approach	EB	WB	SB
HCM Control Delay, s	4.6	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1558	-	-	-	951
HCM Lane V/C Ratio	0.041	-	-	-	0.048
HCM Control Delay (s)	7.4	0	-	-	9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	33	57	16	4	5
Future Vol, veh/h	3	33	57	16	4	5
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	3	36	62	17	4	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	148	7	9	0	-	0
Stage 1	7	-	-	-	-	-
Stage 2	141	-	-	-	-	-
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	844	1075	1611	-	-	-
Stage 1	1016	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	811	1075	1611	-	-	-
Mov Cap-2 Maneuver	811	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	886	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	5.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1611	-	1047	-	-
HCM Lane V/C Ratio	0.038	-	0.037	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	37	43	38	45	3	13	181	43	4	220	69
Future Vol, veh/h	29	37	43	38	45	3	13	181	43	4	220	69
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	32	40	47	41	49	3	14	197	47	4	239	75

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	560	557	277	577	571	221	314	0	0	244	0	0
Stage 1	285	285	-	249	249	-	-	-	-	-	-	-
Stage 2	275	272	-	328	322	-	-	-	-	-	-	-
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	439	439	762	428	431	819	1246	-	-	1322	-	-
Stage 1	722	676	-	755	701	-	-	-	-	-	-	-
Stage 2	731	685	-	685	651	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	393	432	762	369	424	819	1246	-	-	1322	-	-
Mov Cap-2 Maneuver	393	432	-	369	424	-	-	-	-	-	-	-
Stage 1	713	673	-	745	692	-	-	-	-	-	-	-
Stage 2	668	676	-	602	648	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.3	16.6	0.4	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1246	-	-	505	404	1322	-	-
HCM Lane V/C Ratio	0.011	-	-	0.235	0.231	0.003	-	-
HCM Control Delay (s)	7.9	0	-	14.3	16.6	7.7	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.9	0	-	-

Intersection	
Int Delay, s/veh	1.9

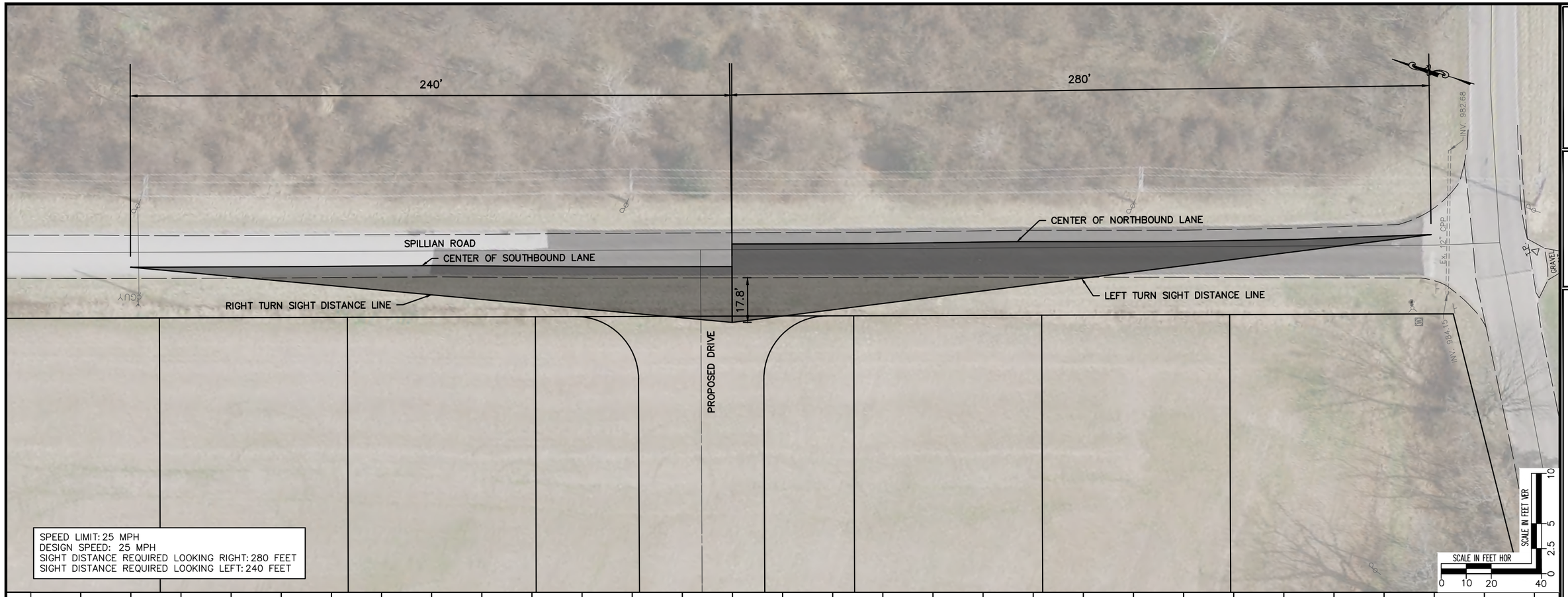
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	47	216	31	50	243
Future Vol, veh/h	20	47	216	31	50	243
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	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	22	51	235	34	54	264

