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Stinson Village
Traffic Impact Analysis
Stallings, North Carolina



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TRAFFIC IMPACT ANALYSIS

FOR THE

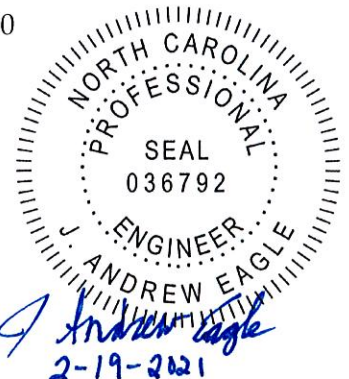
Stinson Village

LOCATED
IN
STALLINGS, NORTH CAROLINA

Prepared For:
Town of Stallings
315 Stallings Road
Stallings, NC 28104

Prepared By:
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February 2021
RKA Project #19413



TRAFFIC IMPACT ANALYSIS**STINSON VILLAGE
STALLINGS, NORTH CAROLINA****EXECUTIVE SUMMARY**

This report summarizes the findings of the Traffic Impact Analysis (TIA) that was performed for the proposed Stinson Village development to be located north of Idlewild Road, east of I-485 in Stallings, North Carolina. The purpose of this study is to determine the potential impact to the surrounding transportation system caused by the traffic generated by the development.

The site is proposed to be constructed in two phases. Phase 1 will consist of 8,000 square feet divided into two fast-food restaurants with drive-throughs. Phase 1 may also include a 4,993 square foot super convenience market / gas station. Full Build will consist of the Phase 1 development plus up to 203 multifamily low-rise homes, 408 multifamily high-rise homes, 4,000 square feet of day care center, 4,000 square feet of drive-in bank, 5,000 square feet of high-turnover sit-down restaurant, and 3,500 square feet of coffee / donut shop without a drive through. Both Phase 1 and Full Build were analyzed with and without a 4,993 square foot super convenience market / gas station.

Four site accesses will be constructed during Phase 1. Access A would form an unsignalized three leg intersection on Idlewild Road, east of Marshall Hooks Road with right-in/right-out access. Access B would form the fourth leg at the intersection of Idlewild Road and Rite Aid Driveway. Access C would form an unsignalized three leg intersection on Idlewild Road east of Access B with leftover access. Access D would form a full access intersection on Marshall Hooks Road north of Idlewild Road. Phase 1 is expected to be completed in 2022. The site is expected to be fully built by the year 2023.

The study area for the TIA was determined through coordination with NCDOT and the Town of Stallings and consists of the following intersections:

1. Idlewild Road and Stallings Road
2. Idlewild Road and I-485 Southbound Ramps
3. Idlewild Road and I-485 Northbound Ramps
4. Idlewild Road and Marshall Hooks Road

5. Idlewild Road and Rite Aid Driveway / Access B
6. Idlewild Road and Stevens Mill Road
7. Idlewild Road and Access A
8. Idlewild Road and Access C
9. Marshall Hooks Road and Access D
10. Access B and Internal Roadway

Based on coordination with the NCDOT and the Town of Stallings the Idlewild Mixed Use development was determined to have an impact on the project study area. This development will be located on the south side of Idlewild Road, east of I-485. The site is expected be fully constructed by 2022. Traffic generated by the site and all committed improvements will be included in all future analysis.

Several scenarios were analyzed using traffic analysis software, Synchro 10. Traffic operations during the AM and PM peak hours were modeled for each scenario. The results of each scenario were compared in order to determine impacts from background traffic growth and the proposed development. The following scenarios were modeled:

- 2019 Existing
- 2022 No-Build
- 2022 Build Phase 1 (without gas station)
- 2022 Build Phase 1 (with gas station)
- 2023 No-Build
- 2023 Full Build (without gas station)
- 2023 Full Build (with gas station)

Based on the analysis results, some impacts are expected by the proposed development. Figures E-1 through E-5 illustrate the improvements recommended to be completed by the developer for the various scenarios.

The following improvements are recommended to be done by proposed development as part of the 2022 Build Phase 1 Without Gas Station scenario:

Idlewild Road and I-485 Northbound Ramps

- Extend the westbound Idlewild Road right turn lane to provide 300 feet of storage and appropriate taper.
- Extend the northbound exit ramp shared left/through lane to provide 325 feet of storage and appropriate taper.

Idlewild Road and Marshall Hooks Road

- Convert the intersection to a left-over if not already done by others. This includes the construction of concrete medians and/or islands to restrict turn movements
- Provide 150 feet of storage and appropriate taper on the eastbound Idlewild Road left turn lane.

Idlewild Road and Rite Aid Driveway / Access B

- Construct an eastbound Idlewild Road left turn lane with 175 feet of storage and the appropriate taper.
- Restripe the eastbound Idlewild Road right turn lane to a shared through/right. Construct an additional eastbound departure lane and drop it at Access C.
- Extend the westbound Idlewild Road left turn lane to provide 300 feet of storage and the appropriate taper.
- Construct an additional westbound Idlewild Road through lane with 350 feet of storage and the appropriate taper. Construct an additional westbound departure lane; connecting to the existing dual through lanes.
- Restripe the northbound approach to provide one left turn lane and one shared through/right lane. The shared through/right lane would have 500 feet of storage and the appropriate taper.
- Construct Access B with one left turn and one shared through/right lane. The left turn lane would have 250 feet of storage and the appropriate taper.
- Provide 250 feet of internal protected stem on Access B.
- Modify the signal as necessary.

Idlewild Road and Stevens Mill Road

- Extend the eastbound Idlewild Road left turn lane to provide 500 feet of storage and the appropriate taper.
- Extend the westbound Idlewild Road left turn lane to provide 250 feet of storage and the appropriate taper.
- Extend the northbound Stevens Mill Road left turn lane to provide 500 feet of storage and the appropriate taper.
- Construct a northbound Stevens Mill Road right turn lane with 500 feet of storage and the appropriate taper.
- Extend the southbound Stevens Mill Road left turn lane to provide 250 feet of storage and the appropriate taper.
- Extend the southbound Stevens Mill Road right turn lane to provide 275 feet of storage and the appropriate taper.
- Modify the signal as necessary.

Idlewild Road and Access A

- Construct Access A with one ingress lane and one egress lane (right out only).
- Provide 150 feet of internal protected stem on Access A.
- Construct a westbound Idlewild Road right turn lane with 100 feet of storage and the appropriate taper.

Idlewild Road and Access C

- Construct Access C with one ingress lane and one egress lane (right out only). Locate Access C far enough away from Access B to provide the required left turn lane storages on Idlewild Road.
- Provide 125 feet of internal protected stem on Access C.
- Construct an eastbound Idlewild Road left turn lane with 250 feet of storage and the appropriate taper.
- Construct a westbound Idlewild Road right turn lane with 100 feet of storage and the appropriate taper.

Marshal Hooks Road and Access D

- Construct Access D with one ingress lane and one egress lane.
- Provide 100 feet of internal protected stem on Access D.

The following improvements are recommended to be done by proposed development as part of the 2022 Build Phase 1 With Gas Station scenario:

Idlewild Road and Rite Aid Driveway / Access B

- Extend the eastbound Idlewild Road left turn lane to provide 325 feet of storage and the appropriate taper.

The following improvements are recommended to be done by proposed development as part of the 2023 Full Build Without Gas Station scenario:

Idlewild Road and I-485 Southbound Ramps

- Construct an additional southbound right turn lane on the I-485 Southbound Ramp. Provide 400 feet of storage and the appropriate taper.
- Lengthen the existing southbound right turn lane on the I-485 Southbound Ramp to provide 400 feet of storage and the appropriate taper.
- Modify the signal as necessary.

Idlewild Road and Rite Aid Driveway / Access B

- Extend dual westbound through lanes to the intersection of Idlewild Road and Stevens Mill Road.
- Access B would need dual left turn lanes with 250 feet of storage on each, one through lane, and one right turn lane with 250 feet of storage. Provide the appropriate tapers for turn lanes.
- Modify the signal as necessary.

Idlewild Road and Stevens Mill Road

- Construct an additional westbound Idlewild Road through lane with 500 feet of storage and the appropriate taper. Construct a westbound departure lane and connect to the dual through lanes at intersection of Idlewild Road and Rite Aid Driveway / Access B.
- Modify the signal as necessary.

The following improvements are recommended to be done by proposed development as part of the 2023 Full Build With Gas Station scenario:

Idlewild Road and Rite Aid Driveway / Access B

- Construct a second eastbound Idlewild Road left turn lane. The eastbound left turn lanes would need 325 feet of storage on each and the appropriate taper. Construct a second departure lane on Access B.
- Construct a westbound Idlewild Road right turn lane with 400 feet of storage and the appropriate taper.
- Modify the signal as necessary.

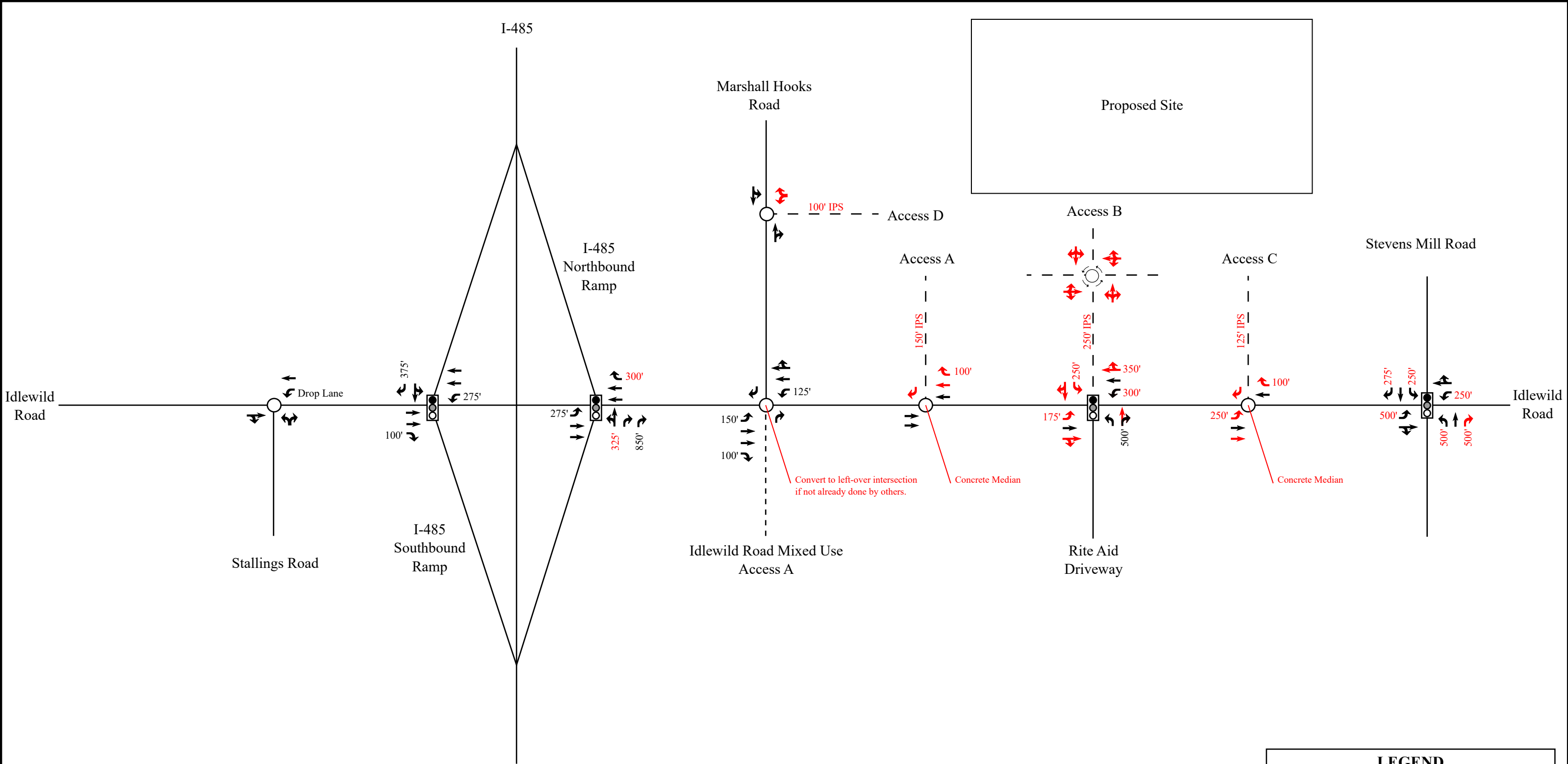
The following improvements are recommended to be done by proposed development as part of the 2040 Build scenario:

Idlewild Road and Rite Aid Driveway / Access B

- Construct an additional southbound right turn lane with 250 feet of storage and appropriate taper.

Idlewild Road and Stevens Mill Road

- Construct an additional southbound right turn lane. It is recommended the dual southbound right turn lanes provide 225 feet of storage on each.
- Extend the northbound Stevens Mill Road left turn lanes to each provide 500 feet of storage and appropriate taper.



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Stinson Village

Stallings, NC

2022 Build Phase 1
(without Gas Station)
Recommended
Lane Configurations

Scale: Not to Scale

Figure E-1



LEGEND

 Unsignalized Intersection

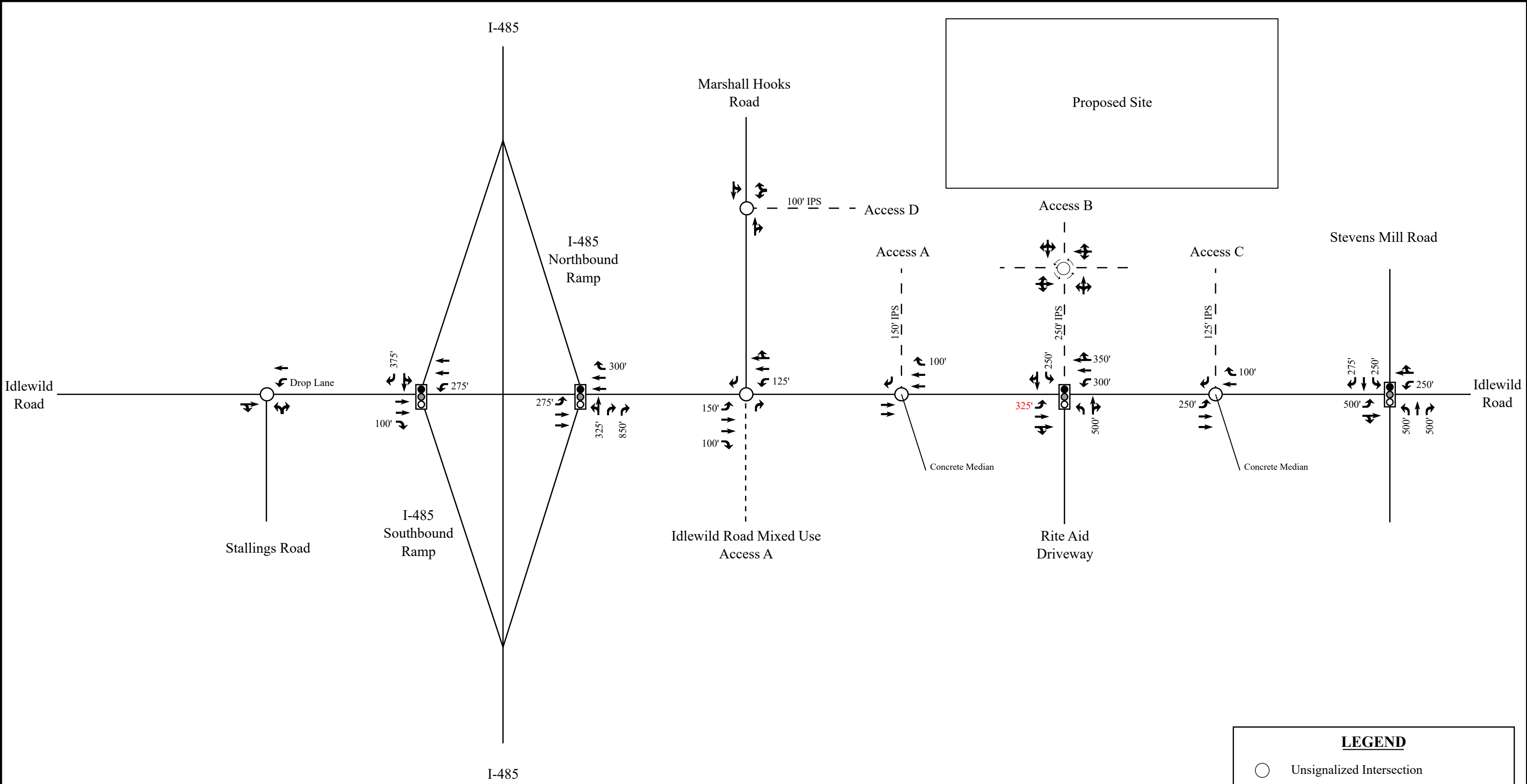
 Signalized Intersection

 Roundabout

 Existing Lane

 Improvement By Developer

 Storage (In Feet)



LEGEND

Unsignalized Intersection

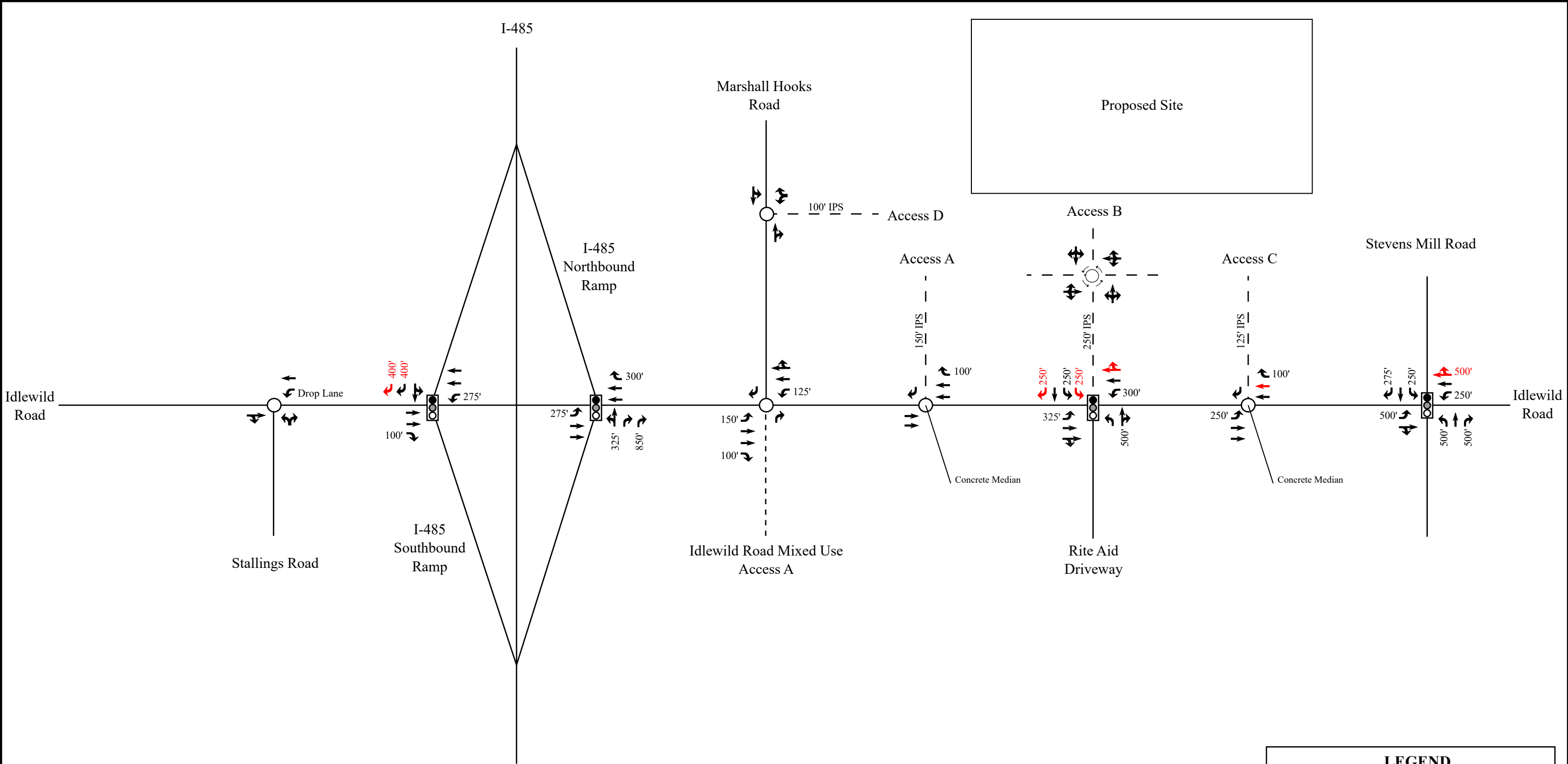
Signalized Intersection

Roundabout

Existing Lane

Improvement By Developer

Storage (In Feet)



Stinson Village
Stallings, NC

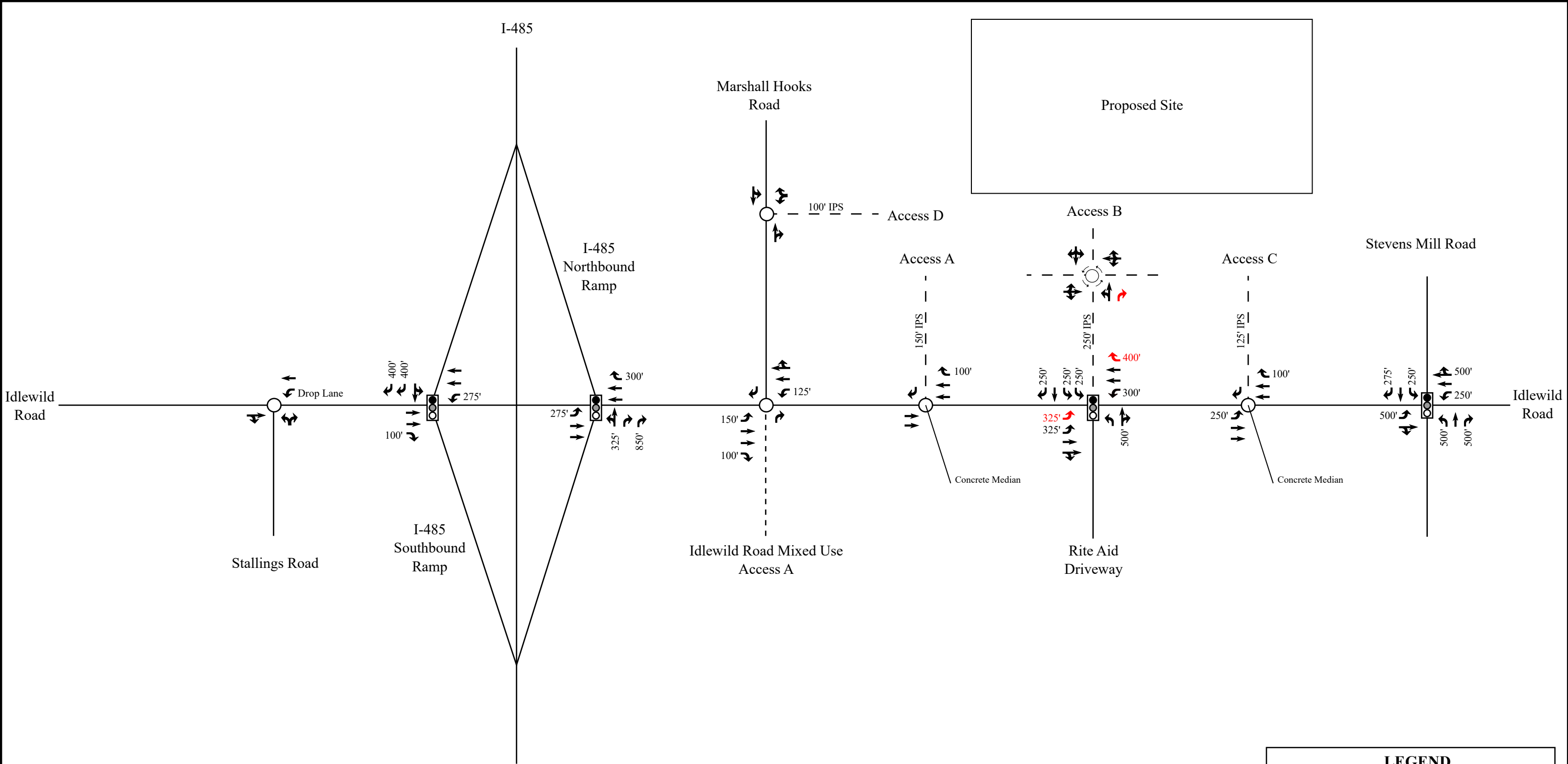
2023 Full Build
(without Gas Station)
Recommended
Lane Configurations

Scale: Not to Scale Figure E-3



LEGEND

- Unsignalized Intersection
- Signalized Intersection
- Roundabout
- Existing Lane
- Improvement By Developer
- X' Storage (In Feet)



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Stallings, NC

2023 Full Build
(with Gas Station)
Recommended
Lane Configurations

Scale: Not to Scale

Figure E-4

LEGEND

Unsignalized Intersection

Signalized Intersection

Roundabout

Existing Lane

Improvement By Developer

X' Storage (In Feet)

E-10

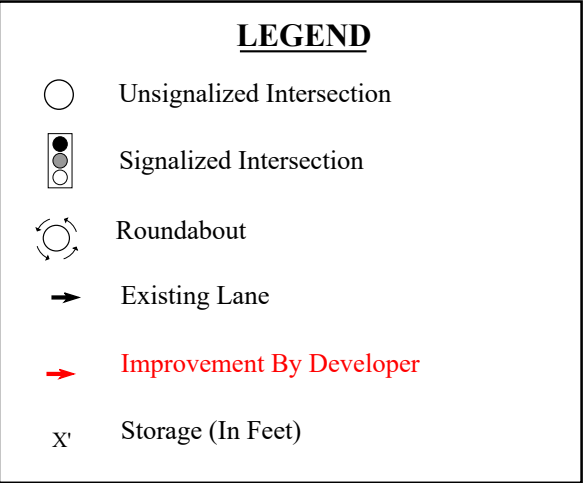


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TRAFFIC IMPACT ANALYSIS

STINSON VILLAGE STALLINGS, NORTH CAROLINA

1. INTRODUCTION

1.1. Purpose of Report

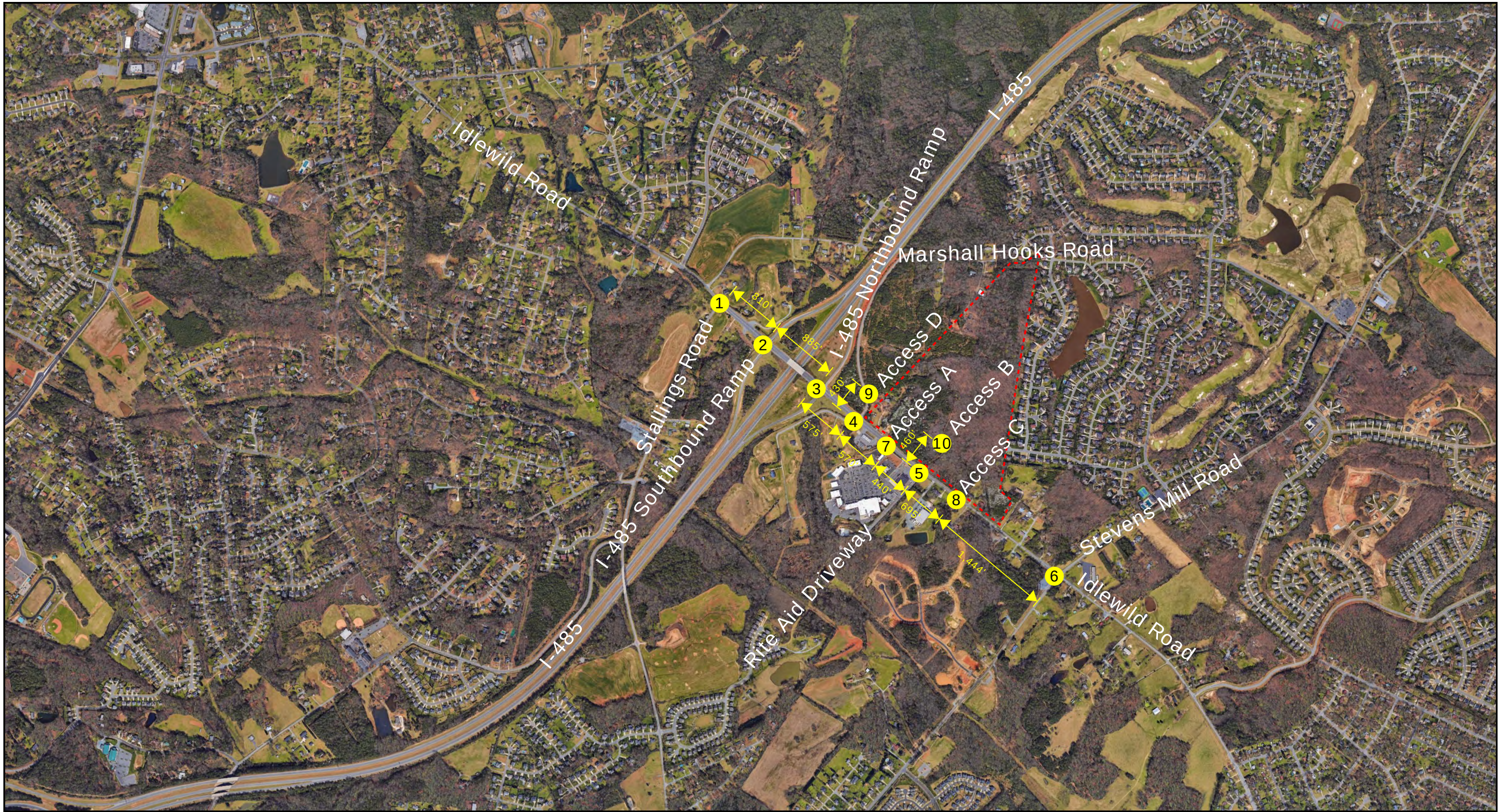
This report summarizes the findings of the Traffic Impact Analysis (TIA) that was performed for the proposed Stinson Village development to be located north of Idlewild Road, east of I-485 in Stallings, North Carolina. The purpose of this study is to determine the potential impact to the surrounding transportation system caused by the traffic generated by the development.