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	624	252	0	0	269	0
Stage 1	252	-	-	-	-	-
Stage 2	372	-	-	-	-	-
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	449	787	-	-	1295	-
Stage 1	790	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	427	787	-	-	1295	-
Mov Cap-2 Maneuver	427	-	-	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	663	-	-	-	-	-

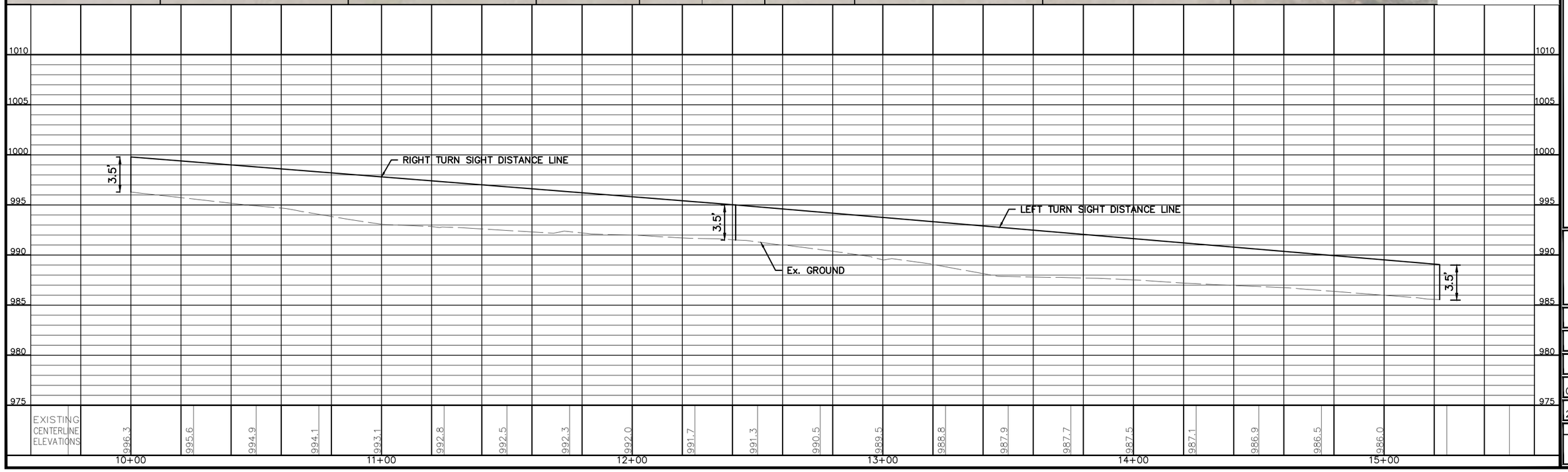
Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	1.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	629	1295	-
HCM Lane V/C Ratio	-	-	0.116	0.042	-
HCM Control Delay (s)	-	-	11.5	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

APPENDIX F – Sight Distance Analysis



SPEED LIMIT: 25 MPH
DESIGN SPEED: 25 MPH
SIGHT DISTANCE REQUIRED LOOKING RIGHT: 280 FEET
SIGHT DISTANCE REQUIRED LOOKING LEFT: 240 FEET



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STRUEWING PROPERTY TRAFFIC IMPACT STUDY
VILLAGE OF YELLOW SPRINGS
PROPOSED DRIVE SIGHT DISTANCE TRAINGLES

REVISIONS:

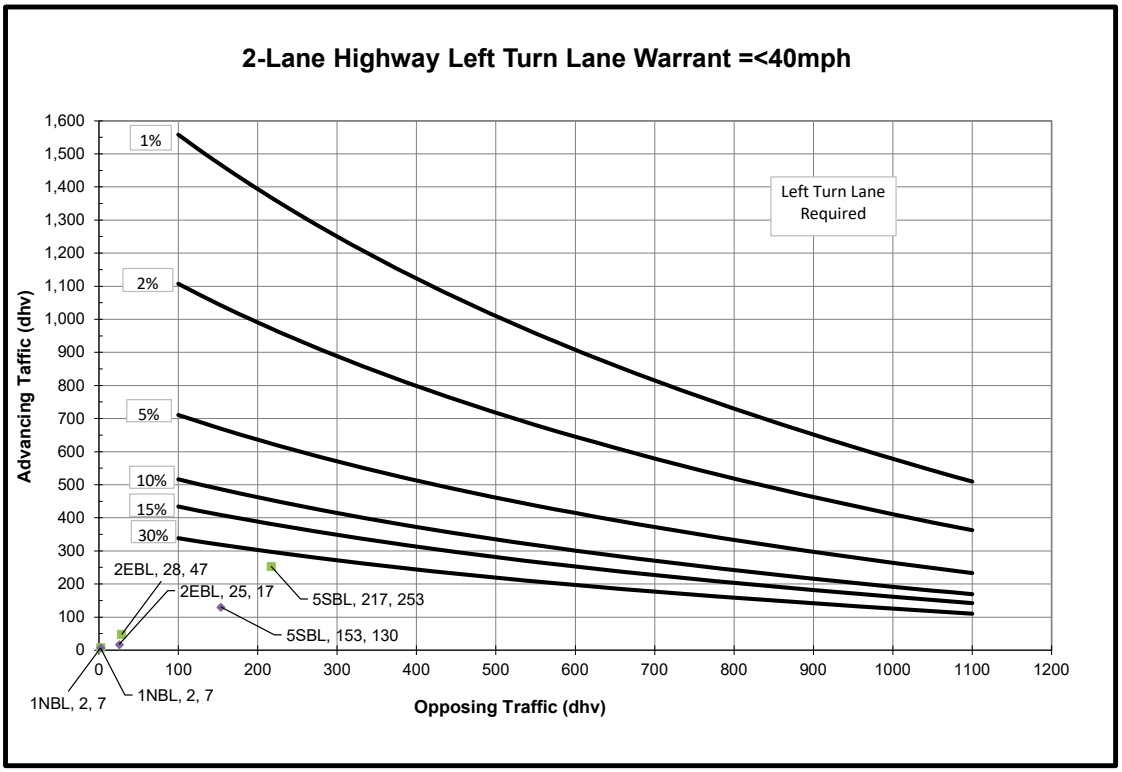
FILE NAME: Sight Distance
DRAWN BY: adg
CHECKED BY: mkg
PROJECT No.: GRE-YSP-2004
DATE: 2021-09-08
SHEET NUMBER: 1 OF 1