1.2. Study Objectives

The site is proposed to be constructed in two phases. Phase 1 will consist of 8,000 square feet divided into two fast-food restaurants with drive-throughs. Phase 1 may also include a 4,993 square foot super convenience market / gas station. Full Build will consist of the Phase 1 development plus up to 203 multifamily low-rise homes, 408 multifamily high-rise homes, 4,000 square feet of day care center, 4,000 square feet of drive-in bank, 5,000 square feet of high-turnover sit-down restaurant, and 3,500 square feet of coffee / donut shop without a drive through. Both Phase 1 and Full Build were analyzed with and without a 4,993 square foot super convenience market / gas station.

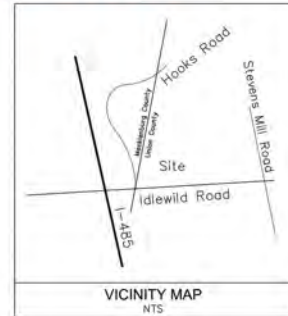
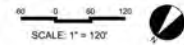
Four site accesses will be constructed during Phase 1. Access A would form an unsignalized three leg intersection on Idlewild Road, east of Marshall Hooks Road with right-in/right-out access. Access B would form the fourth leg at the intersection of Idlewild Road and Rite Aid Driveway. Access C would form an unsignalized three leg intersection on Idlewild Road east of Access B with leftover access. Access D would form a full access intersection on Marshall Hooks Road north of Idlewild Road. Phase 1 is expected to be completed in 2022. The site is expected to be fully built by the year 2023.

Refer to Figure 1 for an illustration of the site location. Refer to Figure 2 for the preliminary site plan. The objective of this report is to determine what geometric improvements are necessary to mitigate traffic conditions on the transportation network surrounding the site with the proposed development fully built out.





IDLEWILD SITE
STALLINGS, NORTH CAROLINA



SITE DATA
TAX MAP NO: 07075020, 07075019, 07075018, 07075017A, 0707017B, 07075028, 07075023, 19511201, 07075022, 07075022A, 19511224, 19511202, 19511213

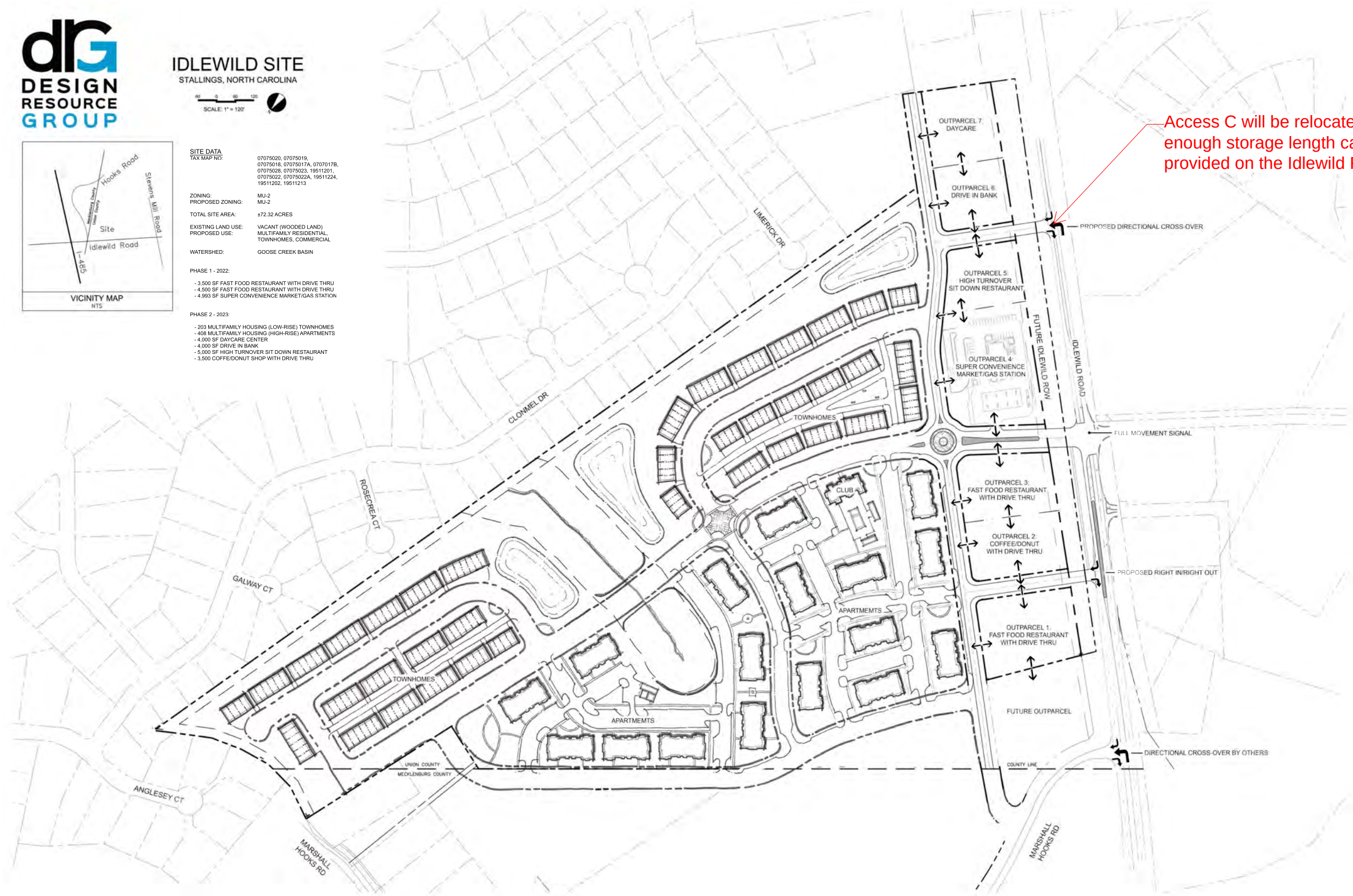
ZONING: MU-2
PROPOSED ZONING: MU-2
TOTAL SITE AREA: ±72.32 ACRES
EXISTING LAND USE: VACANT (WOODED LAND)
PROPOSED USE: MULTIFAMILY RESIDENTIAL, TOWNHOMES, COMMERCIAL
WATERSHED: GOOSE CREEK BASIN

PHASE 1 - 2022:

- 3,500 SF FAST FOOD RESTAURANT WITH DRIVE THRU
- 4,500 SF FAST FOOD RESTAURANT WITH DRIVE THRU
- 4,993 SF SUPER CONVENIENCE MARKET/GAS STATION

PHASE 2 - 2023:

- 203 MULTIFAMILY HOUSING (LOW-RISE) TOWNHOMES
- 408 MULTIFAMILY HOUSING (HIGH-RISE) APARTMENTS
- 4,000 SF DAYCARE CENTER
- 4,000 SF DRIVE IN BANK
- 5,000 SF HIGH TURNOVER SIT DOWN RESTAURANT
- 3,500 COFFEE/DONUT SHOP WITH DRIVE THRU



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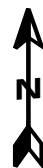


Stinson Village
Stallings, NC

Preliminary Site Plan

Scale: Not to Scale

Figure 2



2. AREA CONDITIONS

2.1. Transportation Network Study Area

2.1.1. Area Roadway System

The project study area for this TIA was determined through coordination with the North Carolina Department of Transportation (NCDOT) and the Town of Stallings. Table 1 summarizes the characteristics of the roadways within the study area. The NCDOT Functional Class map was used to determine the classification of each road. Traffic Volume maps from NCDOT were used to find the average daily traffic (ADT) volumes in vehicles per day (vpd) for the roadways. A field visit was conducted to verify the existing cross-sections and speed limits in mph.

**TABLE 1
STUDY AREA ROADS**

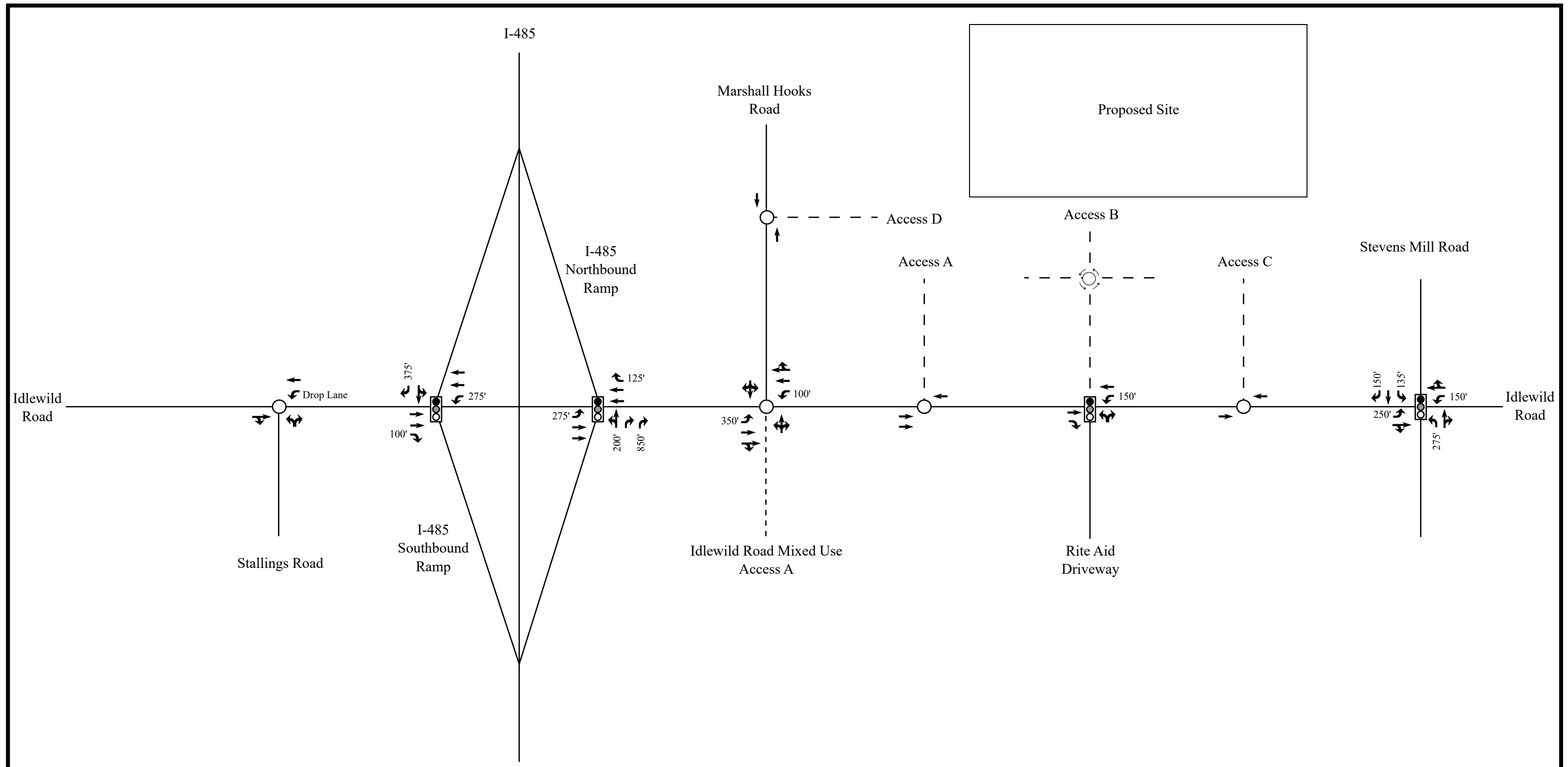
ROADWAY	CLASSIFICATION	CROSS-SECTION	ADT (vpd)	SPEED LIMIT (mph)
Idlewild Road	Minor Arterial	Two-Lane	25,000	45
Stallings Road	Local	Two-Lane	4,300	45
I-485	Interstate	Four-Lane	72,000	70
Marshall Hooks Road	Local	Two-Lane	N/A	Not Posted
Stevens Mill Road	Major Collector	Two-Lane	8,300	45

2.1.1.1. Existing Roadway Conditions

Existing lane configurations (number of traffic lanes on the intersection approach), storage capacities, and other intersection and roadway information within the study area was collected through field reconnaissance by Ramey Kemp and Associates, Inc. (RKA). Refer to Figure 3 for the existing lane configurations and traffic control at study intersections.

2.1.1.2. Future Roadway Conditions

The NCDOT STIP Project U-4913 was identified as an approved roadway project within the project study area. This project would widen Idlewild Road from Stallings Road to Stevens Mill Road. In order to determine if further analysis would be required the traffic volumes from the proposed site and adjacent development were compared to the forecast volumes used during the analysis of STIP Project U-4913. It was determined that the forecast would account for the expected trips, therefore, no additional analysis was performed.



LEGEND

-  Unsignalized Intersection
-  Signalized Intersection
-  Roundabout
-  Existing Lane
-  X' Storage (In Feet)

2.1.2. Study Area and Existing Traffic Volumes

The study area for the TIA was determined through coordination with NCDOT and the Town of Stallings and consists of the following intersections:

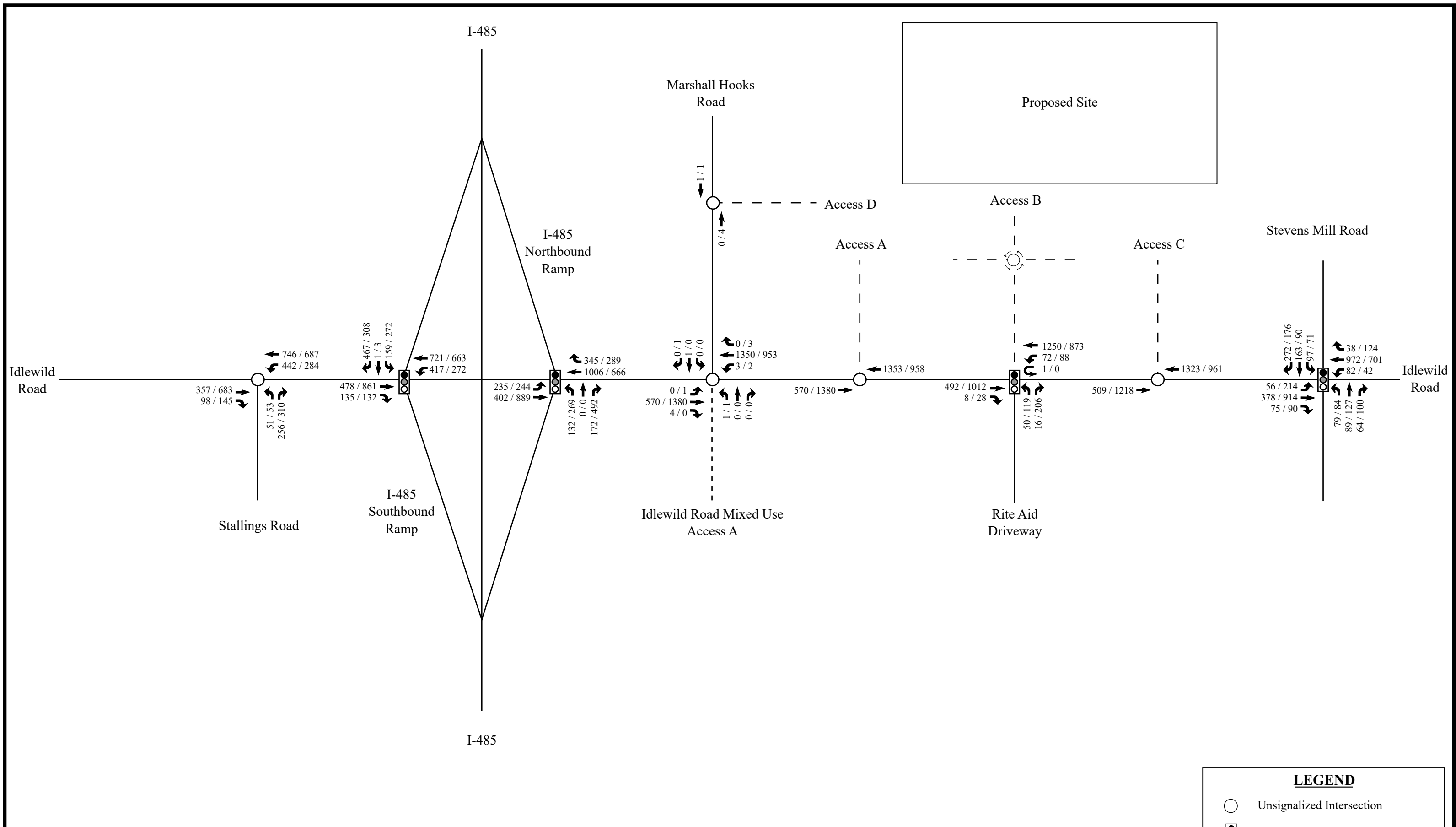
1. Idlewild Road and Stallings Road
2. Idlewild Road and I-485 Southbound Ramps
3. Idlewild Road and I-485 Northbound Ramps
4. Idlewild Road and Marshall Hooks Road
5. Idlewild Road and Rite Aid Driveway / Access B
6. Idlewild Road and Stevens Mill Road
7. Idlewild Road and Access A
8. Idlewild Road and Access C
9. Marshall Hooks Road and Access D
10. Access B and Internal Roadway

Existing traffic volumes were determined through traffic counts conducted during the AM peak period (7:00-9:00 AM) and the PM peak period (4:00-6:00 PM). Turning movement counts were performed at intersection 1 on October 2, 2018. Turn movement counts at intersections 2 through 6 were performed on June 6, 2018. All counts were performed while schools were in session. The traffic volumes were balanced between intersections where appropriate. The 2018 peak hour traffic counts were projected to the year 2019 using a compounded growth rate of 2.5% per year. A minimum of 4 vehicles per hour for each turn lane was used in the analysis. A copy of the traffic count data can be found in Appendix A of this report. Refer to Figure 4 for an illustration of the 2019 Existing peak hour traffic volumes. The study area was confirmed with NCDOT during the scoping process. The approved scope is shown in Appendix B.

2.2. Study Area – Adjacent Land Use

2.2.1. Existing Land Uses

The existing site is undeveloped. The surrounding land is primarily commercial and residential.



2.2.2. Anticipated or Approved Future Development

Based on coordination with the NCDOT and the Town of Stallings the Idlewild Mixed Use development was determined to have an impact on the project study area. This development will be located on the south side of Idlewild Road, east of I-485. The site is expected be fully constructed by 2022. Traffic generated by the site and all committed improvements will be included in all future analysis. Information regarding this development is located in Appendix C.

3. PROJECTED TRAFFIC

3.1. Site Traffic

In order to determine the future traffic conditions after the proposed development is completed, an estimate of traffic projected to travel to / from the proposed development is required. The average weekday daily, AM peak hour, and PM peak hour site trips for this study were calculated based on the *ITE Trip Generation Manual, 10th Edition*.

3.1.1. Trip Generation

The site is proposed to be constructed in two phases. Phase 1 will consist of up to 8,000 square feet of fast-food restaurant with drive-through. Full Build will consist of up to 203 multifamily low-rise homes, 408 multifamily high-rise homes, 4,000 square feet of day care center, 4,000 square feet of drive-in bank, 5,000 square feet of high-turnover sit-down restaurant, 8,000 square feet of fast-food restaurant with drive-through and 3,500 square feet of coffee / donut shop without a drive through. Both Phase 1 and Full Build were analyzed with and without a 4,993 square foot super convenience market / gas station.

Four site accesses will be constructed during Phase 1. Access A would form an unsignalized three leg intersection on Idlewild Road, east of Marshall Hooks Road with right-in/right-out access. Access B would form the fourth leg at the intersection of Idlewild Road and Rite Aid Driveway. Access C would form an unsignalized three leg intersection on Idlewild Road east of Access B with leftover access. Access D would form a full access intersection on Marshall Hooks Road north of Idlewild Road. Phase 1 is expected to be completed in 2022. The site is expected to be fully built by the year 2023. Table 2 summarizes the trip generation for the 2022 Build Phase 1 (without gas station) scenario while Table 3 summarizes the trip generation for the 2022 Build Phase 1 (with gas station) scenario. Table 4 summarizes the trip generation for the 2023 Full Build

(without gas station) scenario while Table 5 summarizes the trip generation for the 2023 Full Build (with gas station) scenario. Internal capture trips were limited to a 10% reduction. Pass-by trips were limited to 10% of the adjacent street traffic.