APPENDIX G – Turn Lane Analysis

Left Turn Lane Warrant
Opening Year No-Build Volumes

PM Peak Hour				
Intersection	**Left Turning Vol**	**Advancing Vol**	**Opposing Vol**	**Left Turn %**
1NBL	1	7	2	14%
2EBL	14	47	28	30%
5SBL	32	253	217	13%

AM Peak Hour				
Intersection	**Left Turning Vol**	**Advancing Vol**	**Opposing Vol**	**Left Turn %**
1NBL	1	7	2	14%
2EBL	2	17	25	12%
5SBL	23	130	153	18%



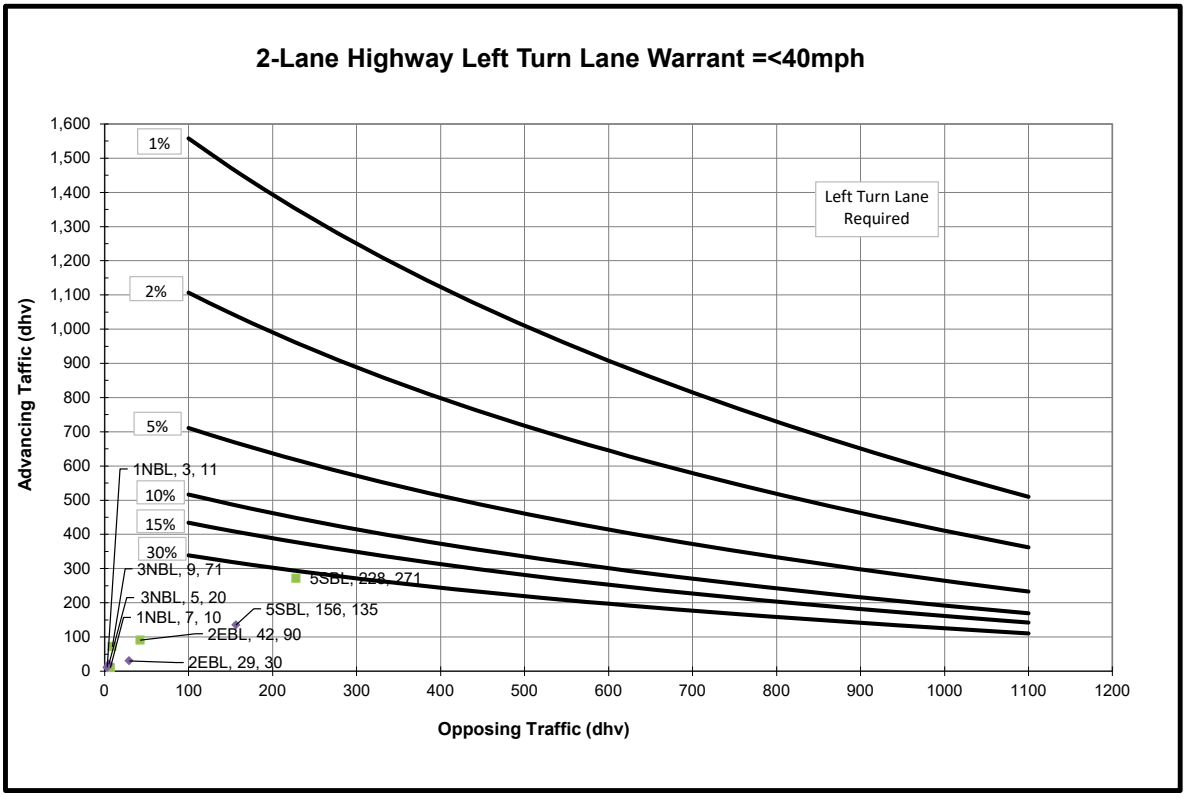
Intersection Legend

1-Spillan Road & Edgefield Drive
2-Spillan Road & Hyde Road
3-Spillan Road & Proposed Drive
4-US 68 & Hyde Road
5-US 68 & Kahoe Lane

Left Turn Lane Warrant
Opening Year Build Volumes

PM Peak Hour				
Intersection	**Left Turning Vol**	**Advancing Vol**	**Opposing Vol**	**Left Turn %**
1NBL	1	10	7	10%
2EBL	57	90	42	63%
3NBL	57	71	9	80%
5SBL	50	271	228	18%