**TABLE 2
PROPOSED SITE PHASE 1 (WITHOUT GAS STATION) TRIP GENERATION**

LAND USE	SIZE	DAILY TRIPS (VPD)	PEAK HOUR TRIPS (VPH)			
			AM		PM	
			ENTER	EXIT	ENTER	EXIT
Fast-Food Rest. with Drive-Thru (934)	3,500 SF	1,650	72	69	59	55
Pass-By Trips			35	35	29	29
Fast-Food Rest. with Drive-Thru (934)	4,500 SF	2,120	92	89	76	71
Pass-By Trips			45	45	37	37
Total Trips		3,770	164	158	135	126
Total Pass-By Trips			78	78	66	66
Total New External Trips			86	80	69	60

**TABLE 3
PROPOSED SITE PHASE 1 (WITH GAS STATION) TRIP GENERATION**

LAND USE	SIZE	DAILY TRIPS (VPD)	PEAK HOUR TRIPS (VPH)			
			AM		PM	
			ENTER	EXIT	ENTER	EXIT
Fast-Food Rest. with Drive-Thru (934)	3,500 SF	1,650	72	69	59	55
Pass-By Trips			35	35	29	29
Fast-Food Rest. with Drive-Thru (934)	4,500 SF	2,120	92	89	76	71
Pass-By Trips			45	45	37	37
Super Convenience Market/Gas Station (934)	4,993 SF	4,184	208	207	173	173
Pass-By Trips			129	129	97	97
Total Trips		7,954	372	365	308	299
Total Pass-By Trips			78	78	84	84
Total New External Trips			294	287	224	215

**TABLE 4
PROPOSED SITE FULL BUILD (WITHOUT GAS STATION) TRIP GENERATION**

LAND USE	SIZE	DAILY TRIPS (VPD)	PEAK HOUR TRIPS (VPH)			
			AM		PM	
			ENTER	EXIT	ENTER	EXIT
Multifamily-low rise (220)	203 DU	1,494	21	72	70	41
Internal Capture Trips			1	16	2	1
Multifamily-high rise (222)	408 DU	1,820	30	97	90	57
Internal Capture Trips			2	21	3	1
Day Care Center (565)	4,000 SF	192	23	21	21	23
Internal Capture Trips			0	0	0	0
Drive-In Bank (912)	4,000 SF	402	22	16	41	41
Internal Capture Trips			0	0	0	0
Pass-By Trips			6	6	15	15
High-Turnover Restaurant (932)	5,000 SF	562	40	30	45	42
Internal Capture Trips			4	0	0	1
Pass-By Trips			-	-	19	19
Fast-Food Rest. with Drive-Thru (934)	3,500 SF	1,650	72	69	59	55
Internal Capture Trips			7	0	0	1
Pass-By Trips			33	33	29	29
Fast-Food Rest. with Drive-Thru (934)	4,500 SF	2,120	92	89	76	71
Internal Capture Trips			9	1	1	1
Pass-By Trips			42	42	37	37
Coffee/Donut Shop (936)	3,500 SF	2,642	181	173	64	63
Internal Capture Trips			17	2	1	2
Total Trips		10,882	481	567	466	393
Total Internal Capture Trips			46	46	22	22
Total Pass-By Trips			78	78	84	84
Total New External Trips			357	443	360	287

**TABLE 5
PROPOSED SITE FULL BUILD (WITH GAS STATION) TRIP GENERATION**

LAND USE	SIZE	DAILY TRIPS (VPD)	PEAK HOUR TRIPS (VPH)			
			AM		PM	
			ENTER	EXIT	ENTER	EXIT
Multifamily-low rise (220)	203 DU	1,494	21	72	70	41
Internal Capture Trips			1	16	2	1
Multifamily-high rise (222)	408 DU	1,820	30	97	90	57
Internal Capture Trips			2	21	3	1
Day Care Center (565)	4,000 SF	192	23	21	21	23
Internal Capture Trips			0	0	0	0
Drive-In Bank (912)	4,000 SF	402	22	16	41	41
Internal Capture Trips			0	0	0	0
Pass-By Trips			6	6	15	15
High-Turnover Restaurant (932)	5,000 SF	562	40	30	45	42
Internal Capture Trips			4	0	0	1
Pass-By Trips			-	-	19	19
Fast-Food Rest. with Drive-Thru (934)	3,500 SF	1,650	72	69	59	55
Internal Capture Trips			7	0	0	1
Pass-By Trips			33	33	29	29
Fast-Food Rest. with Drive-Thru (934)	4,500 SF	2,120	92	89	76	71
Internal Capture Trips			9	1	1	1
Pass-By Trips			42	42	37	37
Coffee/Donut Shop (936)	3,500 SF	2,642	181	173	64	63
Internal Capture Trips			17	2	1	2
Super Convenience Market (960)	4,993 SF	4,184	208	207	173	173
Internal Capture Trips			0	0	0	0
Pass-By Trips			129	129	97	97
Total Trips		15,066	689	774	639	566
Total Internal Capture Trips			46	46	22	22
Total Pass-By Trips			78	78	84	84
Total New External Trips			565	650	533	460

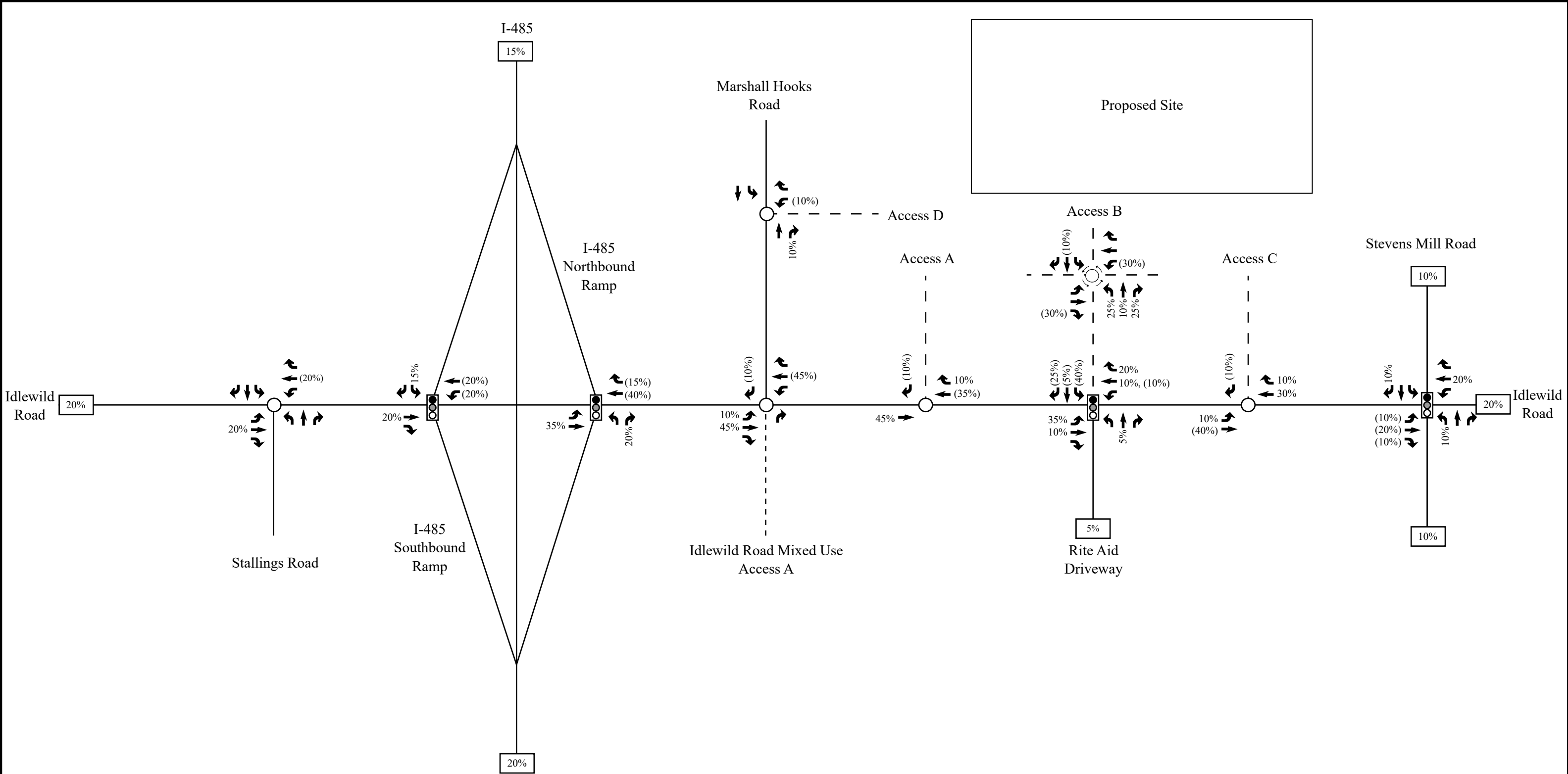
3.1.2. Trip Distribution and Assignment

The trip distribution percentages were developed based on existing traffic patterns, location of employment centers, and engineering judgment. Figure 5 illustrates the primary site trip distribution percentages. These trip distribution percentages were applied to the total new trip generation data in Table 2 to calculate the 2022 Phase 1 (without gas station) site trip assignments shown in Figure 6. Figure 7 illustrates the pass-by trip assignments. The pass-by trips were limited by the adjacent street traffic; thus, the trip distributions were not used. Adding the primary and pass-by trip assignments (Figures 6 and 7) results in the 2022 Phase 1 Build (without gas station) total trip assignment shown in Figure 8.

Similarly, primary site trip distribution percentages (Figure 5) were applied to the total new trip generation data in Table 3 to calculate the 2022 Phase 1 (with gas station) site trip assignments shown in Figure 9. The pass-by trip assignments shown in Figure 10. The pass-by trips were limited by the adjacent street traffic; thus, the trip distributions were not used. Adding the primary and pass-by trip assignments (Figure 9 and 10) results in the 2022 Phase 1 Build (with gas station) total trip assignment shown in Figure 11.

The primary site trip distribution percentages (Figure 5) were applied to the total new trip generation data in Table 4 to calculate the 2023 Full Build (without gas station) site trip assignments shown in Figure 12. The pass-by trip assignment shown in Figure 13 were used during the 2023 Full Build (without gas station) scenario. The pass-by trips were limited by the adjacent street traffic; thus, the trip distributions were not used. Adding the primary and pass-by trip assignments (Figures 12 and 13) results in the 2023 Full Build (without gas station) total trip assignment shown in Figure 14.

Finally, the primary site trip distribution percentages (Figure 5) were applied to the total new trip generation data in Table 5 to calculate the 2023 Full Build (with gas station) site trip assignments shown in Figure 15. The pass-by trip assignment shown in Figure 16 were used during the 2023 Full Build (without gas station) scenario. The pass-by trips were limited by the adjacent street traffic; thus, the trip distributions were not used. Adding the primary and pass-by trip assignments (Figures 15 and 16) results in the 2023 Full Build (with gas station) total trip assignment shown in Figure 17.



Moving forward.



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Stinson Village
Stallings, NC

Proposed Site
Primary
Trip Distribution Percentages

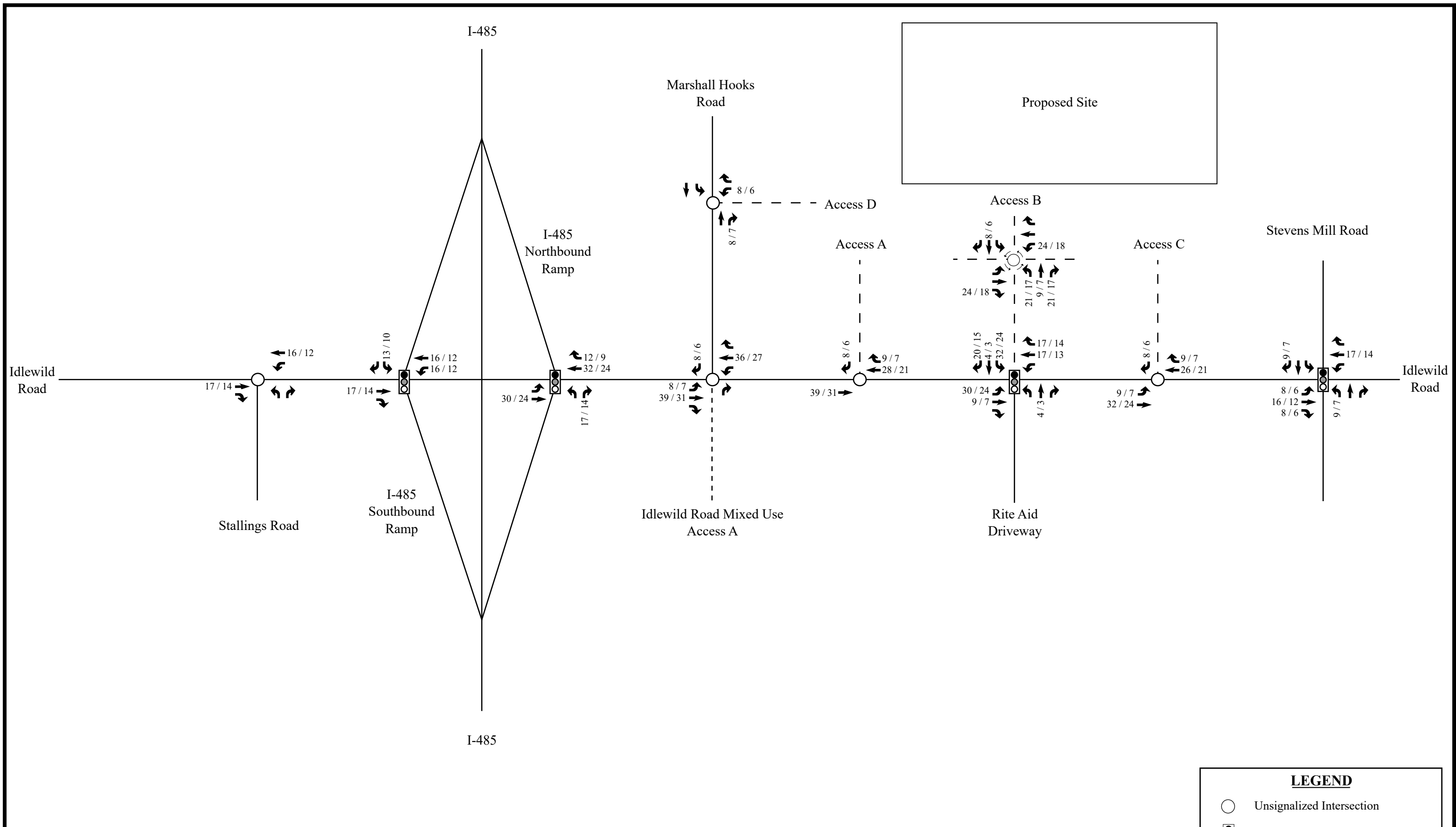
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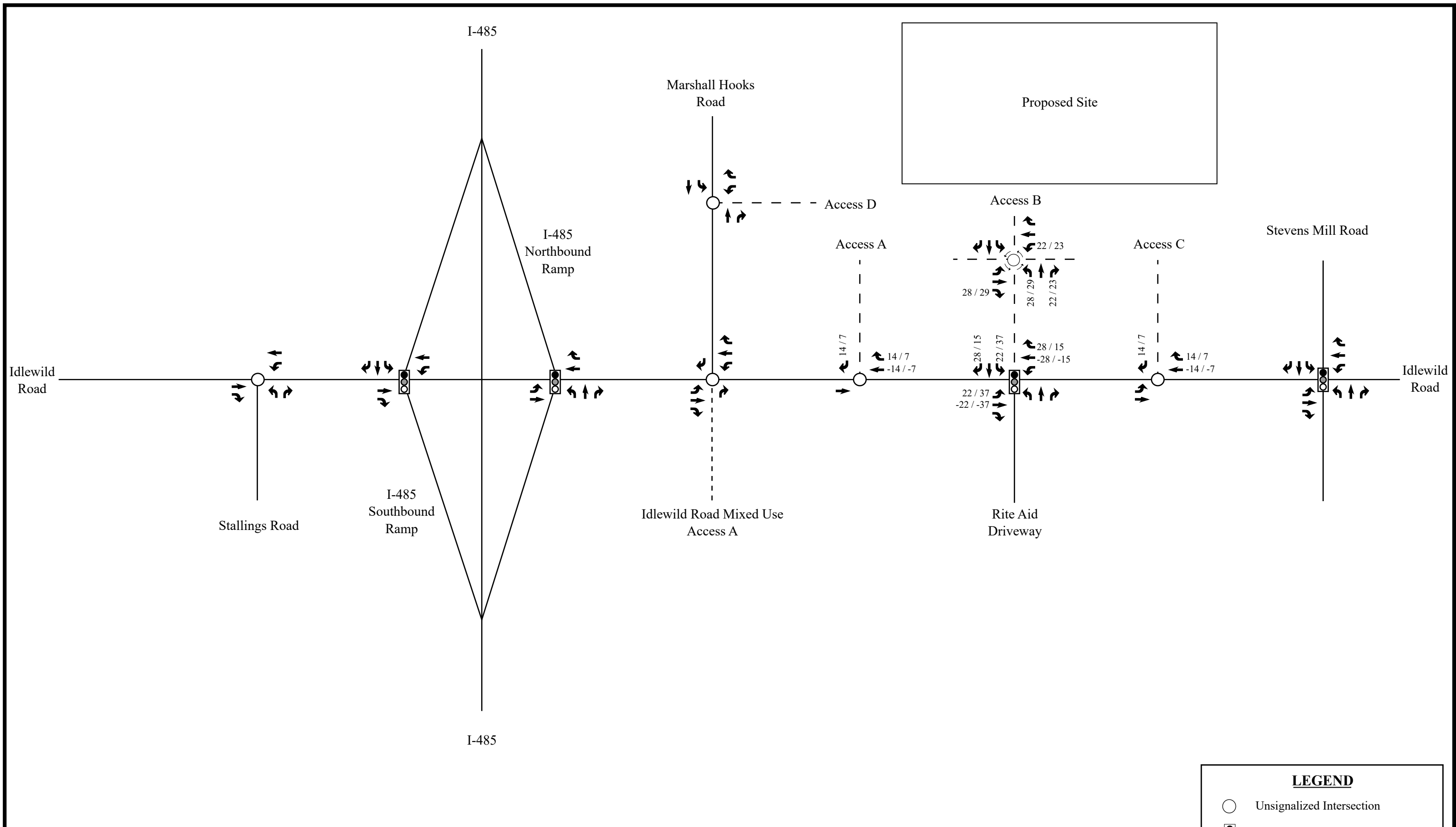
Figure 5

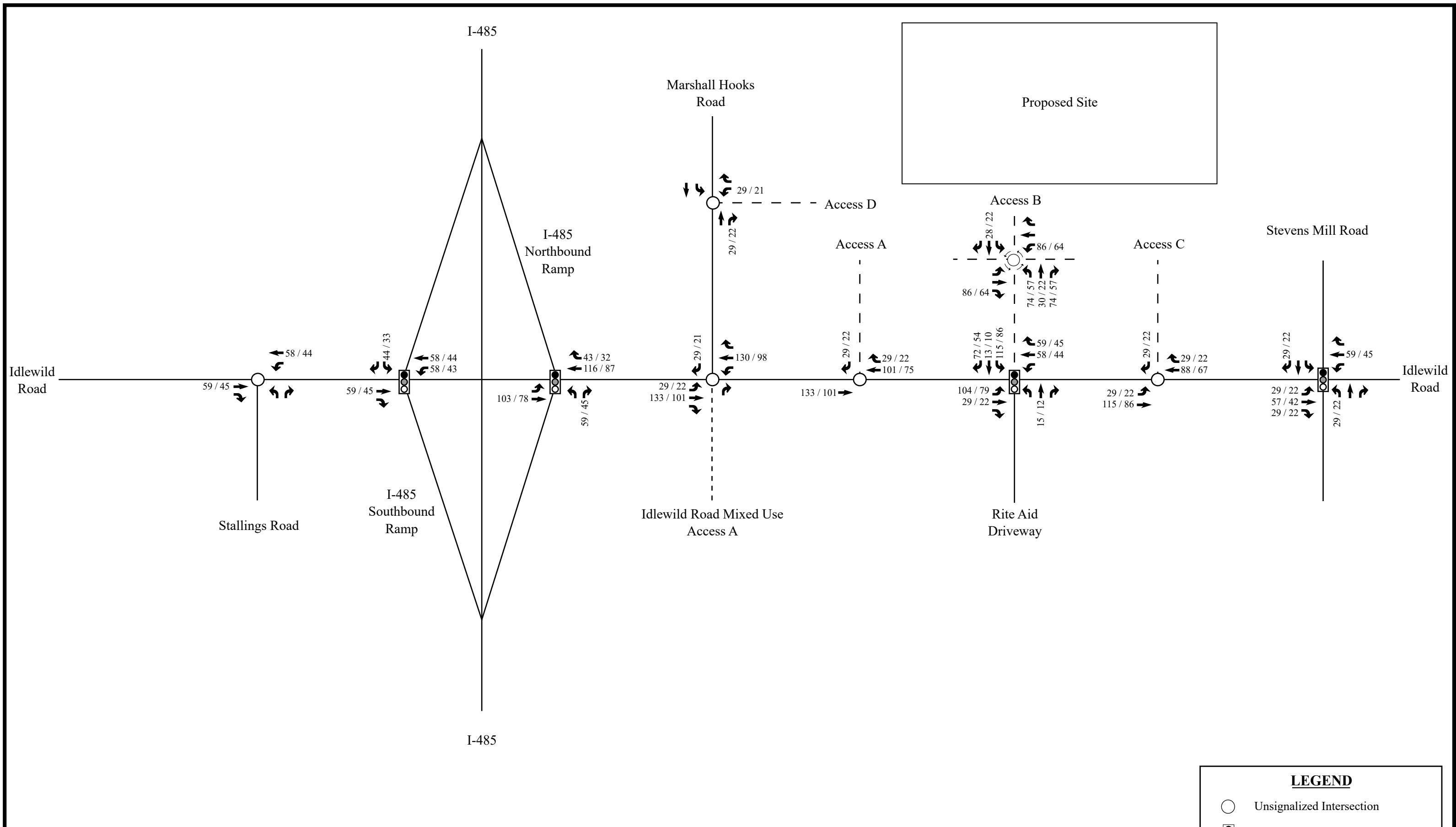


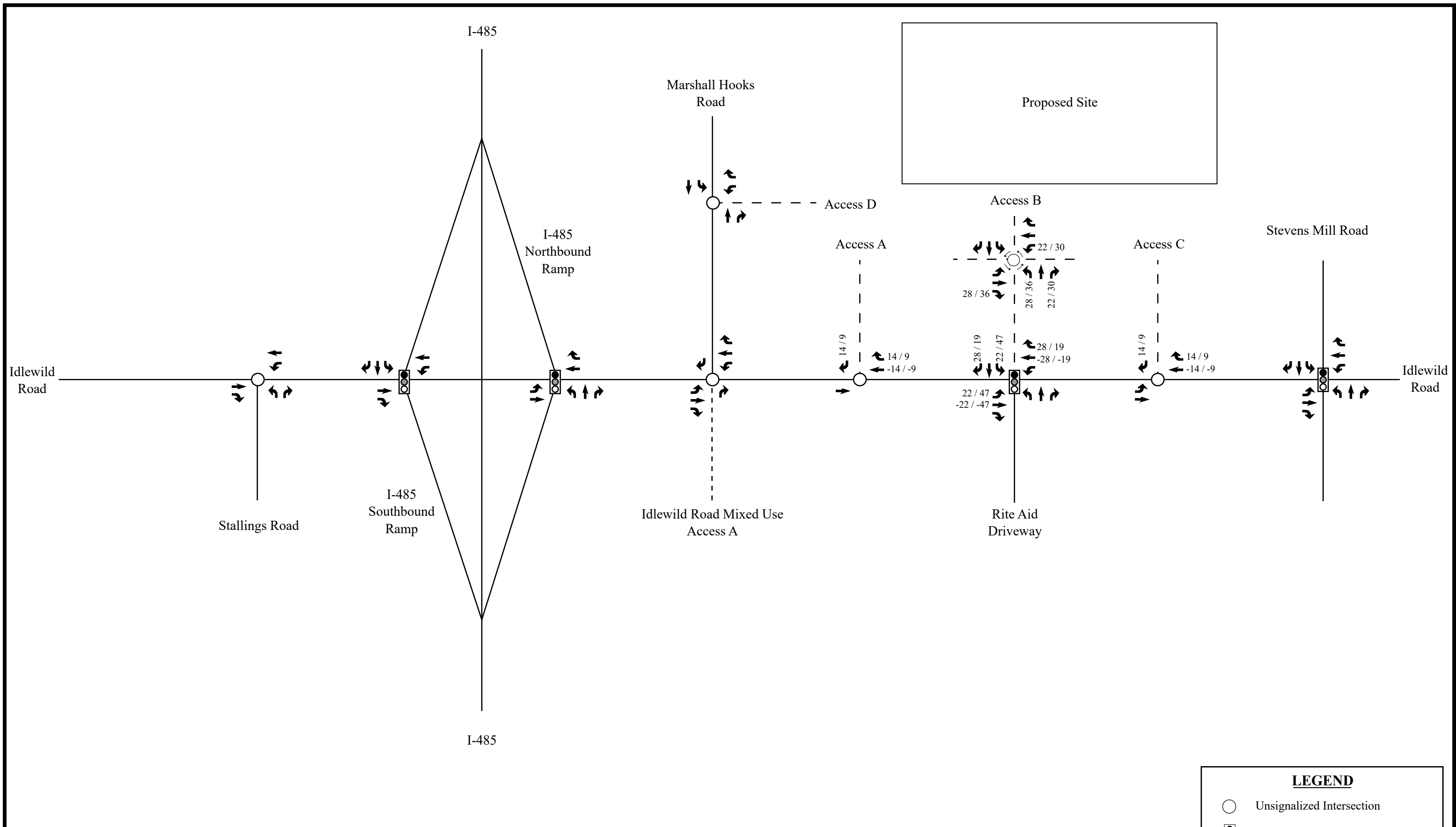
LEGEND

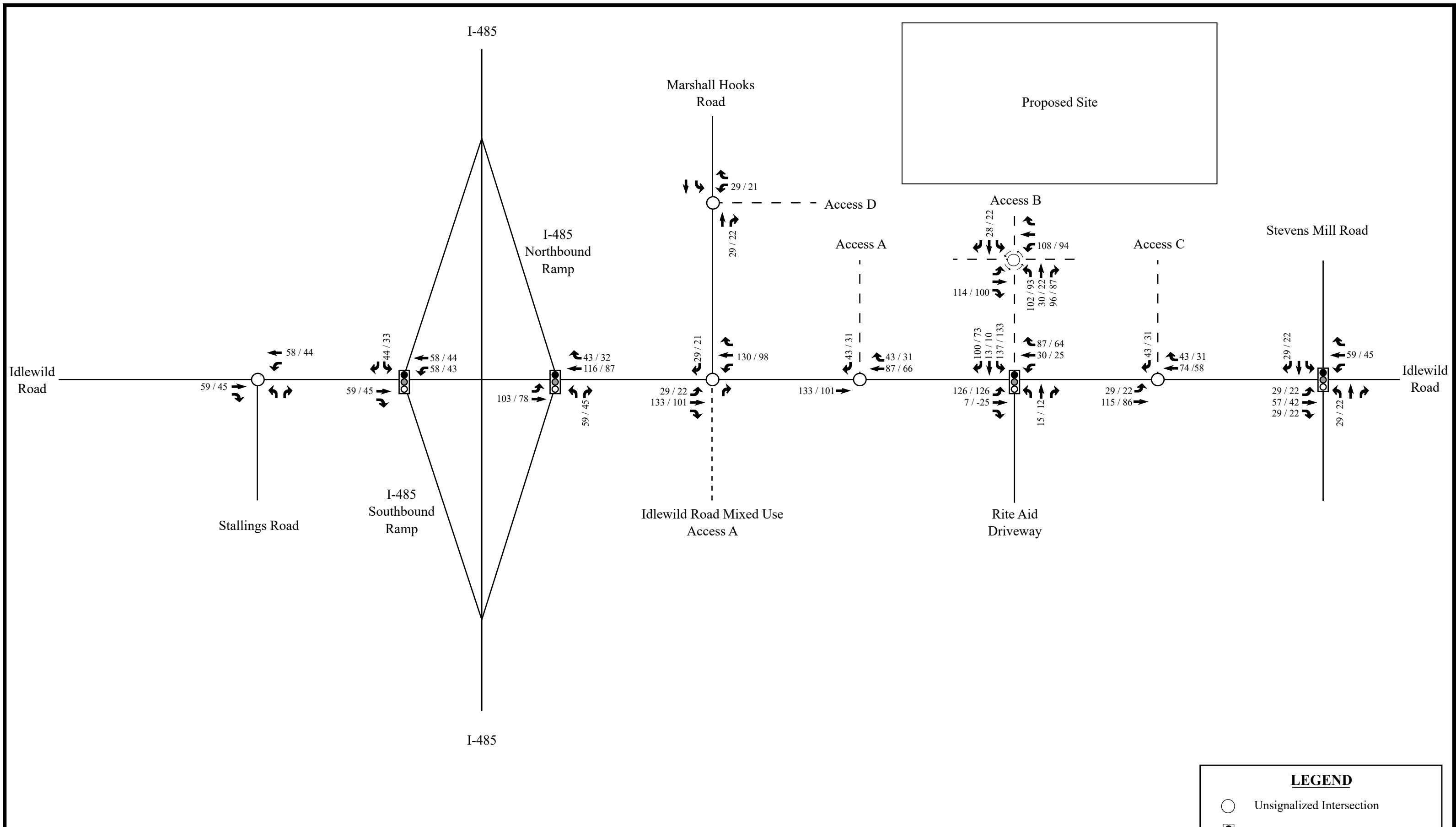
- Unsignalized Intersection
- ◫ Signalized Intersection
- ⊙ Roundabout
- X% → Entering Trip Distributions
- (Y%) → Exiting Trip Distributions
- XX% Regional Trip Distribution











LEGEND

- Unsignalized Intersection
- ◫ Signalized Intersection
- ⦿ Roundabout
- X/Y ➔ AM / PM Peak Hour Traffic Volume

Moving forward.



RAMEY KEMP ASSOCIATES

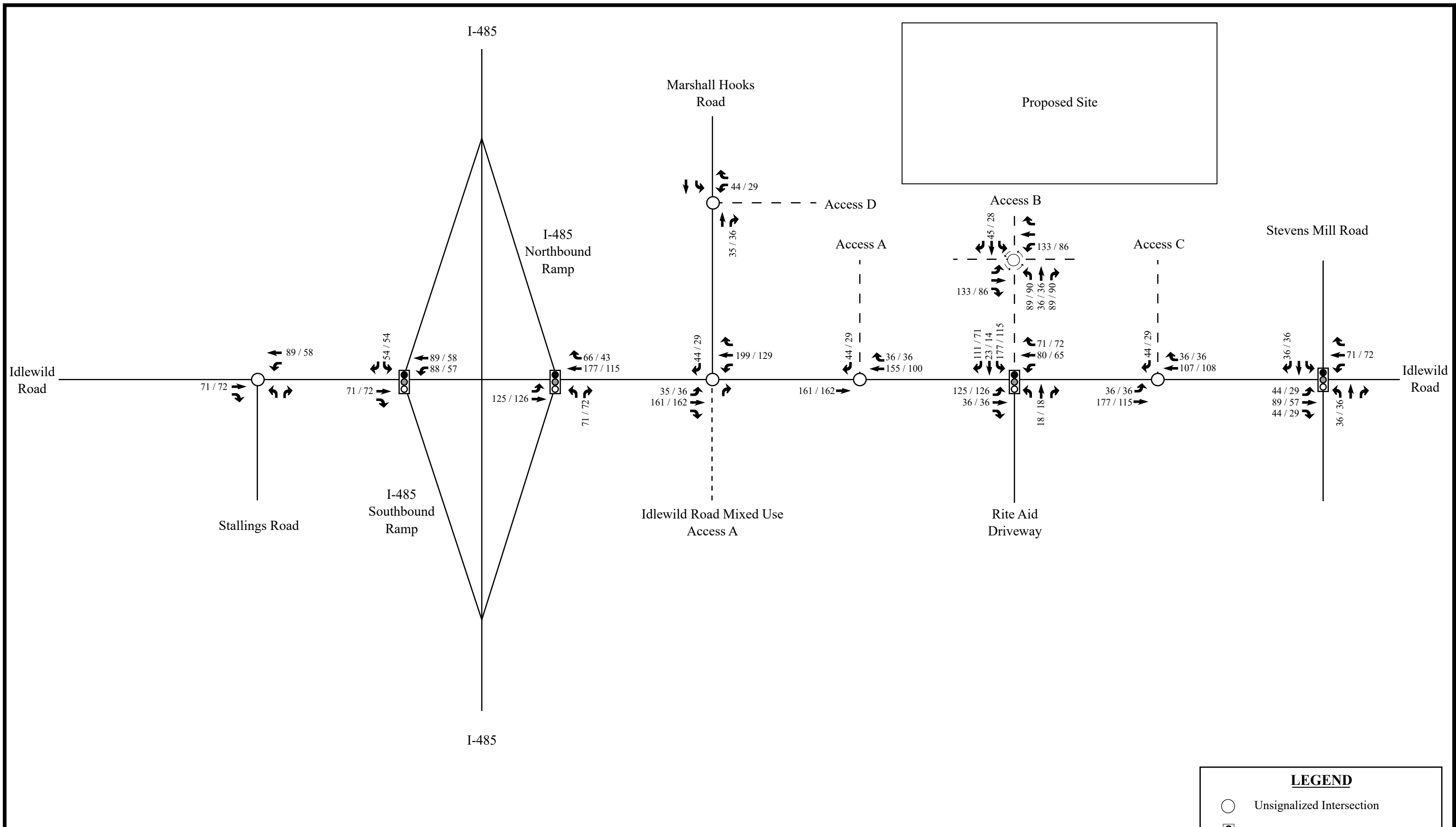
Stinson Village
Stallings, NC

Proposed Site - Phase 1
(with gas station)
Total Trip Assignment

Scale: Not to Scale

Figure 11





LEGEND

- Unsignalized Intersection
- ◫ Signalized Intersection
- ⦿ Roundabout
- X / Y ➔ AM / PM Peak Hour Traffic Volume

Moving forward.



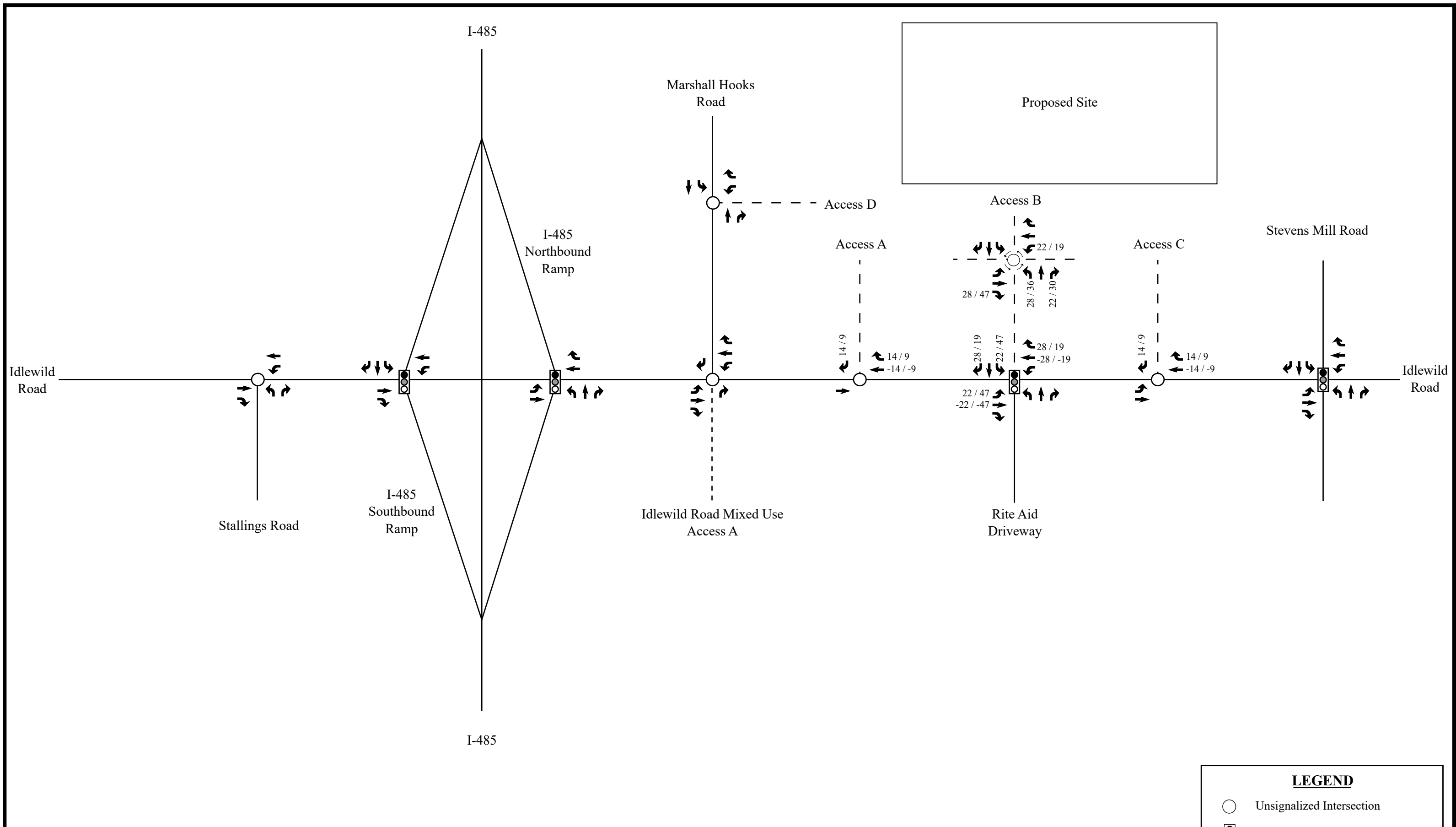
RAMEY KEMP ASSOCIATES

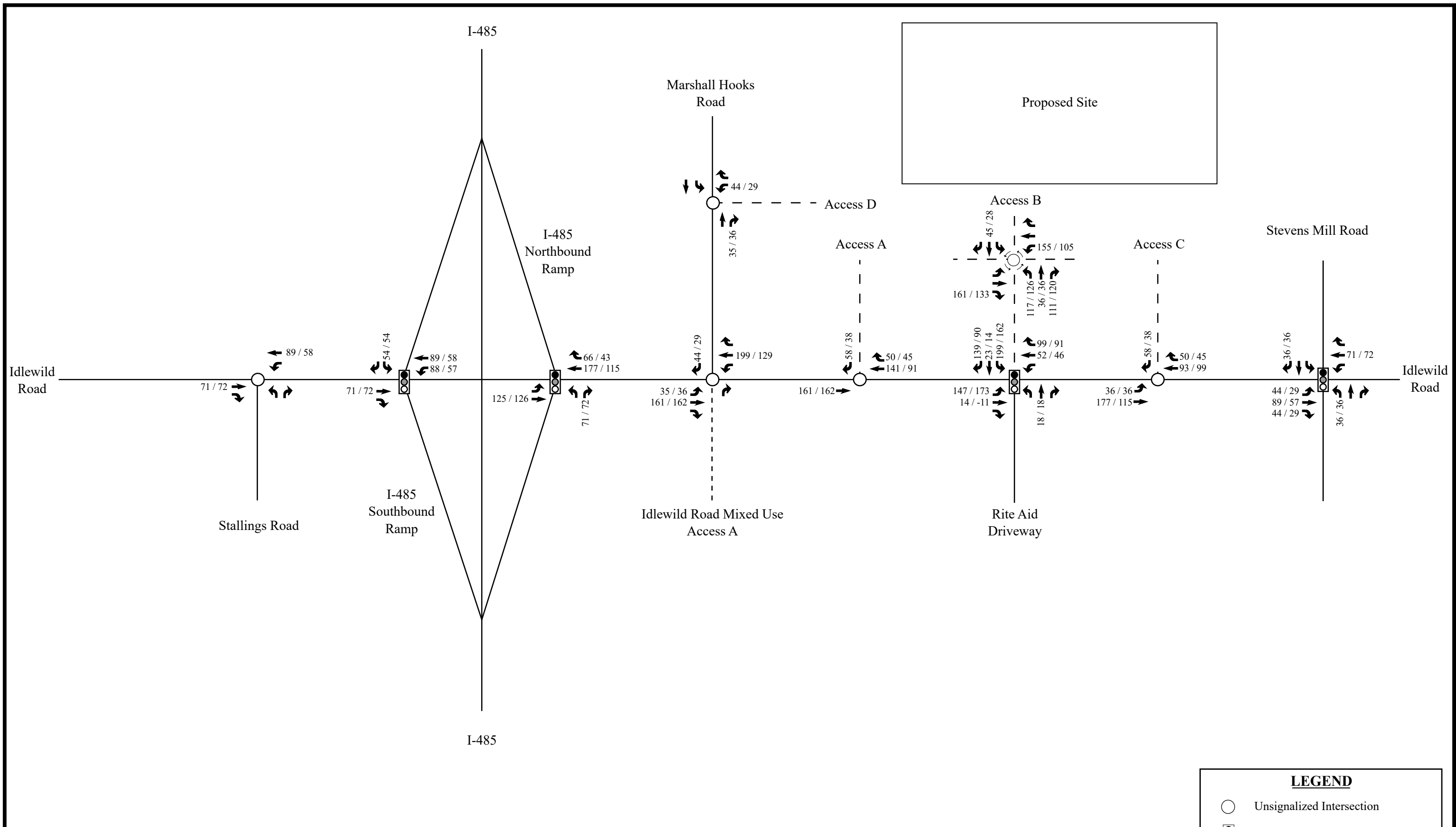
Stinson Village
Stallings, NC

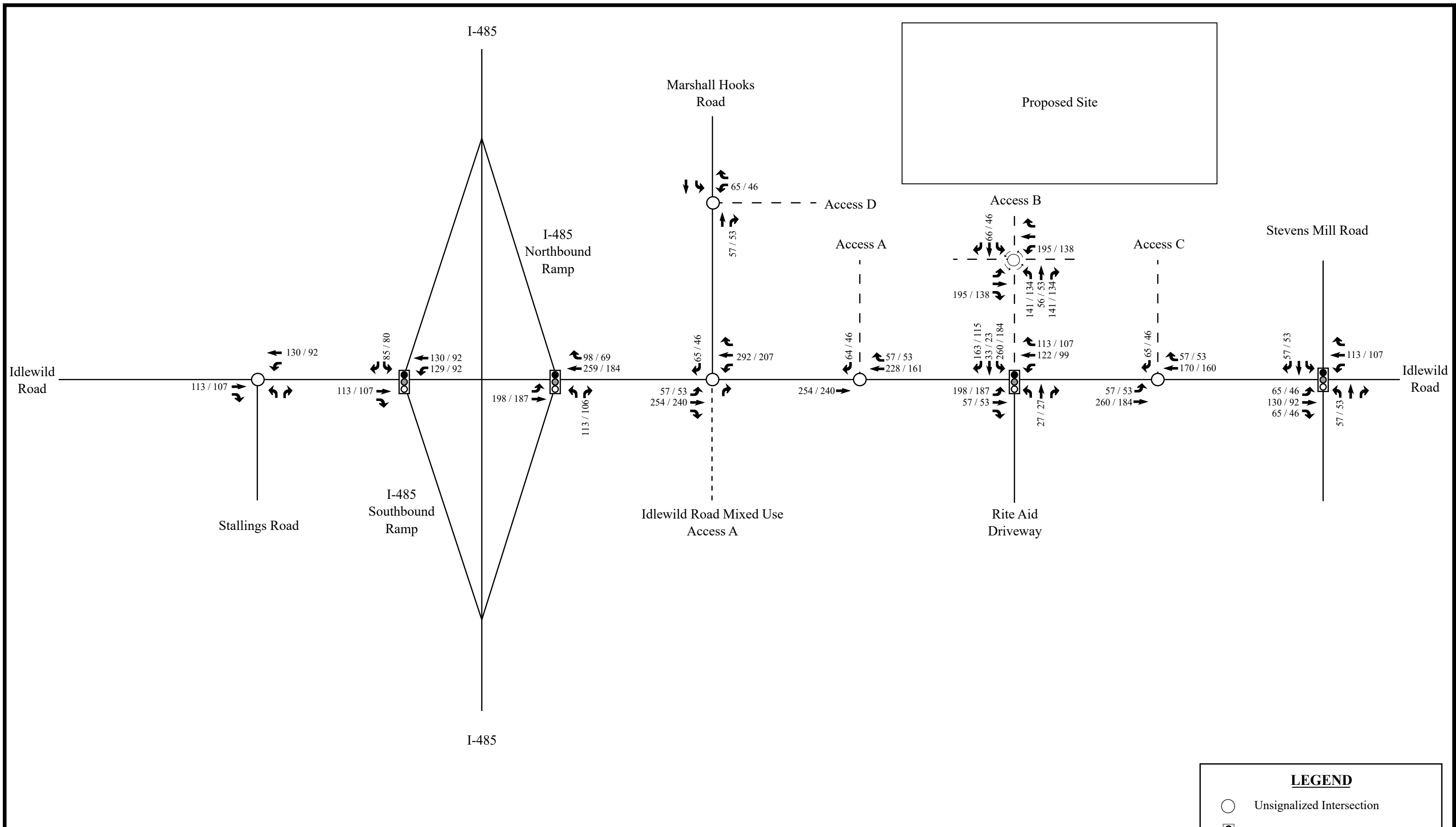
Proposed Site - Full Build
(without gas station)
Primary Trip Assignment

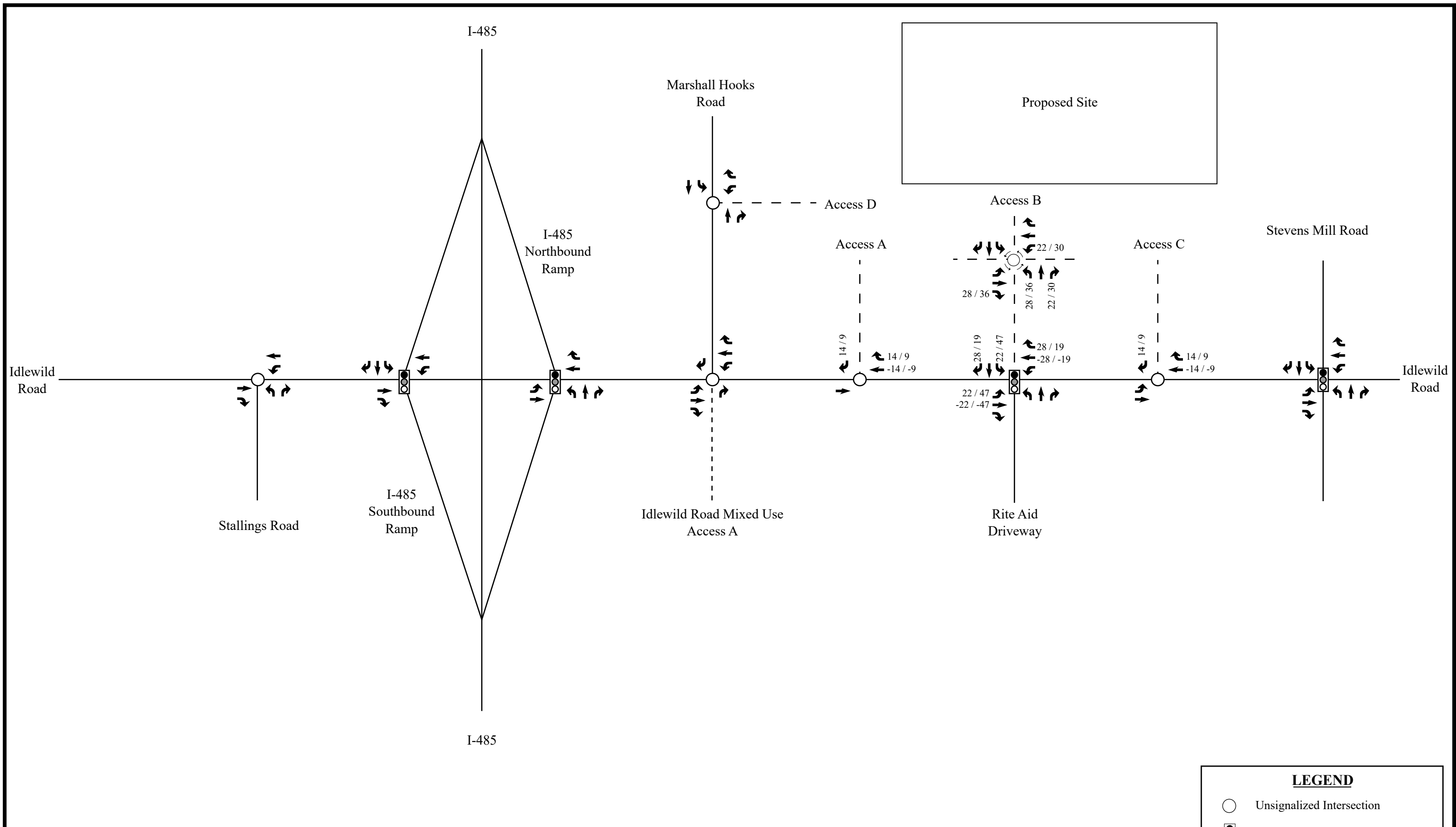
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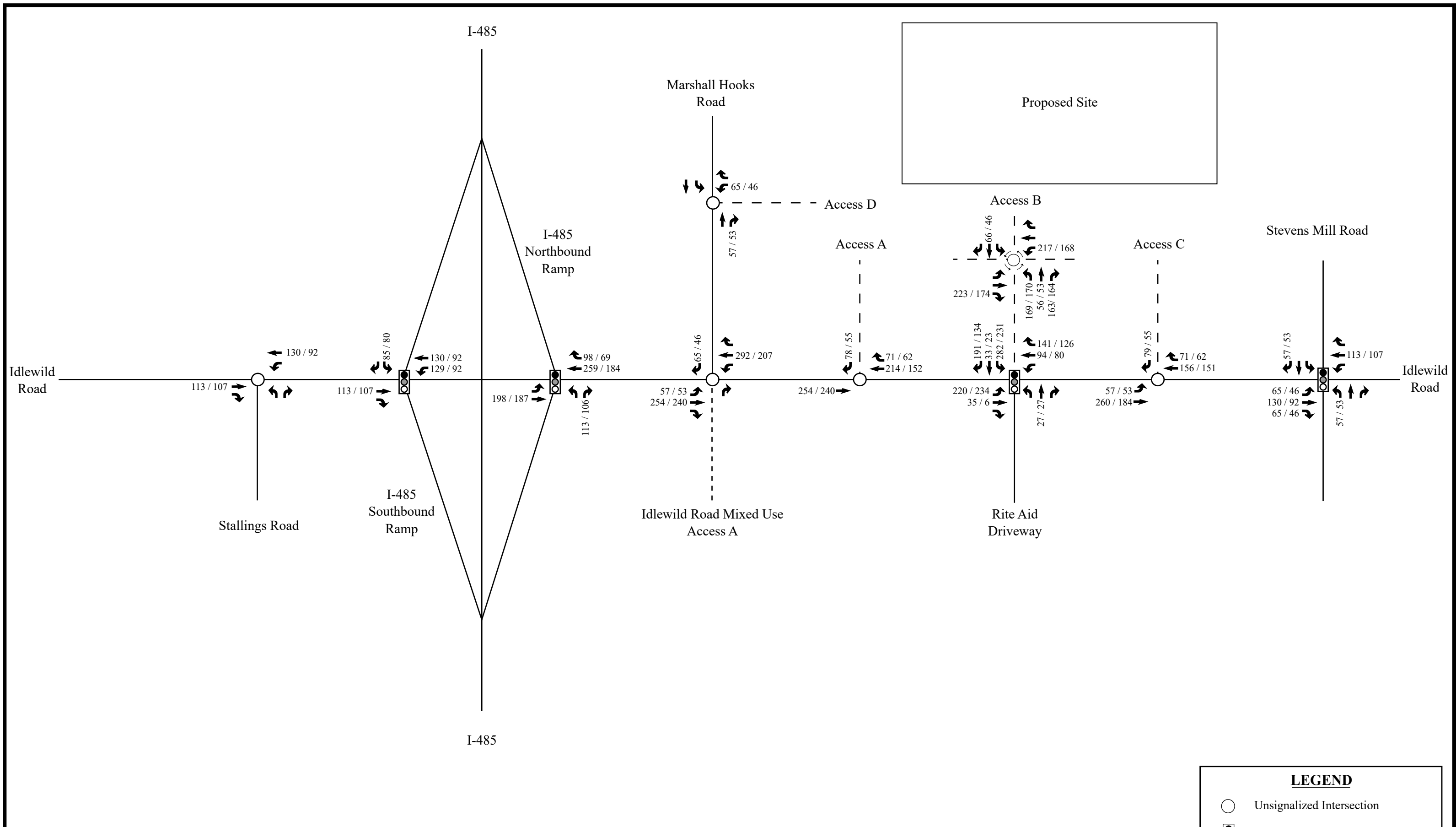
Figure 12