AM Peak Hour				
Intersection	**Left Turning Vol**	**Advancing Vol**	**Opposing Vol**	**Left Turn %**
1NBL	1	11	3	9%
2EBL	15	30	29	50%
3NBL	17	20	5	85%
5SBL	28	135	156	21%



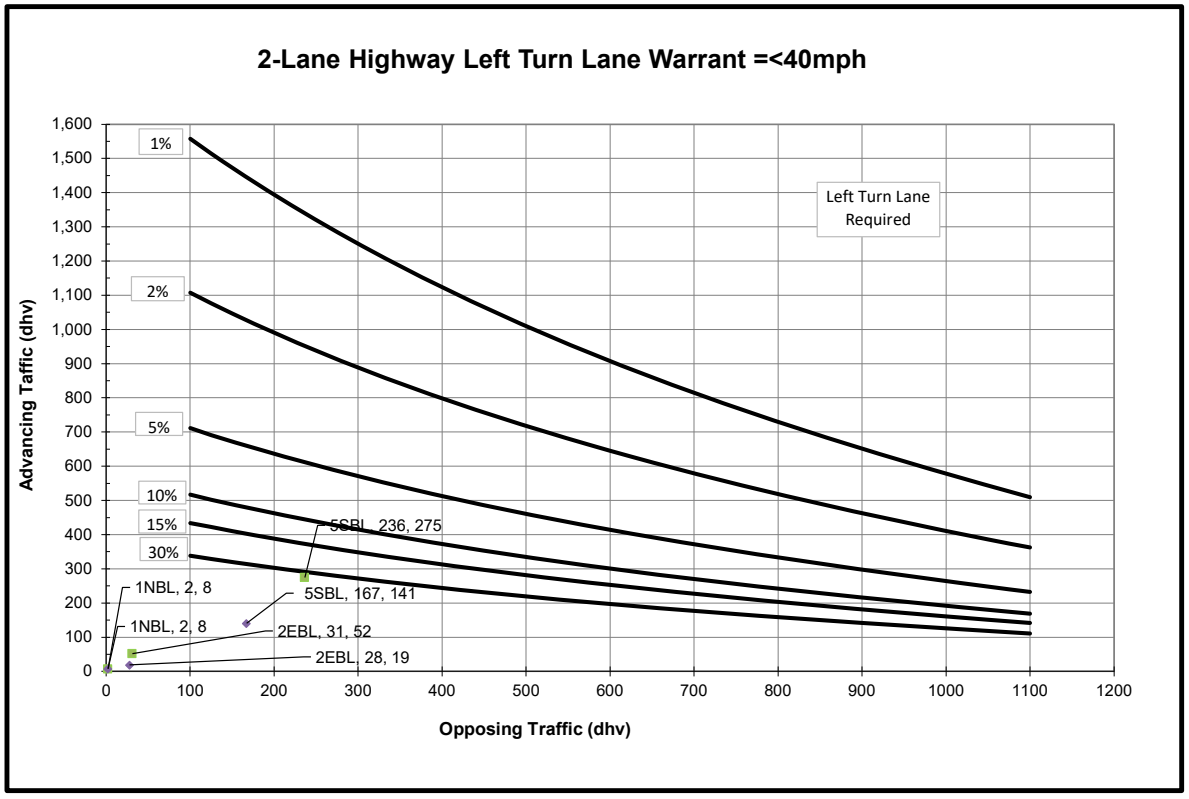
Intersection Legend

1-Spillan Road & Edgefield Drive
2-Spillan Road & Hyde Road
3-Spillan Road & Proposed Drive
4-US 68 & Hyde Road
5-US 68 & Kahoe Lane

Left Turn Lane Warrant
Design Year No-Build Volumes

PM Peak Hour				
Intersection	Left Turning Vol	Advancing Vol	Opposing Vol	Left Turn %
1NBL	1	8	2	14%
2EBL	16	52	31	30%
5SBL	32	275	236	12%

AM Peak Hour				
Intersection	Left Turning Vol	Advancing Vol	Opposing Vol	Left Turn %
1NBL	1	8	2	14%
2EBL	2	19	28	12%
5SBL	23	141	167	16%