4. TRAFFIC ANALYSIS

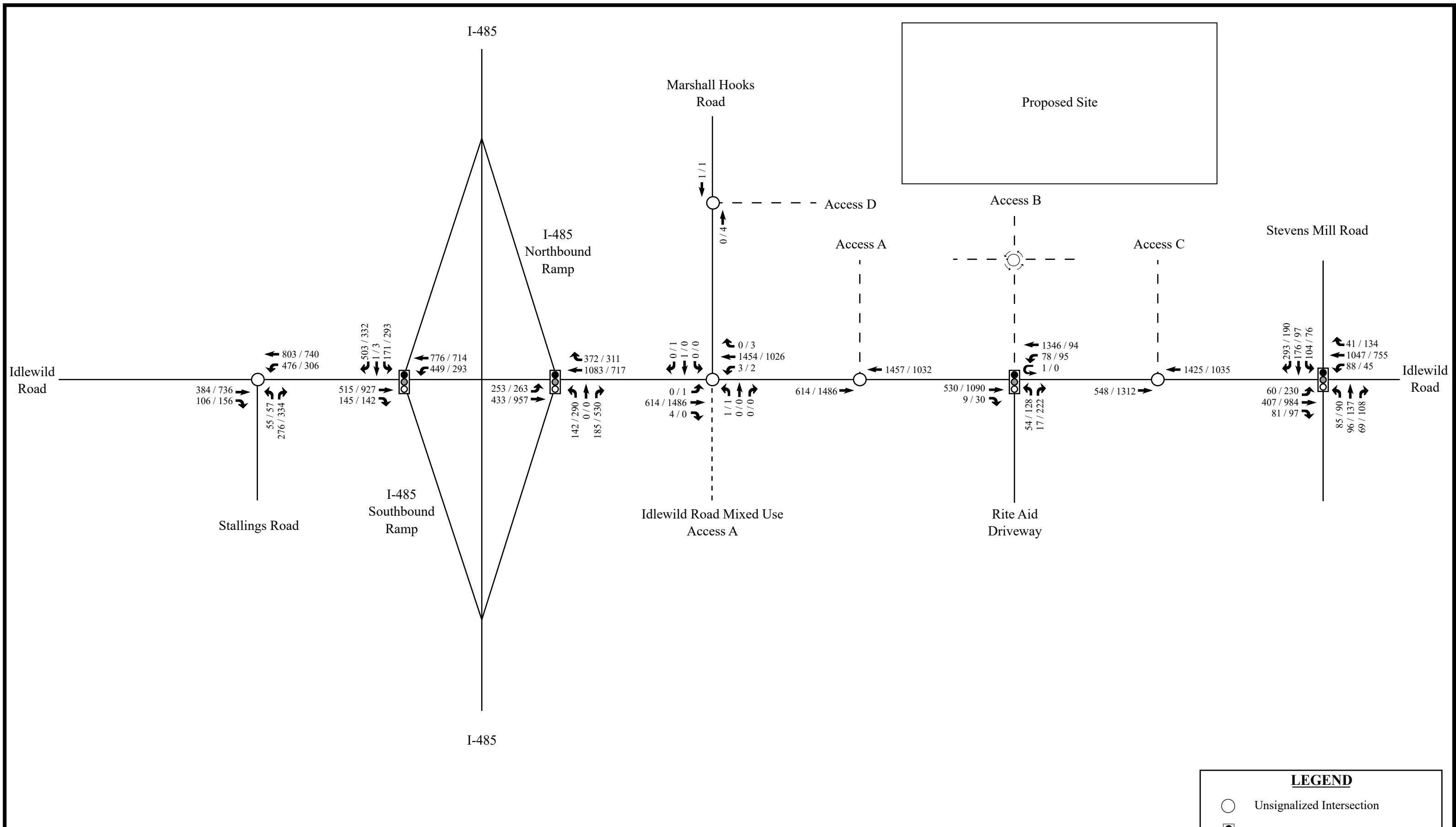
4.1. Traffic Analysis Scenarios

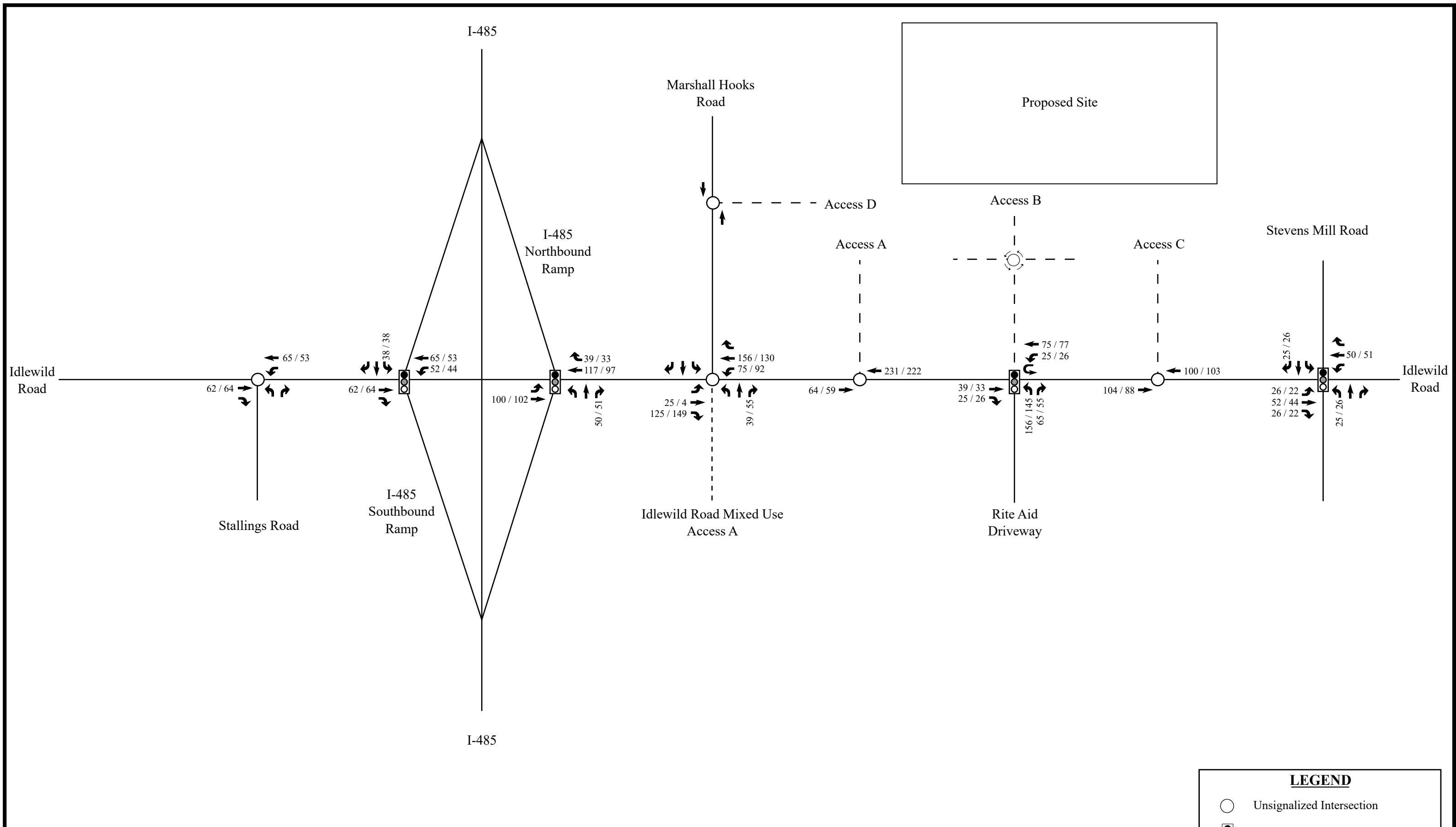
Several scenarios were analyzed using traffic analysis software, Synchro 10. Traffic operations during the AM and PM peak hours were modeled for each scenario. The results of each scenario were compared in order to determine impacts from background traffic growth and the proposed development. The following scenarios were modeled:

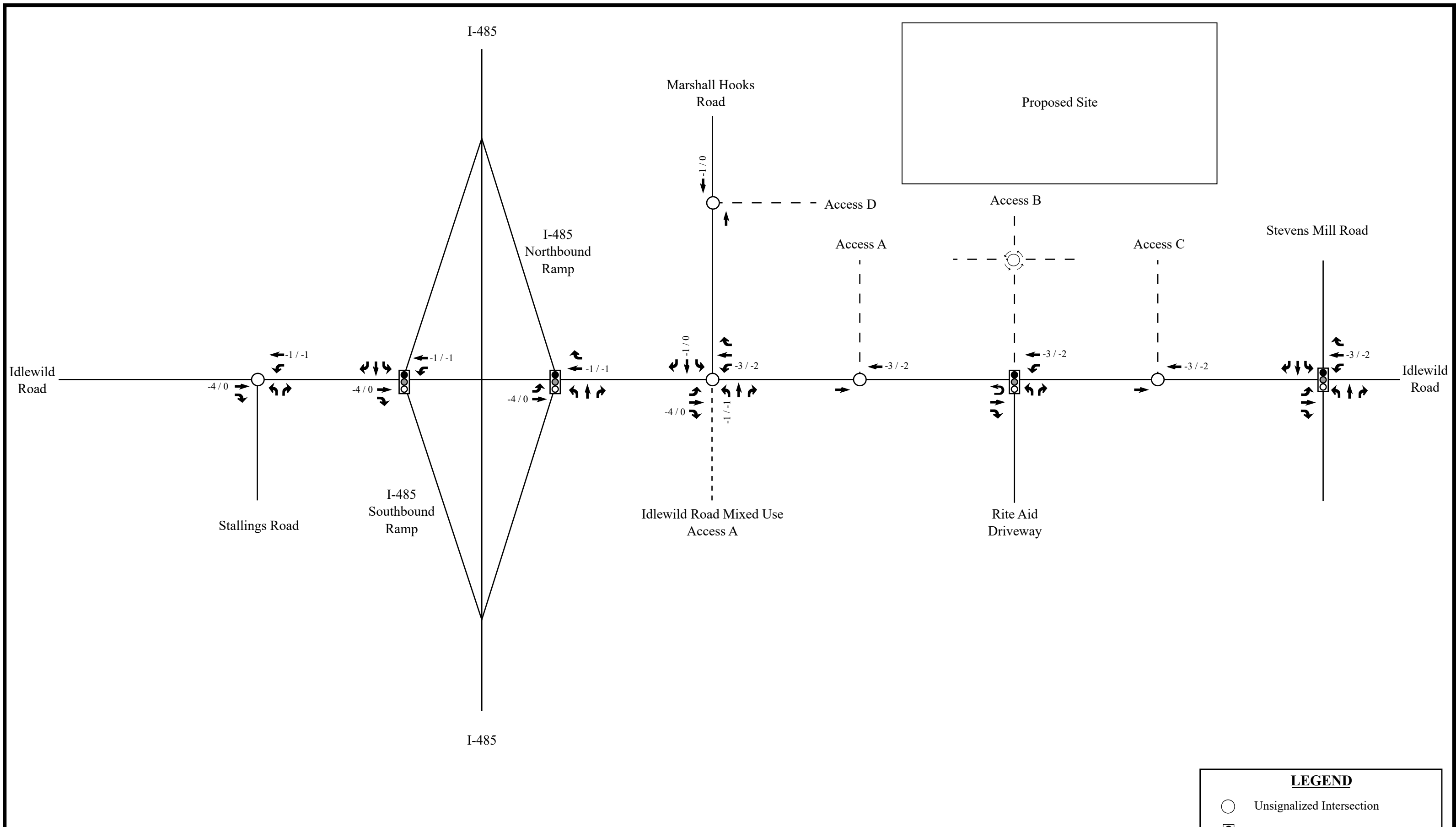
- 2019 Existing
- 2022 No-Build
- 2022 Build Phase 1 (without gas station)
- 2022 Build Phase 1 (with gas station)
- 2023 No-Build
- 2023 Full Build (without gas station)
- 2023 Full Build (with gas station)

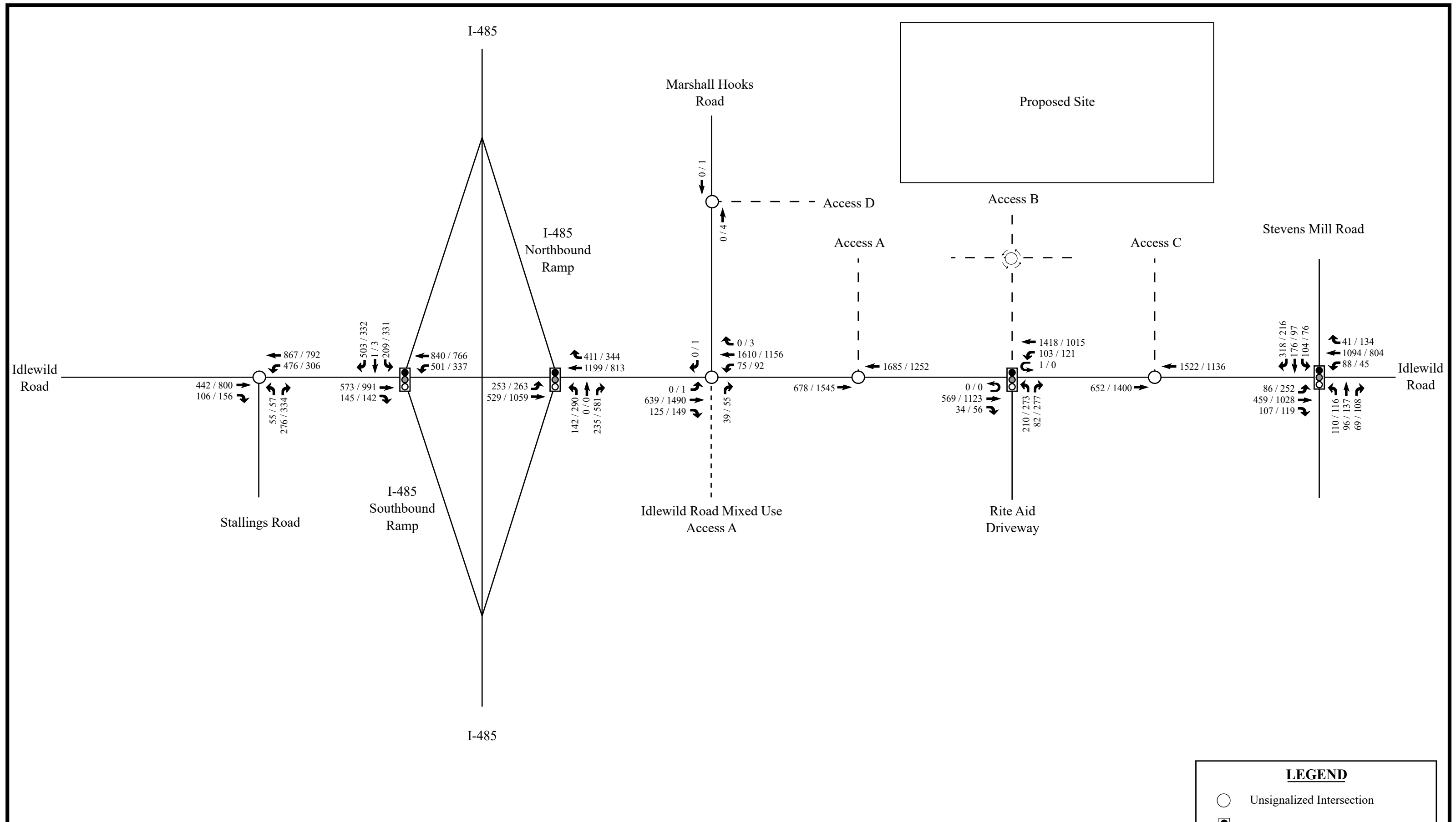
The 2019 Existing scenario included the traffic characteristics that currently exist in the study area. Existing peak hour traffic volumes were used from the intersection counts (Figure 4). Existing signal timing data was obtained from NCDOT and referenced in all traffic models. Refer to Appendix D for the signal timing data. Congestion Management guidelines recommend a minimum cycle length of 120 seconds for signals with four or more phases. No changes to the existing lane configurations were made. Right turns on red were prohibited.

The 2022 No-Build scenario was analyzed to determine the expected future traffic operations. Existing peak hour traffic counts were projected to the year 2022 using a compounded growth rate of 2.5% per year. Refer to Figure 18 for the 2022 projected peak hour traffic volumes. The total adjacent development trips, represented in Figure 19, were added to the network in the 2022 No-Build scenario. The traffic volumes entering/exiting Boyd Funderburk Road were removed and the intersection was changed from full access to a directional crossover. Figure 20 illustrates the traffic volume adjustments that were made. The adjustment described (Figure 20) was then added to the 2022 projected peak hour traffic volumes (Figure 18) to determine the 2022 No-Build peak hour traffic volumes shown in Figure 21. Roadway improvements being done by the Idlewild Road Mixed Use development were included. The splits and offsets at the signalized







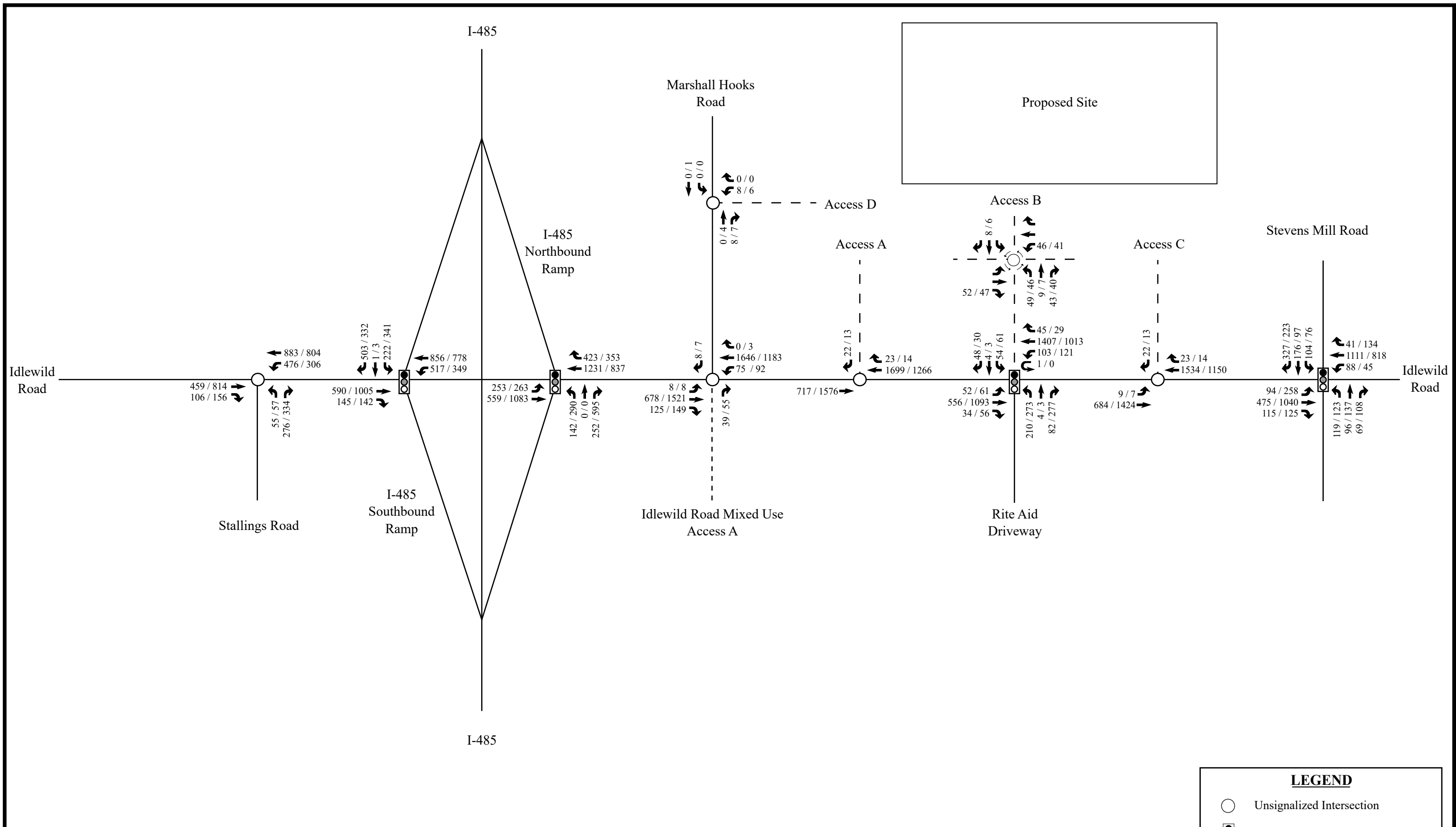


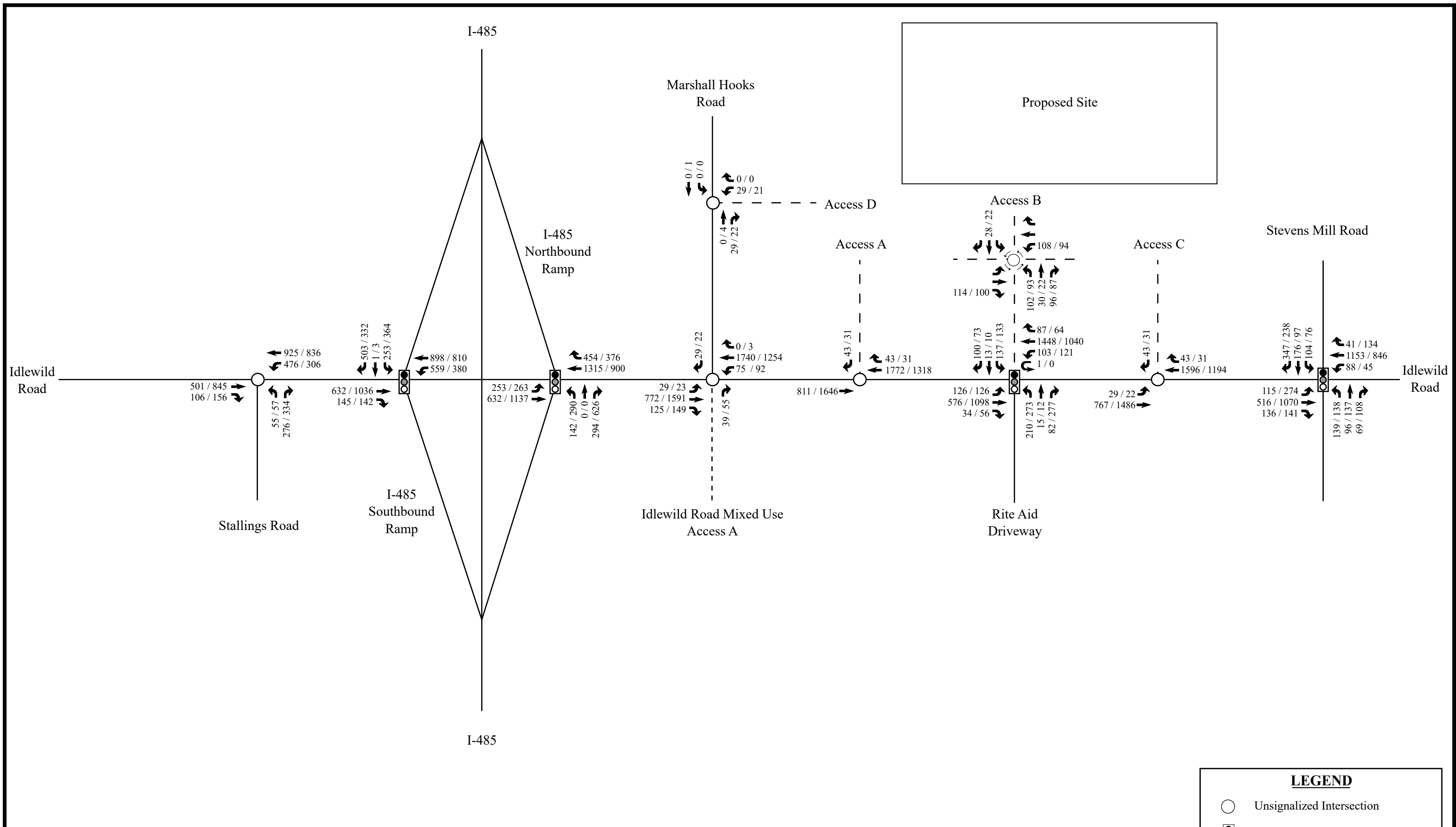
intersections were optimized. Right turns on red were prohibited. Congestion Management guidelines recommend all signalized left turn movements be modeled with protected only phasing.

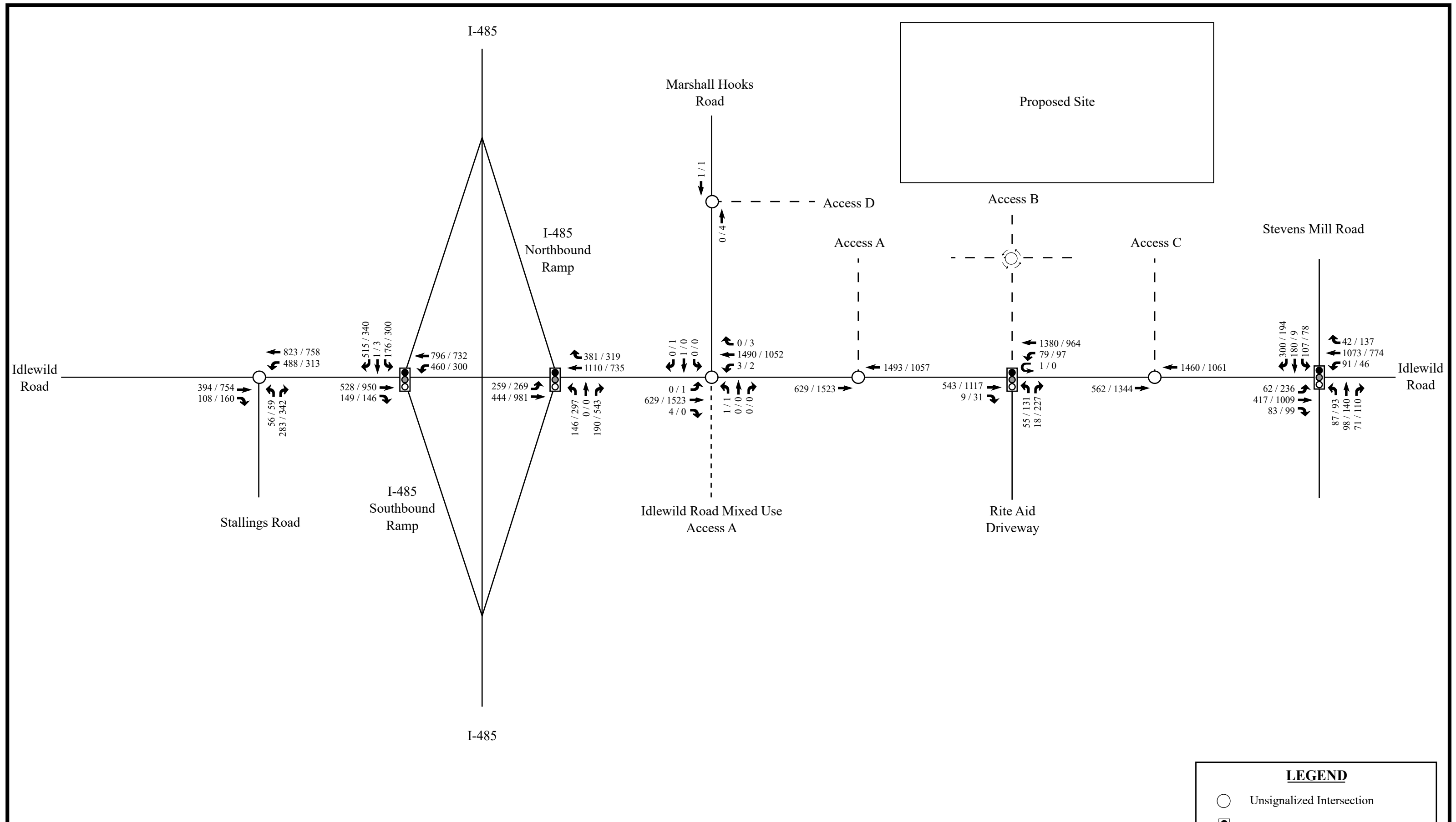
The 2022 Build Phase 1 (without gas station) scenario was compared to the 2022 No-Build scenario to determine expected impacts caused by the proposed development. This scenario included the same assumptions as the 2022 No-Build scenario. The trips expected to be generated by 2022 Build Phase 1 (without gas station) of the proposed development (Figure 8) were added to the 2022 No-Build peak hour volumes (Figure 21) to determine the 2022 Build Phase 1 (without gas station) peak hour traffic volumes. Refer to Figure 22 for the 2022 Build Phase 1 (without gas station) peak hour traffic volumes. The splits and offsets at the signalized intersections were optimized. The proposed site driveways were added to the traffic models.

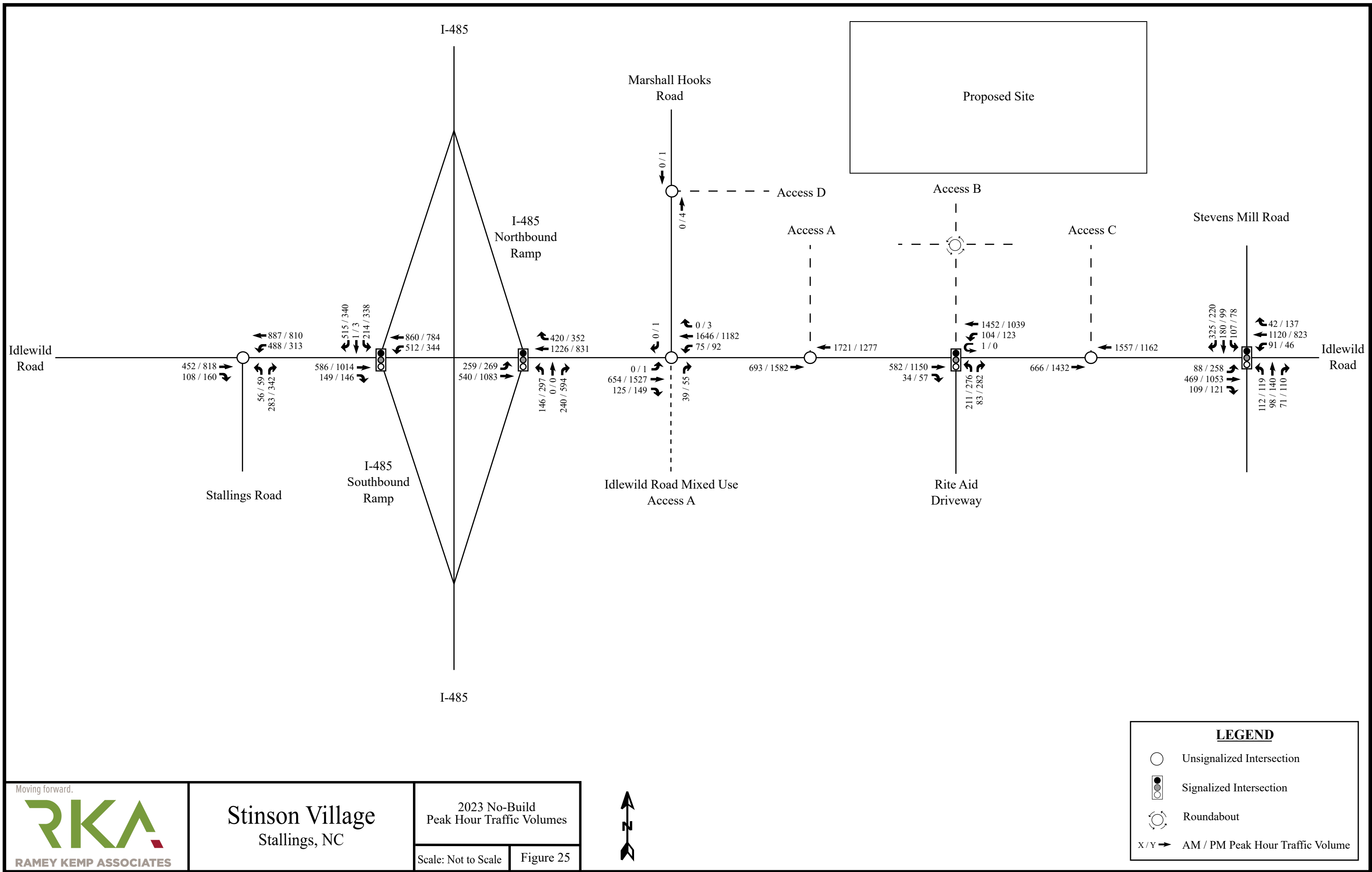
The 2022 Build Phase 1 (with gas station) scenario was compared to the 2022 No-Build scenario to determine expected impacts caused by the proposed development. This scenario included the same assumptions as the 2022 No-Build scenario. The trips expected to be generated by 2022 Build Phase 1 (with gas station) of the proposed development (Figure 11) were added to the 2022 No-Build peak hour volumes (Figure 21) to determine the 2022 Build Phase 1 (with gas station) peak hour traffic volumes. Refer to Figure 23 for the 2022 Build Phase 1 (with gas station) peak hour traffic volumes. The splits and offsets at the signalized intersections were optimized. The proposed site driveways were added to the traffic models.

The 2023 No-Build scenario was analyzed to determine the expected future traffic operations. Existing peak hour traffic counts were projected to the year 2023 using a compounded growth rate of 2.5% per year. Refer to Figure 24 for the 2023 projected peak hour traffic volumes. The same assumptions as the 2022 No-Build scenario were used. Figure 25 depicts the 2023 No-Build peak hour traffic volumes using these assumptions. The splits and offsets at the signalized intersections were optimized. Right turns on red were prohibited. Congestion Management guidelines recommend all signalized left turn movements be modeled with protected only phasing.









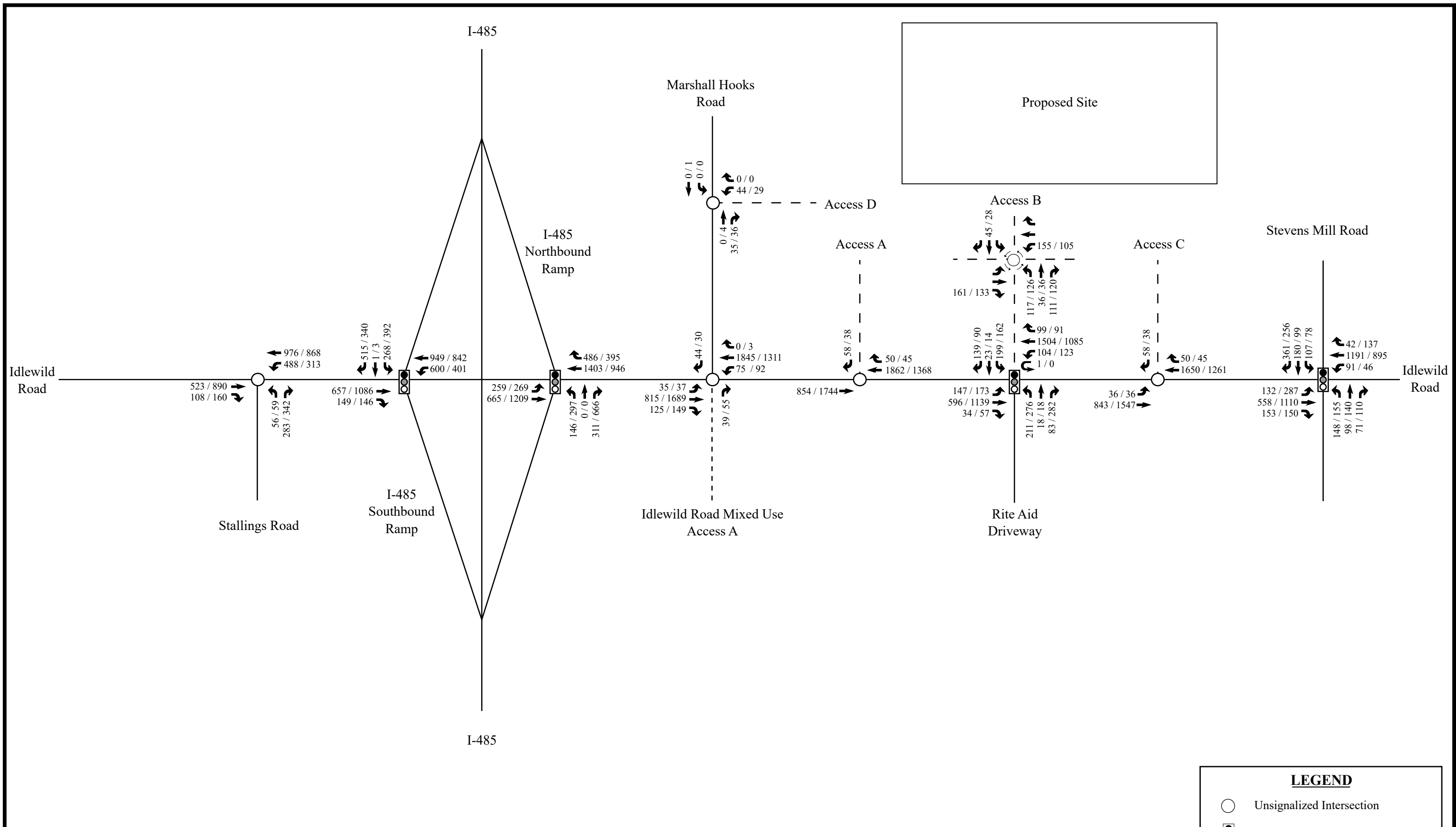
The 2023 Build (without gas station) scenario was compared to the 2023 No-Build scenario to determine expected impacts caused by the proposed site. This scenario included the same assumptions as the 2023 No-Build scenario. The trips expected to be generated by 2023 Full Build (without gas station) conditions of the proposed development (Figure 14) were added to the 2023 No-Build peak hour volumes (Figure 25) to determine the 2023 Build peak hour traffic volumes. Refer to Figure 26 for the 2023 Full Build (without gas station) peak hour traffic volumes. The splits and offsets at the signalized intersections were optimized.

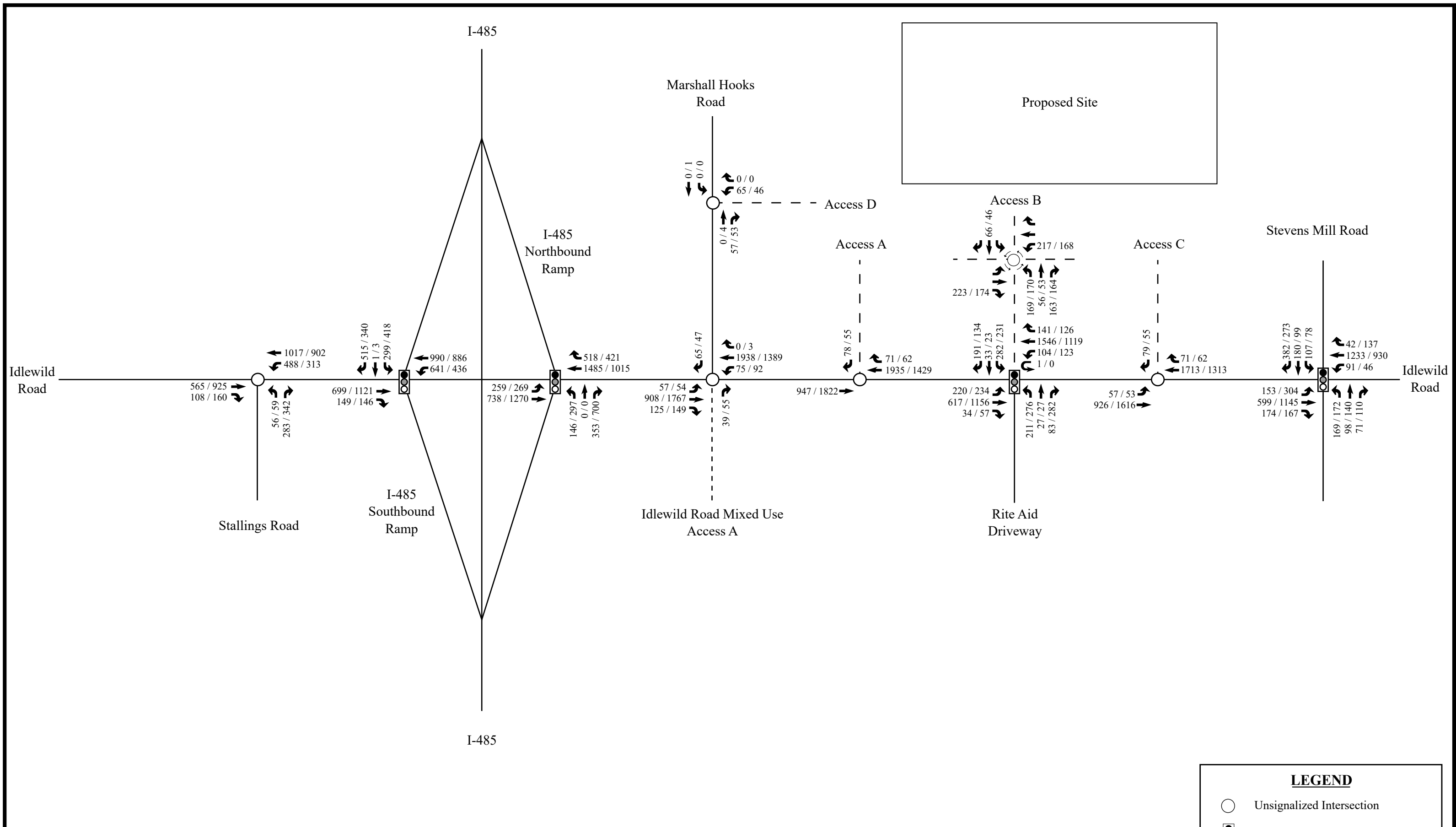
The 2023 Build (with gas station) scenario was compared to the 2023 No-Build scenario to determine expected impacts caused by the proposed site. This scenario included the same assumptions as the 2023 No-Build scenario. The trips expected to be generated by 2023 Full Build (without gas station) conditions of the proposed development (Figure 17) were added to the 2023 No-Build peak hour volumes (Figure 25) to determine the 2023 Build peak hour traffic volumes. Refer to Figure 27 for the 2023 Full Build (without gas station) peak hour traffic volumes. The splits and offsets at the signalized intersections were optimized.

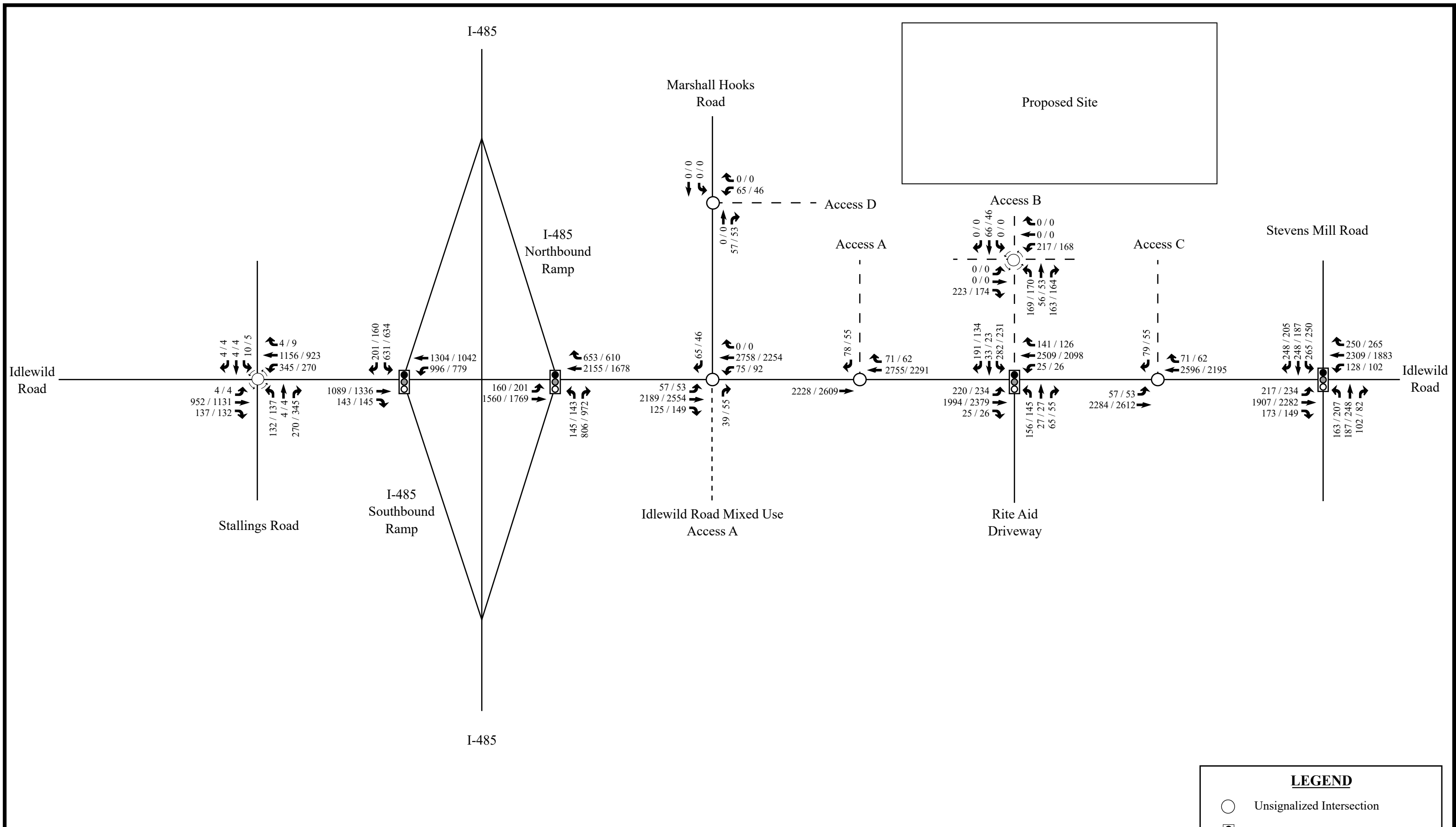
The 2040 Build scenario included improvements and forecasted traffic volumes from TIP U-4913. The forecasted volumes included 50% of the Small Area Plan developed for U-4913. The high trip generations of the proposed site and the adjacent development included in the study were assumed to account for the volumes generated by the Small Area Plan and thus the Small Area Plan trips were removed from the traffic volumes. The adjacent development trips and the proposed site trips under full build (with gas station) conditions was added to the traffic volumes to determine the 2040 Build peak hour traffic volumes shown in Figure 28. Small Area Plan information and supporting data can be found in Appendix E.

4.2. Traffic Analysis Procedure

All study intersections (both unsignalized and signalized) were analyzed using the methodology outlined in the Highway Capacity Manual (HCM) published by the Transportation Research Board. A computer software package, Synchro and SimTraffic (Version 10), was used to complete the analyses for all the study area intersections. Synchro was developed by Trafficware Corporation and allows the user to input data into the Synchro software and calculate the output







LEGEND

- Unsignalized Intersection
- ◫ Signalized Intersection
- ⦿ Roundabout
- X/Y → AM / PM Peak Hour Traffic Volume

Moving forward.



RAMEY KEMP ASSOCIATES

Stinson Village
Stallings, NC

2040 Full Build
Peak Hour Traffic Volumes

Scale: Not to Scale Figure 28



based on methodologies in the HCM. SimTraffic creates a traffic simulation model from the Synchro inputs. SimTraffic was used in this study to determine expected queue lengths.

Analysis results for signalized intersections provide delay and level of service (LOS) for all movements and approaches. The overall intersection delay and LOS is also provided. The capacity analysis for an unsignalized intersection does not provide an overall LOS for the intersection, rather a LOS for movements and/or approaches that have a conflicting movement. The HCM defines capacity as “the maximum hourly rate at which persons or vehicles can reasonably be expected to traverse a point or uniform section of a lane or roadway during a given time period under prevailing roadway, traffic, and control conditions”. LOS is a term used to represent different driving conditions, and is defined as a “qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers”. LOS varies from Level “A” representing free flow, to Level “F” where greater vehicle delays are evident.

Refer to Table 6 for HCM levels of service and related average control delay per vehicle for both signalized and unsignalized intersections. Control delay as defined by the HCM includes “initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay”. As shown in Table 6, an average control delay of 40 seconds at a signalized intersection results in a LOS D.

**TABLE 6
HIGHWAY CAPACITY MANUAL - LEVELS OF SERVICE AND DELAY**

UNSIGNALIZED INTERSECTION		SIGNALIZED INTERSECTION	
LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)	LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)
A	0-10	A	0-10
B	10-15	B	10-20
C	15-25	C	20-35
D	25-35	D	35-55
E	35-50	E	55-80
F	>50	F	>80

4.3. Mitigation Requirements

NCDOT has guidelines for determining when improvements are needed by the developer. The District Engineer is responsible for the final determination of the improvements. NCDOT typically requires mitigation to be identified when developments are expected to impact the traffic operations as described below:

- Overall intersection or intersection approach delay increases by 25% or more.
- LOS degrades by at least one level
- LOS is F
- Synchro 95th or SimTraffic maximum queue results are greater than the existing turn lane storage length

4.4. Capacity and Level of Service at Study Intersections

4.4.1. Idlewild Road and Stallings Road

The intersection of Idlewild Road and Stallings Road was analyzed as a three-leg unsignalized intersection with existing lane configurations. Table 7 summarizes the capacity analysis results. Impacts requiring mitigation are highlighted in yellow. Refer to Appendix F for the Synchro reports for this intersection. All SimTraffic reports can be found in Appendix P.

High delays and long queues are expected during the 2022 No-Build scenario; focused on the northbound Stallings Road stop controlled approach. There are not enough gaps in traffic on Idlewild Road to allow vehicles to turn from Stallings Road. The proposed development would technically have impacts at this intersection, but this is mostly due to the poor traffic operations expected without any trips from the proposed development. Adding turn lanes and/or through lanes at this intersection were considered, but did not resolve the poor traffic operations. Furthermore, adding lanes on Idlewild Road may make it even more difficult to turn from Stallings Road because of the additional lanes that would need to be crossed. Restricting the left turns from Stallings Road is not recommended because there is no appropriate u-turn location to the east.

NCDOT TIP U-4913 would realign Stallings Road and construct a roundabout. Improvements at the existing intersection would likely have to be removed to construct the U-4913 improvements. The improvements implemented would allow the intersection and all approaches to operate at an acceptable LOS during both peak hours. No additional improvements by the developer are recommended at this intersection.

TABLE 7
ANALYSIS SUMMARY OF
IDLEWILD ROAD AND STALLINGS ROAD

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2019 Existing	EB WB ¹ NB ²	1 TH-RT 1 LT, 1 TH 1 LT-RT	- B (11.3) F (897.1)	NA ³	- B (13.4) F (1029.3)	NA ³
2022 No-Build	EB WB ¹ NB ²	1 TH-RT 1 LT, 1 TH 1 LT-RT	- B (13.1) F (2032.3)	NA ³	- C (16.2) F (2230.7)	NA ³
2022 Build Phase 1 without Gas Station	EB WB ¹ NB ²	1 TH-RT 1 LT, 1 TH 1 LT-RT	- B (13.4) F (2221.8)	NA ³	- C (16.6) F (2266.2)	NA ³
2022 Build Phase 1 with Gas Station	EB WB ¹ NB ²	1 TH-RT 1 LT, 1 TH 1 LT-RT	- B (14.2) F (2704.3)	NA ³	- C (17.3) F (2634.4)	NA ³
2023 No-Build	EB WB ¹ NB ²	1 TH-RT 1 LT, 1 TH 1 LT-RT	- B (13.5) F (2509.3)	NA ³	- C (17.0) F (2530.3)	NA ³
2023 Full Build without Gas Station	EB WB ¹ NB ²	1 TH-RT 1 LT, 1 TH 1 LT-RT	- B (15.0) F (3490.2)	NA ³	- C (19.0) F (3634.9)	NA ³
2023 Full Build with Gas Station	EB WB ¹ NB ²	1 TH-RT 1 LT, 1 TH 1 LT-RT	- C (16.0) F (4759.7)	NA ³	- C (20.1) F (4077.4)	NA ³
2040 Build	EB WB NB SB	1 LT-TH, 1 TH-RT 1 LT-TH, 1 TH-RT 1 LT-TH, 1 RT 1 LT-TH-RT	A (10.0) A (3.5) A (9.4) A (7.7)	A (6.7)	B (10.3) A (2.9) B (12.6) A (6.3)	A (7.6)

1. Major street left-turn movement for unsignalized intersection.

2. Stop controlled approach for unsignalized intersection.

3. Overall intersection LOS is not provided for unsignalized intersections

4.4.2. Idlewild Road and I-485 Southbound Ramps

The intersection of Idlewild Road and I-485 Southbound Ramps was analyzed as a three-leg signalized intersection with existing lane configurations. Table 8 summarizes the capacity analysis results. Impacts requiring mitigation are highlighted in yellow. Refer to Appendix G for the Synchro reports for this intersection. All SimTraffic reports can be found in Appendix P.

Minimal impacts are expected during the 2022 Build Phase 1 Without Gas Station scenario. No improvements by the developer are recommended for this scenario.

The LOS and delay is expected to be impacted on the eastbound approach during the 2022 Build Phase 1 With Gas Station scenario. However, the overall intersection LOS remains at LOS D and no major impacts to queues were identified. No improvements by the developer are recommended for this scenario.

The LOS and delay is expected to be impacted on multiple approaches during the 2023 Full Build Without Gas Station scenario. Increased queues on the southbound approach are also expected. Construction of an additional southbound right turn lane would improve the eastbound approach by allowing more green time to be given to the eastbound approach. It would also improve queues on the southbound approach. The following improvements are recommended to be done by the developer for this scenario:

- Construct an additional southbound right turn lane on the I-485 Southbound Ramp. Provide 400 feet of storage and the appropriate taper.
- Lengthen the existing southbound right turn lane on the I-485 Southbound Ramp to provide 400 feet of storage and the appropriate taper.
- Modify the signal as necessary.

Additional impacts are expected during the 2023 Full Build scenarios with and without the gas station. The improvements recommended above would mitigate much of these impacts and provide acceptable overall intersection delays and LOS.

The TIP U-4913 improvements at the study intersection allow the intersection to perform at an acceptable LOS during both the 2040 Build AM and PM peak hours. No further improvements by the developer are recommended.