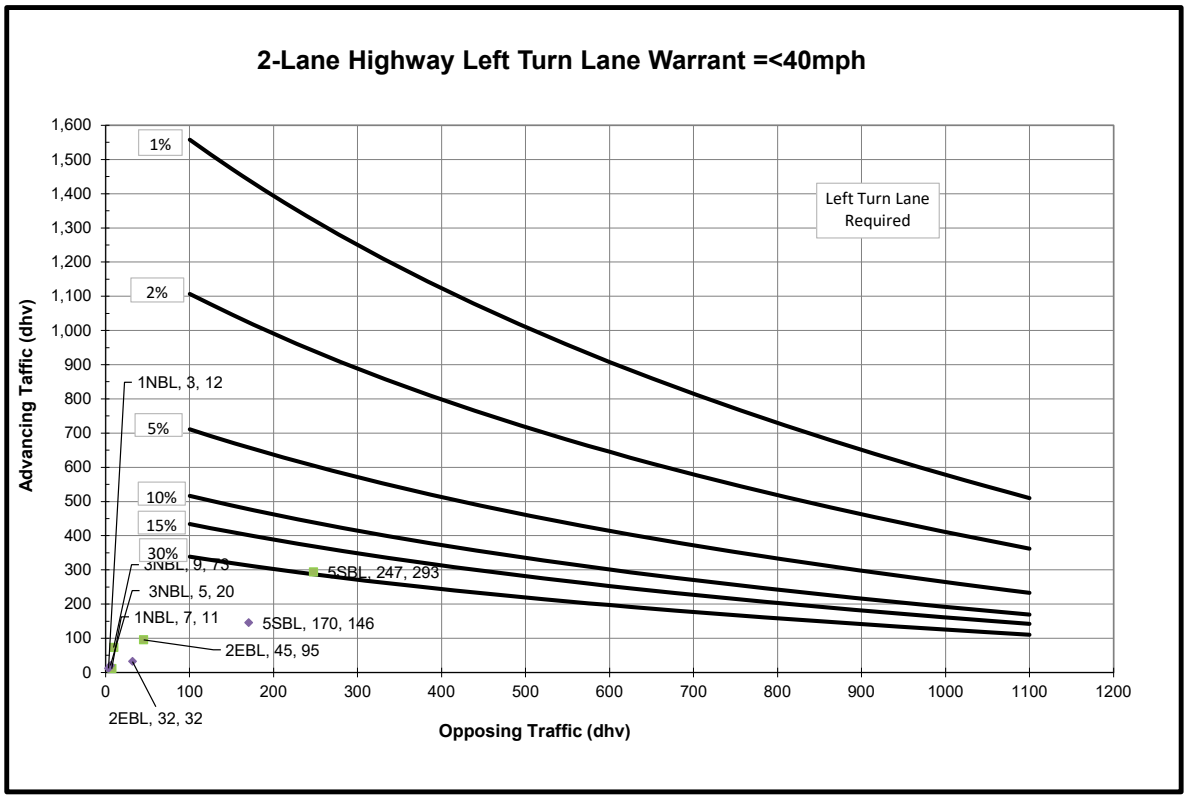
Intersection Legend

1-Spillan Road & Edgefield Drive
2-Spillan Road & Hyde Road
3-Spillan Road & Proposed Drive
4-US 68 & Hyde Road
5-US 68 & Kahoe Lane

Left Turn Lane Warrant
Design Year Build Volumes

PM Peak Hour				
Intersection	**Left Turning Vol**	**Advancing Vol**	**Opposing Vol**	**Left Turn %**
1NBL	1	11	7	10%
2EBL	59	95	45	62%
3NBL	57	73	9	79%
5SBL	50	293	247	17%

AM Peak Hour				
Intersection	**Left Turning Vol**	**Advancing Vol**	**Opposing Vol**	**Left Turn %**
1NBL	1	12	3	9%
2EBL	15	32	32	48%
3NBL	17	20	5	84%
5SBL	28	146	170	19%



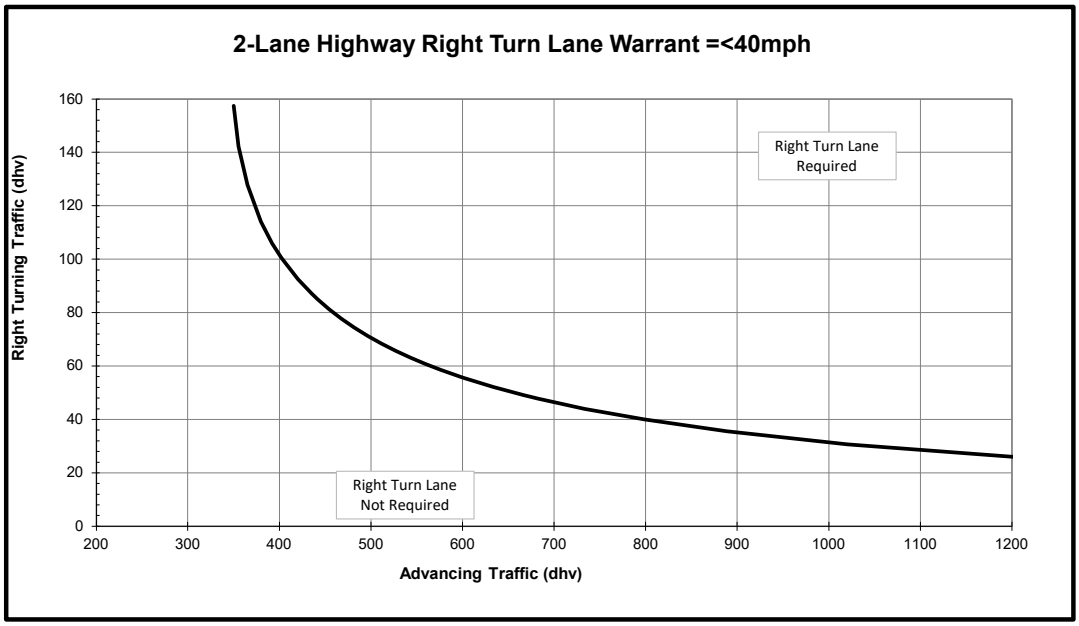
Intersection Legend

1-Spillan Road & Edgefield Drive
2-Spillan Road & Hyde Road
3-Spillan Road & Proposed Drive
4-US 68 & Hyde Road
5-US 68 & Kahoe Lane