TABLE 8
ANALYSIS SUMMARY OF
IDLEWILD ROAD AND I-485 SOUTHBOUND RAMP

ANALYSIS SCENARIO	NODE	A P P R O A C H	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
				Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2019 Existing	2	EB WB SB	2 TH, 1 RT 1 LT, 2 TH 1 LT-TH, 1 RT	D (40.0) B (19.6) D (49.2)	C (32.7)	C (26.4) B (17.6) D (54.1)	C (29.6)
2022 No-Build	2	EB WB SB	2 TH, 1 RT 1 LT, 2 TH 1 LT-TH, 1 RT	E (61.0) C (30.3) E (60.6)	D (46.1)	D (39.5) B (19.6) E (61.8)	D (37.1)
2022 Build Phase 1 without Gas Station	2	EB WB SB	2 TH, 1 RT 1 LT, 2 TH 1 LT-TH, 1 RT	E (70.9) C (28.0) E (60.2)	D (47.4)	D (40.1) C (21.7) E (64.7)	D (38.7)
2022 Build Phase 1 with Gas Station	2	EB WB SB	2 TH, 1 RT 1 LT, 2 TH 1 LT-TH, 1 RT	F (83.8) D (36.4) E (59.4)	D (54.6)	F (82.8) B (18.3) D (51.9)	D (50.7)
2023 No-Build	2	EB WB SB	2 TH, 1 RT 1 LT, 2 TH 1 LT-TH, 1 RT	E (63.2) C (31.2) E (64.6)	D (48.1)	E (64.6) B (16.1) D (49.9)	D (42.8)
2023 Full Build without Gas Station	2	EB WB SB	2 TH, 1 RT 1 LT, 2 TH 1 LT-TH, 1 RT	F (93.4) D (46.9) E (63.0)	E (62.9)	D (51.1) C (28.4) E (71.8)	D (47.0)
2023 Full Build without Gas Station with Improvements	2	EB WB SB	2 TH, 1 RT 1 LT, 2 TH 1 LT-TH, 2 RT	D (50.4) B (13.5) E (64.1)	D (35.7)	D (47.5) C (23.7) E (66.2)	D (42.5)
2023 Full Build with Gas Station	2	EB WB SB	2 TH, 1 RT 1 LT, 2 TH 1 LT-TH, 1 RT	F (112.9) E (58.8) E (62.3)	E (73.6)	F (190.6) B (18.6) D (50.7)	F (91.2)
2023 Full Build with Gas Station with Improvements	2	EB WB SB	2 TH, 1 RT 1 LT, 2 TH 1 LT-TH, 2 RT	E (55.5) B (14.7) E (71.4)	D (39.3)	E (62.1) C (26.4) E (69.3)	D (49.7)
2040 Build	2	WB SB	2 TH 1 RT	A (3.7) C (24.5)	A (6.5)	A (4.8) B (16.9)	A (6.4)
	22	EB NB	2 TH 2 TH	C (34.6) B (13.0)	C (22.8)	C (28.9) B (15.0)	C (22.8)
	222	EB SB	2 TH 2 LT	A (4.1) C (20.7)	B (10.2)	A (3.6) C (28.6)	B (11.6)

Bold denotes improvement.

4.4.3. Idlewild Road and I-485 Northbound Ramps

The intersection of Idlewild Road and I-485 Northbound Ramps was analyzed as a three-leg signalized intersection with existing lane configurations. Table 9 summarizes the capacity analysis results. Impacts requiring mitigation are highlighted in yellow. Refer to Appendix H for the Synchro reports for this intersection. All SimTraffic reports can be found in Appendix P.

Minimal impacts are expected by the proposed development. No impacts to delay or LOS were identified during the AM peak hour. Delay on the northbound approach is expected during the PM peak hour. The following improvements are recommended to be done by the developer for the 2022 Build Phase 1 without Gas Station scenario:

- Extend the westbound Idlewild Road right turn lane to provide 300 feet of storage and appropriate taper.
- Extend the northbound exit ramp shared left/through lane to provide 325 feet of storage and appropriate taper.

The TIP U-4913 improvements at the study intersection allow the intersection to perform at an acceptable LOS during both the 2040 Build AM and PM peak hours. No further improvements by the developer are recommended.

TABLE 9
ANALYSIS SUMMARY OF
IDLEWILD ROAD AND I-485 NORTHBOUND RAMP

ANALYSIS SCENARIO	NODE	APPROACH	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
				Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2019 Existing	3	EB WB NB	1 LT, 2 TH 2 TH, 1 RT 1 LT-TH, 2 RT	B (12.8) A (9.0) E (63.4)	B (17.4)	B (11.6) B (18.5) E (55.7)	C (25.7)
2022 No-Build	3	EB WB NB	1 LT, 2 TH 2 TH, 1 RT 1 LT-TH, 2 RT	B (15.5) B (19.0) E (61.0)	C (23.8)	B (16.4) C (27.5) D (51.5)	C (29.4)
2022 Build Phase 1 without Gas Station	3	EB WB NB	1 LT, 2 TH 2 TH, 1 RT 1 LT-TH, 2 RT	B (14.8) B (10.2) E (62.7)	B (18.8)	B (14.4) B (20.0) E (56.3)	C (27.2)
2022 Build Phase 1 with Gas Station	3	EB WB NB	1 LT, 2 TH 2 TH, 1 RT 1 LT-TH, 2 RT	B (12.4) B (11.8) E (64.8)	B (19.5)	B (13.0) C (20.1) E (76.1)	C (31.7)
2023 No-Build	3	EB WB NB	1 LT, 2 TH 2 TH, 1 RT 1 LT-TH, 2 RT	B (15.1) B (19.3) E (61.3)	C (23.9)	B (16.0) C (28.7) E (57.8)	C (31.3)
2023 Full Build without Gas Station	3	EB WB NB	1 LT, 2 TH 2 TH, 1 RT 1 LT-TH, 2 RT	B (11.4) B (13.0) E (67.0)	C (20.2)	B (11.5) B (19.5) F (110.5)	D (39.6)
2023 Full Build with Gas Station	3	EB WB NB	1 LT, 2 TH 2 TH, 1 RT 1 LT-TH, 2 RT	B (10.1) B (14.4) E (75.0)	C (21.9)	B (11.5) B (19.5) F (158.1)	D (51.3)
2040 Build	3	WB NB	3 TH 1 LT	A (4.1) C (26.3)	A (5.5)	A (2.5) B (19.6)	A (3.8)
	33	WB SB	3 TH 3 TH	B (13.1) D (35.6)	C (22.5)	B (19.4) C (25.7)	C (22.6)
	333	EB NB	3 TH 3 RT	A (5.9) B (18.4)	B (10.2)	A (3.1) C (28.4)	B (12.0)

4.4.4. Idlewild Road and Marshall Hooks Road

The intersection of Idlewild Road and Marshall Hooks Road was analyzed as a four-leg unsignalized intersection with full access during the 2019 Existing scenario. The intersection was modeled as an unsignalized left-over in all future scenarios. Table 10 summarizes the capacity analysis results. Impacts requiring mitigation are highlighted in yellow. Refer to Appendix I for the Synchro reports for this intersection. All SimTraffic reports can be found in Appendix P.

This intersection is expected to be signalized by the Idlewild Road Mixed Use development located on the south side of Idlewild Road. However, the intersection was modeled without a traffic signal in case it is not warranted and installed by the year 2022. No queue issues were identified during the AM peak hour. During the PM peak hour, the eastbound through movement is expected to spillback from the signal at Rite Aid Driveway / Access B. This spillback could limit the number of vehicles that can turn right from the northbound approach. An alternative route for the northbound right turn movement would be for vehicles to use the northbound approach at the intersection of Idlewild Road and Rite Aid Driveway / Access B. The following improvements are recommended to be done by the developer for the 2022 Build Phase 1 without Gas Station scenario:

- Convert the intersection to a left-over if not already done by others. This includes the construction of concrete medians and/or islands to restrict turn movements
- Provide 150 feet of storage and appropriate taper on the eastbound Idlewild Road left turn lane.

The TIP U-4913 improvements at the study intersection allow the intersection to perform at an acceptable LOS during both the 2040 Build AM and PM peak hours. No further improvements by the developer are recommended.

TABLE 10
ANALYSIS SUMMARY OF
IDLEWILD ROAD AND MARSHALL HOOKS ROAD

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2019 Existing	EB ¹ WB ¹ NB ² SB ²	1 LT, 1 TH, 1 TH-RT 1 LT, 1 TH, 1 TH-RT 1 LT-TH-RT 1 LT-TH-RT	B (13.2) A (8.8) F (53.1) F (76.9)	NA ³	B (10.6) B (13.5) F (155.0) F (122.6)	NA ³
2022 No-Build	EB ¹ WB ¹ NB ² SB ²	1 LT, 2 TH, 1 RT 1 LT, 2 TH, 1 TH-RT 1 RT 1 RT	C (15.7) B (10.1) B (11.0) C (17.9)	NA ³	B (11.8) C (20.6) C (19.2) B (13.7)	NA ³
2022 Build Phase 1 without Gas Station	EB ¹ WB ¹ NB ² SB ²	1 LT, 2 TH, 1 RT 1 LT, 2 TH, 1 TH-RT 1 RT 1 RT	C (16.2) B (10.4) B (11.2) C (18.6)	NA ³	B (12.0) C (21.3) C (19.7) B (14.0)	NA ³
2022 Build Phase 1 with Gas Station	EB ¹ WB ¹ NB ² SB ²	1 LT, 2 TH, 1 RT 1 LT, 2 TH, 1 TH-RT 1 RT 1 RT	C (18.4) B (10.9) B (11.8) C (21.3)	NA ³	B (12.8) C (23.1) C (20.8) C (15.0)	NA ³
2023 No-Build	EB ¹ WB ¹ NB ² SB ²	1 LT, 2 TH, 1 RT 1 LT, 2 TH, 1 TH-RT 1 RT 1 RT	C (16.1) B (10.2) B (11.1) C (18.4)	NA ³	B (12.0) C (21.4) C (19.8) B (14.0)	NA ³
2023 Full Build without Gas Station	EB ¹ WB ¹ NB ² SB ²	1 LT, 2 TH, 1 RT 1 LT, 2 TH, 1 TH-RT 1 RT 1 RT	C (20.6) B (11.2) B (12.0) C (24.6)	NA ³	B (13.6) D (26.0) C (22.6) C (15.9)	NA ³
2023 Full Build with Gas Station	EB ¹ WB ¹ NB ² SB ²	1 LT, 2 TH, 1 RT 1 LT, 2 TH, 1 TH-RT 1 RT 1 RT	C (24.7) B (11.9) B (12.7) D (30.2)	NA ³	B (14.9) D (28.7) C (24.2) C (17.5)	NA ³
2040 Build	EB WB NB SB	1 LT, 2 TH, 1 TH-RT 1 LT, 2 TH, 1 TH-RT 1 RT 1 RT	A (3.7) A (4.2) D (53.1) E (60.5)	A (5.0)	A (5.1) A (3.0) D (54.3) E (61.4)	A (5.2)

1. Major street left-turn movement for unsignalized intersection.

2. Stop controlled approach for unsignalized intersection.

3. Overall intersection LOS is not provided for unsignalized intersections.

4.4.5. Idlewild Road and Rite Aid Driveway / Access B

The intersection of Idlewild Road and Rite Aid Driveway / Access B was analyzed as a three-leg signalized intersection during the existing and no-build scenarios. The proposed development would add a fourth leg to the intersection. Table 11 summarizes the capacity analysis results. Impacts requiring mitigation are highlighted in yellow. Refer to Appendix J for the Synchro reports for this intersection. All SimTraffic reports can be found in Appendix P.

The proposed development is expected to impact LOS and delay on the eastbound and westbound approaches during the 2022 Build Phase 1 Without Gas Station scenario. This is largely due to the addition of a fourth leg at the intersection. The following improvements are recommended to be done by the developer for this scenario:

- Construct an eastbound Idlewild Road left turn lane with 175 feet of storage and the appropriate taper.
- Restripe the eastbound Idlewild Road right turn lane to a shared through/right. Construct an additional eastbound departure lane and drop it at Access C.
- Extend the westbound Idlewild Road left turn lane to provide 300 feet of storage and the appropriate taper.
- Construct an additional westbound Idlewild Road through lane with 350 feet of storage and the appropriate taper. Construct an additional westbound departure lane; connecting to the existing dual through lanes.
- Restripe the northbound approach to provide one left turn lane and one shared through/right lane. The shared through/right lane would have 500 feet of storage and the appropriate taper.
- Construct Access B with one left turn and one shared through/right lane. The left turn lane would have 250 feet of storage and the appropriate taper.
- Provide 250 feet of internal protected stem on Access B.
- Modify the signal as necessary.

Additional improvements would be needed to address the impacts for the 2022 Build Phase 1 With Gas Station scenario. In addition to the improvements above, the following would be recommended for this scenario:

- Extend the eastbound Idlewild Road left turn lane to provide 325 feet of storage and the appropriate taper.

Additional improvements would be needed to address the impacts for the 2023 Full Build Without Gas Station scenario. In addition to the improvements above, the following would be recommended for this scenario:

- Extend dual westbound through lanes to the intersection of Idlewild Road and Stevens Mill Road.
- Access B would need dual left turn lanes with 250 feet of storage on each, one through lane, and one right turn lane with 250 feet of storage. Provide the appropriate tapers for turn lanes.
- Modify the signal as necessary.

Additional improvements would be needed to address the impacts for the 2023 Full Build With Gas Station scenario. In addition to the improvements above, the following would be recommended for this scenario:

- Construct a second eastbound Idlewild Road left turn lane. The eastbound left turn lanes would need 325 feet of storage on each and the appropriate taper. Construct a second departure lane on Access B.
- Construct a westbound Idlewild Road right turn lane with 400 feet of storage and the appropriate taper.
- Modify the signal as necessary.

The TIP U-4913 improvements at the study intersection would allow the intersection to perform at an acceptable LOS during both the 2040 Build AM and PM peak hours. Under these conditions the queue on the southbound approach will spillback into the roundabout that is internal to the site. In order to alleviate this, further improvements are required. The following improvements by the developer are recommended for this scenario:

- Construct an additional southbound right turn lane with 250 feet of storage and appropriate taper.

The NCDOT Safest Feasible Intersection Design (SaFID) Chart was referenced. This chart recommends intersection designs based on daily traffic volumes. The 2019 daily traffic volumes on Idlewild Road was 25,000 vehicles. This volume was projected to the year 2023 using a growth rate of 2.5% per year. The minor street daily volume was developed by applying the trip distribution percentages to the daily trip generation for the proposed site. The 2023 daily volume on Idlewild Road was estimated to be 27,595 vehicles. The 2023 daily volume on Access B was estimated to be 9,974 vehicles. Idlewild Road was assumed to have 4 lanes, and Access B was assumed to have 2 lanes. The SaFID chart recommends either a two-lane roundabout or a signalized Reduced Conflict Intersection (RCI). NCDOT TIP U-4913 plans to widen Idlewild Road to a 6-lane section, so a two-lane roundabout may not be the best option. Restricting turn movements at the intersection would force vehicles to make u-turns elsewhere. There is no suitable location for a u-turn bulb on Idlewild Road, west of Access B.

**TABLE 11
ANALYSIS SUMMARY OF
IDLEWILD ROAD AND RITE AID DRIVEWAY / ACCESS B**

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2019 Existing	EB WB NB	1 TH, 1 RT 1 LT, 1 TH 1 LT, 1 RT	A (3.9) B (10.6) F (85.9)	B (11.5)	D (50.9) B (14.3) F (104.8)	D (43.3)
2022 No-Build	EB WB NB	1 TH, 1 RT 1 LT, 1 TH 1 LT, 1 RT	A (4.6) D (47.1) F (106.7)	D (43.7)	E (63.6) C (20.1) F (101.1)	D (53.5)

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2022 Build Phase 1 without Gas Station	EB WB NB SB	1 LT, 1 TH, 1 RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT	B (16.8) F (250.5) E (65.0) E (65.8)	F (164.1)	F (172.1) F (101.9) F (87.1) E (65.0)	F (126.1)
2022 Build Phase 1 without Gas Station with Improvements	EB WB NB SB	1 LT, 1 TH, 1 TH-RT 1 LT, 1 TH, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT	B (12.4) C (27.4) E (65.0) E (65.8)	C (29.5)	C (25.6) C (30.5) E (61.4) E (62.8)	D (35.2)
2022 Build Phase 1 with Gas Station	EB WB NB SB	1 LT, 1 TH, 1 RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT	D (38.9) F (359.3) E (64.5) F (151.7)	F (230.3)	F (176.7) F (152.4) F (139.1) F (136.3)	F (158.5)
2022 Build Phase 1 with Gas Station Improvements	EB WB NB SB	1 LT, 1 TH, 1 TH-RT 1 LT, 1 TH, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT	C (24.2) D (36.3) F (90.0) F (93.4)	D (43.8)	C (34.4) D (37.9) E (70.4) E (75.0)	D (44.5)
2023 No-Build	EB WB NB	1 TH, 1 RT 1 LT, 1 TH 1 LT, 1 RT	A (4.3) E (58.1) F (107.4)	D (50.5)	E (57.0) B (13.9) F (281.5)	F (82.7)
2023 Full Build without Gas Station	EB WB NB SB	1 LT, 1 TH, 1 RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT	D (51.0) F (392.5) E (64.7) F (316.8)	F (267.5)	F (211.5) F (185.4) F (148.5) F (199.5)	F (190.6)
2023 Full Build without Gas Station with Improvements	EB WB NB SB	1 LT, 1 TH, 1 TH-RT 1 LT, 1 TH, 1 TH-RT 1 LT, 1 TH-RT 2 LT, 1 TH, 1 RT	C (24.9) D (45.7) E (58.0) E (69.6)	D (44.5)	C (34.6) D (43.0) E (72.6) E (57.1)	D (45.7)
2023 Full Build with Gas Station	EB WB NB SB	1 LT, 1 TH, 1 RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT	F (122.7) F (437.2) E (64.6) F (577.2)	F (344.8)	F (254.3) F (217.2) F (154.4) F (400.4)	F (240.5)
2023 Full Build with Gas Station with Improvements	EB WB NB SB	2 LT, 1 TH, 1 TH-RT 1 LT, 2 TH, 1 RT 1 LT, 1 TH-RT 2 LT, 1 TH, 1 RT	C (33.5) D (38.5) E (62.3) E (70.2)	D (44.0)	D (46.5) D (41.0) E (71.2) D (50.5)	D (48.7)
2040 Build	EB WB NB SB	1 LT, 3 TH, 1 RT 1 LT, 3 TH, 1 RT 2 LT, 1 TH, 1 RT 2 LT, 1 TH, 2 RT	B (14.0) C (29.2) E (55.7) E (76.8)	C (28.6)	B (17.0) B (18.6) E (55.5) E (57.6)	C (22.1)

Bold denotes improvement.

4.4.6. Idlewild Road and Stevens Mill Road

The intersection of Idlewild Road and Steven Mills Road was analyzed as a four-leg signalized intersection. Table 12 summarizes the capacity analysis results. Impacts requiring mitigation are highlighted in yellow. Refer to Appendix K for the Synchro reports for this intersection. All SimTraffic reports can be found in Appendix P.

Multiple approaches are expected to operate at LOS F during the 2022 No-Build scenario. The westbound, northbound, and southbound approaches are expected to queue over 1,000 feet during the AM peak hour. The eastbound, westbound, and northbound approaches are expected to queue over 1,000 feet during the PM peak hour.

The proposed development would impact the intersection during the PM peak hour of the 2022 Build Phase 1 Without Gas Station scenario. The following improvements are recommended to be done by the developer for this scenario:

- Extend the eastbound Idlewild Road left turn lane to provide 500 feet of storage and the appropriate taper.
- Extend the westbound Idlewild Road left turn lane to provide 250 feet of storage and the appropriate taper.
- Extend the northbound Stevens Mill Road left turn lane to provide 500 feet of storage and the appropriate taper.
- Construct a northbound Stevens Mill Road right turn lane with 500 feet of storage and the appropriate taper.
- Extend the southbound Stevens Mill Road left turn lane to provide 250 feet of storage and the appropriate taper.
- Extend the southbound Stevens Mill Road right turn lane to provide 275 feet of storage and the appropriate taper.
- Modify the signal as necessary.

Similar impacts are expected during the 2022 Build Phase 1 With Gas Station scenario. The improvements recommended above would be sufficient to mitigate this scenario.

Additional improvements would be needed to address the impacts for the 2023 Full Build Without Gas Station scenario. In addition to the improvements above, the following would be recommended for this scenario:

- Construct an additional westbound Idlewild Road through lane with 500 feet of storage and the appropriate taper. Construct a westbound departure lane and connect to the dual through lanes at intersection of Idlewild Road and Rite Aid Driveway / Access B.
- Modify the signal as necessary.

Similar impacts are expected during the 2023 Full Build With Gas Station scenario. The improvements recommended above would be sufficient to mitigate this scenario.

The TIP U-4913 improvements at the study intersection would greatly reduce the expected delay. However, some impacts such as long queues and higher delays are expected along the northbound and southbound approaches. In order to alleviate this, further improvements are required. The following improvements by the developer are recommended for this scenario:

- Construct an additional southbound right turn lane. It is recommended the dual southbound right turn lanes provide 225 feet of storage on each.
- Extend the northbound Stevens Mill Road left turn lanes to each provide 500 feet of storage and appropriate taper.

TIP U-4913 includes an alternative design at the intersection of Idlewild Road and Stevens Mill Road. A Median U-Turn intersection was analyzed as the alternative design. This alternative would prohibit any left turn movements at the intersection. Instead, vehicles would turn right and then make a U-turn. The intersection and associated U-turns would operate at LOS C or better. No queue issues were identified. No improvements by the developer are recommended for this scenario.

TABLE 12
ANALYSIS SUMMARY OF
IDLEWILD ROAD AND STEVENS MILL ROAD

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2019 Existing	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT	A (8.5) D (50.6) F (107.8) F (90.2)	E (56.1)	D (53.8) D (36.0) E (76.3) D (46.2)	D (49.8)
2022 No-Build	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT	C (21.7) F (95.3) F (171.5) F (148.1)	F (96.9)	F (115.1) F (104.8) F (154.3) D (54.1)	F (108.8)
2022 Build Phase 1 without Gas Station	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT	C (20.9) F (101.4) F (177.4) F (153.3)	F (100.7)	F (168.7) D (44.8) F (346.9) E (69.4)	F (138.1)
2022 Build Phase 1 without Gas Station with Improvements	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT 1 LT, 1 TH, 1 RT	C (23.1) F (101.4) F (91.6) F (153.3)	F (92.6)	F (101.3) F (83.3) F (119.2) E (61.6)	F (92.8)
2022 Build Phase 1 with Gas Station	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT	C (27.6) F (117.7) F (194.7) F (166.9)	F (112.7)	F (198.8) D (51.5) F (351.2) E (72.2)	F (154.9)
2022 Build Phase 1 with Gas Station with Improvements	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT 1 LT, 1 TH, 1 RT	C (32.2) F (117.7) F (114.5) F (166.9)	F (105.7)	F (126.3) F (88.6) F (132.0) E (62.9)	F (107.3)
2023 No-Build	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT	C (22.1) F (105.1) F (178.9) F (155.8)	F (103.8)	F (172.5) D (46.3) F (360.0) E (69.6)	F (141.7)
2023 Full Build without Gas Station	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT	C (31.8) F (132.9) F (211.1) F (180.0)	F (123.3)	F (227.4) E (64.8) F (374.3) E (77.9)	F (175.3)
2023 Full Build without Gas Station with Improvements	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH, 1 TH-RT 1 LT, 1 TH, 1 RT 1 LT, 1 TH, 1 RT	D (38.6) D (40.4) E (63.7) E (60.5)	D (46.4)	F (127.8) C (28.8) F (154.9) E (57.5)	F (91.4)
2023 Full Build with Gas Station	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT	D (39.3) F (150.0) F (243.6) F (196.1)	F (137.9)	F (260.7) E (76.1) F (390.0) F (84.8)	F (196.9)
2023 Full Build with Gas Station with Improvements	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH, 1 TH-RT 1 LT, 1 TH, 1 RT 1 LT, 1 TH, 1 RT	D (39.2) D (41.3) E (71.4) E (69.3)	D (49.5)	F (152.4) C (31.6) F (143.9) E (56.6)	F (102.1)

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2040 Build	EB WB NB SB	2 LT, 3 TH, 1 RT 1 LT, 3 TH, 1 RT 2 LT, 2 TH, 1 RT 2 LT, 2 TH, 2 RT	C (31.5) C (30.4) E (65.0) E (57.3)	D (36.6)	C (29.9) C (26.2) E (71.2) E (56.1)	C (35.0)
2040 Build Median U-Turn Intersection	EB WB NB SB	3 TH, 1 RT 2 TH, 1 TH-RT 1 TH, 2 RT 1 TH, 2 RT	A (6.5) C (20.6) D (37.4) E (70.3)	C (21.7)	A (5.2) A (6.7) C (21.2) C (22.6)	A (9.3)
2040 Build Median U-Turn EB U-Turn	EB WB	2 UT, 2 TH 3 TH	C (32.4) B (12.1)	A (9.6)	B (18.6) A (8.8)	A (6.6)
2040 Build Median U-Turn WB U-Turn	EB WB	3 TH 2 UT, 3 TH	B (10.2) C (33.4)	A (6.8)	A (5.1) B (17.5)	A (3.4)

Bold denotes improvement.

4.4.7. Idlewild Road and Access A

The intersection of Idlewild Road and Access A was analyzed as a three-leg unsignalized intersection with right-in/right-out access. Table 13 summarizes the capacity analysis results. Refer to Appendix L for the Synchro reports for this intersection. All SimTraffic reports can be found in Appendix P.

The following improvements are recommended to be done by the developer when Access A is constructed:

- Construct Access A with one ingress lane and one egress lane (right out only).
- Provide 150 feet of internal protected stem on Access A.
- Construct a westbound Idlewild Road right turn lane with 100 feet of storage and the appropriate taper.

TABLE 13
ANALYSIS SUMMARY OF
IDLEWILD ROAD AND ACCESS A

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2022 Build Phase 1 without Gas Station	EB WB SB ²	2 TH 1 TH-RT 1 RT	- - F (62.7)	NA ³	- - D (28.4)	NA ³
2022 Build Phase 1 without Gas Station with Improvements	EB WB SB ²	2 TH 2 TH, 1 RT 1 RT	- - C (20.1)	NA ³	- - B (14.9)	NA ³
2022 Build Phase 1 with Gas Station	EB WB SB ²	2 TH 1 TH, 1 RT 1 RT	- - F (106.5)	NA ³	- - D (34.3)	NA ³
2022 Build Phase 1 with Gas Station with Improvements	EB WB SB ²	2 TH 2 TH, 1 RT 1 RT	- - C (23.0)	NA ³	- - C (15.9)	NA ³
2023 Full Build without Gas Station	EB WB SB ²	2 TH 1 TH, 1 RT 1 RT	- - F (196.9)	NA ³	- - E (39.7)	NA ³
2023 Full Build without Gas Station with Improvements	EB WB SB ²	2 TH 2 TH, 1 RT 1 RT	- - D (26.8)	NA ³	- - C (16.7)	NA ³
2023 Full Build with Gas Station	EB ¹ WB SB ²	2 TH 1 TH, 1 RT 1 RT	- - F (386.4)	NA ³	- - F (53.9)	NA ³
2023 Full Build with Gas Station with Improvements	EB WB SB ²	2 TH 2 TH, 1 RT 1 RT	- - D (32.6)	NA ³	- - C (18.3)	NA ³
2040 Build	EB ¹ WB SB ²	3 TH 2 TH, 1 TH-RT 1 RT	- - F (191.2)	NA ³	- - F (55.8)	NA ³

1. Major street left-turn movement for unsignalized intersection.

2. Stop controlled approach for unsignalized intersection.

3. Overall intersection LOS is not provided for unsignalized intersections.

Bold denotes improvement.