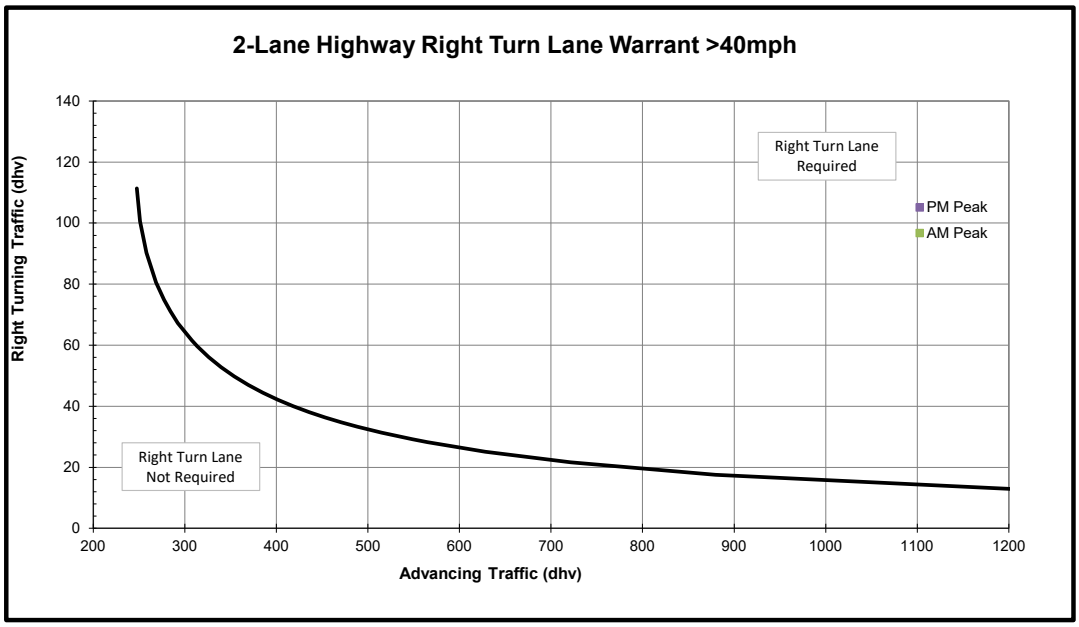
Right Turn Lane Warrant
Opening Year No-Build Volumes

PM Peak Hour		
Intersection	Right Turning Vol	Advancing Vol
1SBR	0	2
2WBR	0	28
4NBR	9	177

AM Peak Hour		
Intersection	Right Turning Vol	Advancing Vol
1SBR	0	2
2WBR	1	25
4NBR	5	166



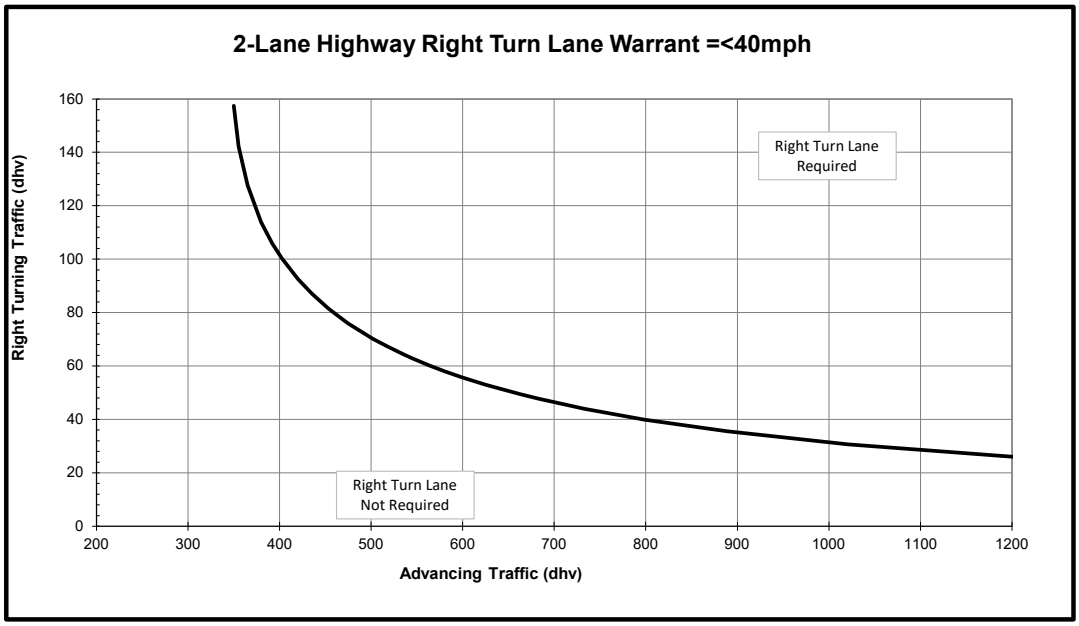
Intersection Legend
1-Spillan Road & Edgefield Drive
2-Spillan Road & Hyde Road
3-Spillan Road & Proposed Drive
4-US 68 & Hyde Road
5-US 68 & Kahoe Lane



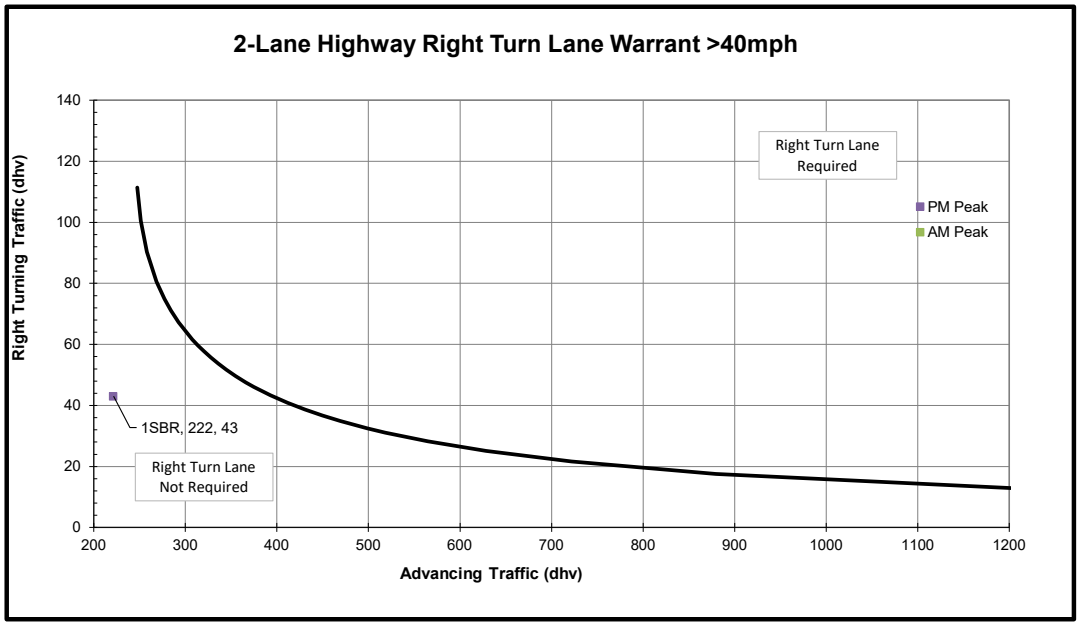
Right Turn Lane Warrant
Opening Year Build Volumes

PM Peak Hour		
Intersection	Right Turning Vol	Advancing Vol
1SBR	0	7
2WBR	14	42
3SBR	5	9
4NBR	43	222

AM Peak Hour		
Intersection	Right Turning Vol	Advancing Vol
1SBR	0	3
2WBR	5	29
3SBR	1	5
4NBR	15	179



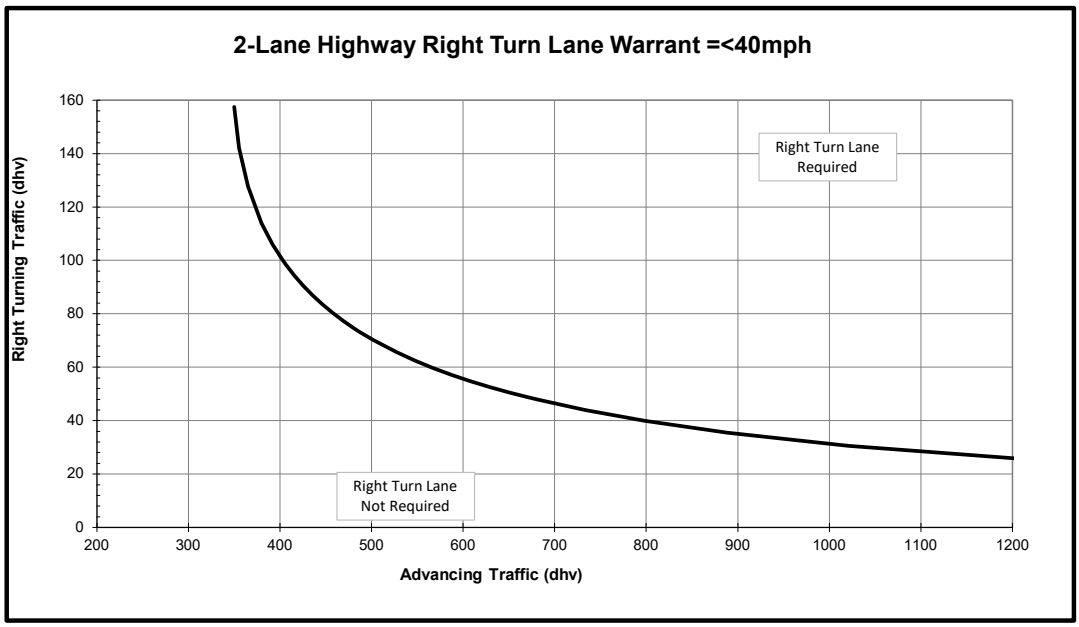
Intersection Legend
1-Spillan Road & Edgefield Drive
2-Spillan Road & Hyde Road
3-Spillan Road & Proposed Drive
4-US 68 & Hyde Road
5-US 68 & Kahoe Lane



Right Turn Lane Warrant
Design Year No-Build Volumes

PM Peak Hour		
Intersection	Right Turning Vol	Advancing Vol
1SBR	0	2
2WBR	0	31
4NBR	9	192

AM Peak Hour		
Intersection	Right Turning Vol	Advancing Vol
1SBR	0	2
2WBR	1	28
4NBR	5	179



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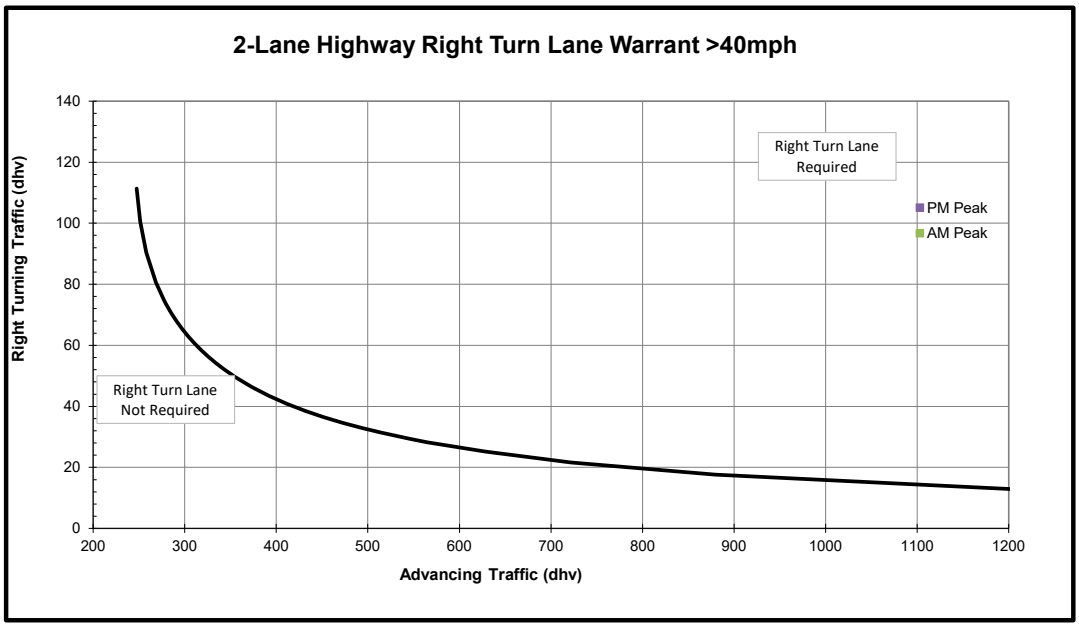
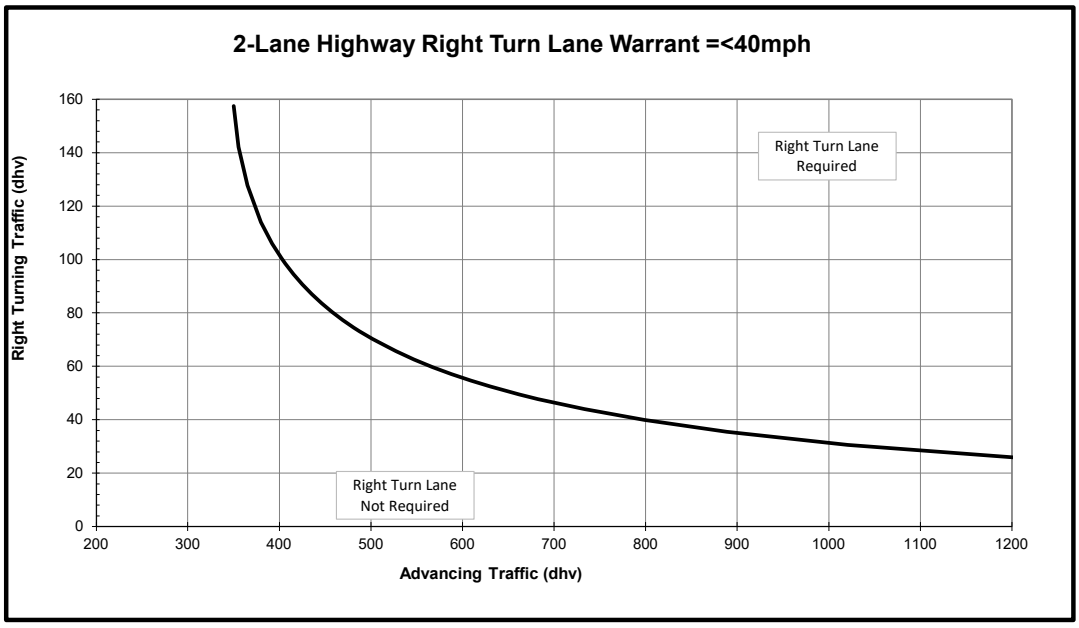
3-Spillan Road & Proposed Drive
4-US 68 & Hyde Road
5-US 68 & Kahoe Lane



Right Turn Lane Warrant
Design Year Build Volumes

PM Peak Hour		
Intersection	Right Turning Vol	Advancing Vol
1SBR	0	7
2WBR	14	45
3SBR	5	9
4NBR	43	237

AM Peak Hour		
Intersection	Right Turning Vol	Advancing Vol
1SBR	0	3
2WBR	5	32
3SBR	1	5
4NBR	15	192



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