4.4.8. Idlewild Road and Access C

The intersection of Idlewild Road and Access C was analyzed as a three-leg unsignalized intersection with left-in/right-in/right-out access. It was assumed an eastbound left turn lane would be required on Idlewild Road. Table 14 summarizes the capacity analysis results. Refer to Appendix M for the Synchro reports for this intersection. All SimTraffic reports can be found in Appendix P.

The following improvements are recommended to be done by the developer when Access C is constructed:

- Construct Access C with one ingress lane and one egress lane (right out only). Locate Access C far enough away from Access B to provide the required left turn lane storages on Idlewild Road.
- Provide 125 feet of internal protected stem on Access C.
- Construct an eastbound Idlewild Road left turn lane with 250 feet of storage and the appropriate taper.
- Construct a westbound Idlewild Road right turn lane with 100 feet of storage and the appropriate taper.

TABLE 14
ANALYSIS SUMMARY OF
IDLEWILD ROAD AND ACCESS C

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2022 Build Phase 1 without Gas Station	EB ¹ WB SB ²	1 LT , 1 TH 1 TH-RT 1 RT	C (15.2) - E (46.4)	NA ³	B (11.8) - C (24.3)	NA ³
2022 Build Phase 1 without Gas Station	EB ¹ WB SB ²	1 LT, 2 TH 1 TH, 1 RT 1 RT	C (15.2) - E (45.4)	NA ³	B (11.8) - C (24.2)	NA ³
2022 Build Phase 1 with Gas Station	EB ¹ WB SB ²	1 LT , 1 TH 1 TH, 1 RT 1 RT	C (16.8) - F (67.1)	NA ³	B (12.5) - D (28.1)	NA ³
2022 Build Phase 1 with Gas Station with Improvement	EB ¹ WB SB ²	1 LT, 2 TH 1 TH, 1 RT 1 RT	C (16.9) - F (68.2)	NA ³	B (12.5) - D (28.2)	NA ³
2023 Full Build without Gas Station	EB ¹ WB SB ²	1 LT , 1 TH 1 TH, 1 RT 1 RT	C (18.0) - F (100.2)	NA ³	B (13.4) - D (32.6)	NA ³
2023 Full Build without Gas Station with Improvements	EB ¹ WB SB ²	1 LT, 2 TH 2 TH, 1 RT 1 RT	C (18.2) - C (22.1)	NA ³	B (13.5) - C (15.6)	NA ³
2023 Full Build with Gas Station	EB ¹ WB SB ²	1 LT , 1 TH 1 TH, 1 RT 1 RT	C (20.8) - F (190.3)	NA ³	B (14.5) - E (41.1)	NA ³
2023 Full Build with Gas Station with Improvements	EB ¹ WB SB ²	1 LT, 2 TH 2 TH, 1 RT 1 RT	C (21.0) - D (25.7)	NA ³	B (14.6) - C (16.8)	NA ³
2040 Build	EB ¹ WB SB ²	1 LT , 3 TH 2 TH, 1 TH-RT 1 RT	F (511.5) - F (142.2)	NA ³	F (169.5) - E (49.3)	NA ³

1. Major street left-turn movement for unsignalized intersection.

2. Stop controlled approach for unsignalized intersection.

3. Overall intersection LOS is not provided for unsignalized intersections.

Bold denotes improvement.

4.4.9. Marshall Hooks Road and Access D

The intersection of Marshall Hooks Road and Access D was analyzed as a three-leg unsignalized intersection with full access. Table 15 summarizes the capacity analysis results. Refer to Appendix N for the Synchro reports for this intersection. All SimTraffic reports can be found in Appendix P.

The following improvements are recommended to be done by the developer when Access D is constructed:

- Construct Access D with one ingress lane and one egress lane.
- Provide 100 feet of internal protected stem on Access D.

**TABLE 15
ANALYSIS SUMMARY OF
MARSHALL HOOKS ROAD AND ACCESS D**

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2022 Build Phase 1 without Gas Station	WB ² NB SB ¹	1 LT-RT 1 TH-RT 1 LT-TH	A (8.6) - A (7.2)	NA ³	A (8.6) - A (7.2)	NA ³
2022 Build Phase 1 with Gas Station	WB ² NB SB ¹	1 LT-RT 1 TH-RT 1 LT-TH	A (8.8) - A (7.3)	NA ³	A (8.7) - A (7.3)	NA ³
2023 Full Build without Gas Station	WB ² NB SB ¹	1 LT-RT 1 TH-RT 1 LT-TH	A (8.9) - A (7.3)	NA ³	A (8.8) - A (7.3)	NA ³
2023 Full Build with Gas Station	WB ² NB SB ¹	1 LT-RT 1 TH-RT 1 LT-TH	A (9.1) - A (7.4)	NA ³	A (9.0) - A (7.3)	NA ³
2040 Build	WB ² NB SB ¹	1 LT-RT 1 TH-RT 1 LT-TH	A (9.1) - A (7.4)	NA ³	A (9.0) - A (7.3)	NA ³

1. Major street left-turn movement for unsignalized intersection.

2. Stop controlled approach for unsignalized intersection.

3. Overall intersection LOS is not provided for unsignalized intersections.

Bold denotes improvement.

4.4.10. Access B and Internal Driveway

The intersection of Access B and Internal Driveway was analyzed as a four-leg roundabout intersection. Table 16 summarizes the capacity analysis results. Refer to Appendix O for the SIDRA reports for this intersection. All SimTraffic reports can be found in Appendix P.

A single lane roundabout is expected to function with no delay or queue issues. The queue on the northbound approach is not expected to spillback to Idlewild Road.

**TABLE 16
ANALYSIS SUMMARY OF
ACCESS B AND INTERNAL ROADWAY**

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2023 Full Build with Gas Station	EB	1 LT-TH-RT	A (6.6)	A (6.1)	A (5.3)	A (5.4)
	WB	1 LT-TH-RT	A (6.0)		A (5.2)	
	NB	1 LT-TH, 1 RT	A (6.0)		A (5.8)	
	SB	1 LT-TH-RT	A (5.3)		A (4.5)	

1. Major street left-turn movement for unsignalized intersection.

2. Stop controlled approach for unsignalized intersection.

3. Overall intersection LOS is not provided for unsignalized intersections.

Bold denotes improvement.

5. CRASH ANALYSIS

Crash data was obtained from the NCDOT. Crash reports were provided for six intersections, and strip analysis crashes in this report are located on Idlewild Road from Stallings Road to Stevens Mill Road. Both intersection analysis and strip analysis crash data started on June 1, 2015 and went through May 31, 2020. The crashes are summarized by intersection in the sections following. Appendix Q includes the crash data obtained from NCDOT.

5.1. Crash Analysis at Study Intersections

5.1.1. Idlewild Road and Stallings Road

Out of the 35 total crashes from 2015 to 2020, there were 10 angle, 8 left turn – different roadway, 6 angle crashes, 3 ran-off road, 3 sideswipe same direction, 2 right turn-different roadway, 1 left turn – same roadway, 1 moveable object and 1 sideswipe opposite direction. The most common types of crashes were angle and left turn – different roadway crashes. It was reported that a majority of these crashes from 2015 to 2020 were Class C injuries. Table 17 shows the summary of crash data from 2015 to 2020.

**TABLE 17
CRASH DATA OF
IDLEWILD ROAD AND STALLINGS ROAD**

YEAR	TOTAL ACCIDENTS	FATAL ACCIDENTS	INJURY ACCIDENTS	PROPERTY DAMAGE ONLY ACCIDENTS
2015	6	0	2	4
2016	3	0	2	1
2017	4	0	0	4
2018	12	0	5	7
2019	7	0	3	4
2020	3	0	1	2

5.1.2. Idlewild Road and I-485 Southbound Ramps

Out of the 55 total crashes from 2015 to 2020, there were 24 rear end, 19 angle, 6 left turn – same roadway, 4 left turn – different roadway, 1 right turn – different roadway and 1 head-on. The most common types of crashes were rear end and angle. It was reported that 14 of the 19 injury accidents 2015 to 2020 were Class C injuries. Table 18 shows the summary of crash data from 2015 to 2020.

**TABLE 18
CRASH DATA OF
IDLEWILD ROAD AND I-485 SOUTHBOUND RAMPS**

YEAR	TOTAL ACCIDENTS	FATAL ACCIDENTS	INJURY ACCIDENTS	PROPERTY DAMAGE ONLY ACCIDENTS
2015	4	0	1	3
2016	8	0	4	4
2017	16	0	9	7
2018	16	0	3	13
2019	9	0	1	8
2020	2	0	1	1

5.1.3. Idlewild Road and I-485 Northbound Ramps

Out of the 36 total crashes from 2015 to 2020, there were 20 rear end, 6 angle, 3 left turn – same roadway, 2 backing up, 1 right turn – different roadway, 1 fixed object, 1 ran off road left, 1 sideswipe same direction, and 1 moveable object. The most common type of crash was rear end crashes. It should be noted that these are the most common type of crash at a signalized intersection. It was reported that a majority of the injuries at the intersection from 2015 to 2020 were Class C injuries. Table 19 shows the summary of crash data from 2015 to 2020.

**TABLE 19
CRASH DATA OF
IDLEWILD ROAD AND I-485 NORTHBOUND RAMPS**

YEAR	TOTAL ACCIDENTS	FATAL ACCIDENTS	INJURY ACCIDENTS	PROPERTY DAMAGE ONLY ACCIDENTS
2015	4	0	2	2
2016	14	0	5	9
2017	7	0	2	5
2018	6	0	2	4
2019	4	0	2	2
2020	1	0	1	0

5.1.4. Idlewild Road and Marshall Hooks Road

Out of the 1 total crash from 2015 to 2020, there were 1 rear end crash. No injuries were reported. It should be noted that there were a significant number of crashes just downstream of the intersection. These crashes are likely at the entrance of the adjacent gas station. These crashes would likely be mitigated by the improvements that will be implemented at this intersection. Table 20 shows the summary of crash data from 2015 to 2020.

**TABLE 20
CRASH DATA OF
IDLEWILD ROAD AND MARSHALL HOOKS ROAD**

YEAR	TOTAL ACCIDENTS	FATAL ACCIDENTS	INJURY ACCIDENTS	PROPERTY DAMAGE ONLY ACCIDENTS
2015	0	0	0	0
2016	0	0	0	0
2017	0	0	0	0
2018	0	0	0	0
2019	1	0	0	1
2020	0	0	0	0

5.1.5. Idlewild Road and Rite Aid Driveway / Access B

Out of the 1 total crash from 2015 to 2020, there was 1 rear end crash. No injuries were reported with this crash. Table 21 shows the summary of crash data from 2015 to 2020.

**TABLE 21
CRASH DATA OF
IDLEWILD ROAD AND RITE AID DRIVEWAY / ACCESS B**

YEAR	TOTAL ACCIDENTS	FATAL ACCIDENTS	INJURY ACCIDENTS	PROPERTY DAMAGE ONLY ACCIDENTS
2015	0	0	0	0
2016	0	0	0	0
2017	0	0	0	0
2018	0	0	0	0
2019	0	0	0	0
2020	1	0	0	1

5.1.6. Idlewild Road and Stevens Mill Road

Out of the 26 total crashes from 2015 to 2020 there were 10 angle, 1 left turn – different roadway, 2 ran off the road, 10 rear end, and 3 sideswipe crashes. The most common types of crashes were angle and rear end crashes. It was reported that 4 of the 7 injury accidents were crashes involving angle crashes. It was also reported that 5 of the injuries along the corridor from 2015 to 2020 were Class C injuries. The remainder of the injuries were Class B Table 22 shows the summary of crash data from 2015 to 2020.

**TABLE 22
CRASH DATA OF
IDLEWILD ROAD AND STEVENS MILL ROAD**

YEAR	TOTAL ACCIDENTS	FATAL ACCIDENTS	INJURY ACCIDENTS	PROPERTY DAMAGE ONLY ACCIDENTS
2015	3	0	2	1
2016	7	0	2	5
2017	3	0	0	3
2018	3	0	0	3
2019	8	0	3	5
2020	2	0	0	2

6. CONCLUSIONS

This report summarizes the findings of the Traffic Impact Analysis (TIA) that was performed for the proposed Stinson Village development to be located north of Idlewild Road, east of I-485 in Stallings, North Carolina. The purpose of this study is to determine the potential impact to the surrounding transportation system caused by the traffic generated by the development.

This report summarizes the findings of the Traffic Impact Analysis (TIA) that was performed for the proposed Stinson Village development to be located north of Idlewild Road, east of I-485 in Stallings, North Carolina. The purpose of this study is to determine the potential impact to the surrounding transportation system caused by the traffic generated by the development.

The site is proposed to be constructed in two phases. Phase 1 will consist of 8,000 square feet divided into two fast-food restaurants with drive-throughs. Phase 1 may also include a 4,993 square foot super convenience market / gas station. Full Build will consist of the Phase 1 development plus up to 203 multifamily low-rise homes, 408 multifamily high-rise homes, 4,000 square feet of day care center, 4,000 square feet of drive-in bank, 5,000 square feet of high-turnover sit-down restaurant, and 3,500 square feet of coffee / donut shop without a drive through. Both Phase 1 and Full Build were analyzed with and without a 4,993 square foot super convenience market / gas station.

Four site accesses will be constructed during Phase 1. Access A would form an unsignalized three leg intersection on Idlewild Road, east of Marshall Hooks Road with right-in/right-out access. Access B would form the fourth leg at the intersection of Idlewild Road and Rite Aid Driveway. Access C would form an unsignalized three leg intersection on Idlewild Road east of Access B with leftover access. Access D would form a full access intersection on Marshall Hooks Road north of Idlewild Road. Phase 1 is expected to be completed in 2022. The site is expected to be fully built by the year 2023.

6.1. Summary of Recommended Improvements

Based on the analysis results, some impacts are expected by the proposed development. Figures 28 through 31 illustrate the improvements recommended to be completed by the developer for the various scenarios.

The following improvements are recommended to be done by proposed development as part of the 2022 Build Phase 1 Without Gas Station scenario:

Idlewild Road and I-485 Northbound Ramps

- Extend the westbound Idlewild Road right turn lane to provide 300 feet of storage and appropriate taper.
- Extend the northbound exit ramp shared left/through lane to provide 325 feet of storage and appropriate taper.

Idlewild Road and Marshall Hooks Road

- Convert the intersection to a left-over if not already done by others. This includes the construction of concrete medians and/or islands to restrict turn movements
- Provide 150 feet of storage and appropriate taper on the eastbound Idlewild Road left turn lane.

Idlewild Road and Rite Aid Driveway / Access B

- Construct an eastbound Idlewild Road left turn lane with 175 feet of storage and the appropriate taper.
- Restripe the eastbound Idlewild Road right turn lane to a shared through/right. Construct an additional eastbound departure lane and drop it at Access C.
- Extend the westbound Idlewild Road left turn lane to provide 300 feet of storage and the appropriate taper.
- Construct an additional westbound Idlewild Road through lane with 350 feet of storage and the appropriate taper. Construct an additional westbound departure lane; connecting to the existing dual through lanes.
- Restripe the northbound approach to provide one left turn lane and one shared through/right lane. The shared through/right lane would have 500 feet of storage and the appropriate taper.
- Construct Access B with one left turn and one shared through/right lane. The left turn lane would have 250 feet of storage and the appropriate taper.
- Provide 250 feet of internal protected stem on Access B.
- Modify the signal as necessary.

Idlewild Road and Stevens Mill Road

- Extend the eastbound Idlewild Road left turn lane to provide 500 feet of storage and the appropriate taper.
- Extend the westbound Idlewild Road left turn lane to provide 250 feet of storage and the appropriate taper.
- Extend the northbound Stevens Mill Road left turn lane to provide 500 feet of storage and the appropriate taper.
- Construct a northbound Stevens Mill Road right turn lane with 500 feet of storage and the appropriate taper.
- Extend the southbound Stevens Mill Road left turn lane to provide 250 feet of storage and the appropriate taper.
- Extend the southbound Stevens Mill Road right turn lane to provide 275 feet of storage and the appropriate taper.
- Modify the signal as necessary.

Idlewild Road and Access A

- Construct Access A with one ingress lane and one egress lane (right out only).
- Provide 150 feet of internal protected stem on Access A.
- Construct a westbound Idlewild Road right turn lane with 100 feet of storage and the appropriate taper.

Idlewild Road and Access C

- Construct Access C with one ingress lane and one egress lane (right out only). Locate Access C far enough away from Access B to provide the required left turn lane storages on Idlewild Road.
- Provide 125 feet of internal protected stem on Access C.
- Construct an eastbound Idlewild Road left turn lane with 250 feet of storage and the appropriate taper.
- Construct a westbound Idlewild Road right turn lane with 100 feet of storage and the appropriate taper.

Marshal Hooks Road and Access D

- Construct Access D with one ingress lane and one egress lane.
- Provide 100 feet of internal protected stem on Access D.

The following improvements are recommended to be done by proposed development as part of the 2022 Build Phase 1 With Gas Station scenario:

Idlewild Road and Rite Aid Driveway / Access B

- Extend the eastbound Idlewild Road left turn lane to provide 325 feet of storage and the appropriate taper.

The following improvements are recommended to be done by proposed development as part of the 2023 Full Build Without Gas Station scenario:

Idlewild Road and I-485 Southbound Ramps

- Construct an additional southbound right turn lane on the I-485 Southbound Ramp. Provide 400 feet of storage and the appropriate taper.
- Lengthen the existing southbound right turn lane on the I-485 Southbound Ramp to provide 400 feet of storage and the appropriate taper.
- Modify the signal as necessary.

Idlewild Road and Rite Aid Driveway / Access B

- Extend dual westbound through lanes to the intersection of Idlewild Road and Stevens Mill Road.
- Access B would need dual left turn lanes with 250 feet of storage on each, one through lane, and one right turn lane with 250 feet of storage. Provide the appropriate tapers for turn lanes.
- Modify the signal as necessary.

Idlewild Road and Stevens Mill Road

- Construct an additional westbound Idlewild Road through lane with 500 feet of storage and the appropriate taper. Construct a westbound departure lane and connect to the dual through lanes at intersection of Idlewild Road and Rite Aid Driveway / Access B.
- Modify the signal as necessary.

The following improvements are recommended to be done by proposed development as part of the 2023 Full Build With Gas Station scenario:

Idlewild Road and Rite Aid Driveway / Access B

- Construct a second eastbound Idlewild Road left turn lane. The eastbound left turn lanes would need 325 feet of storage on each and the appropriate taper. Construct a second departure lane on Access B.
- Construct a westbound Idlewild Road right turn lane with 400 feet of storage and the appropriate taper.
- Modify the signal as necessary.

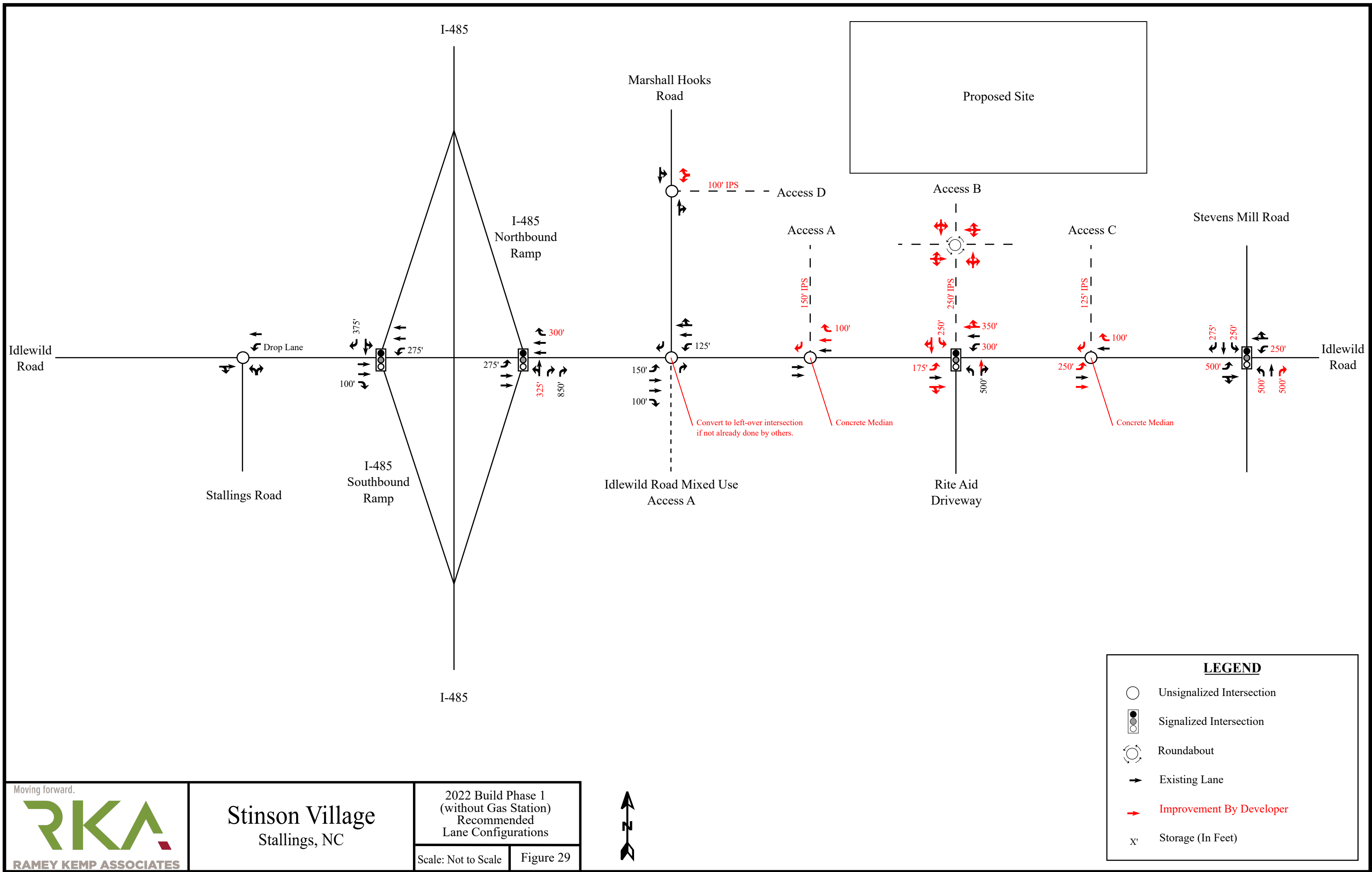
The following improvements are recommended to be done by proposed development as part of the 2040 Build scenario:

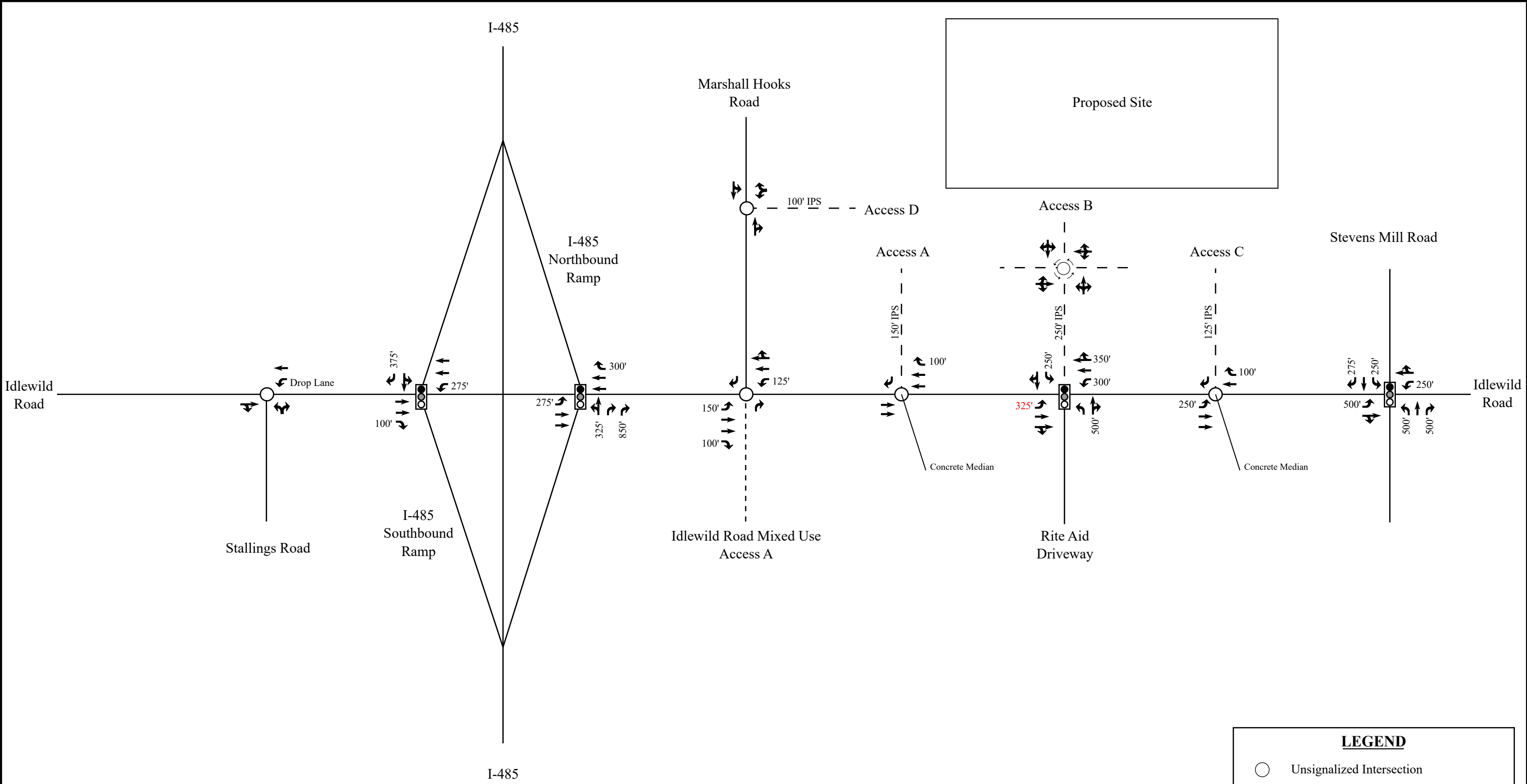
Idlewild Road and Rite Aid Driveway / Access B

- Construct an additional southbound right turn lane with 250 feet of storage and appropriate taper.

Idlewild Road and Stevens Mill Road

- Construct an additional southbound right turn lane. It is recommended the dual southbound right turn lanes provide 225 feet of storage on each.
- Extend the northbound Stevens Mill Road left turn lanes to each provide 500 feet of storage and appropriate taper.

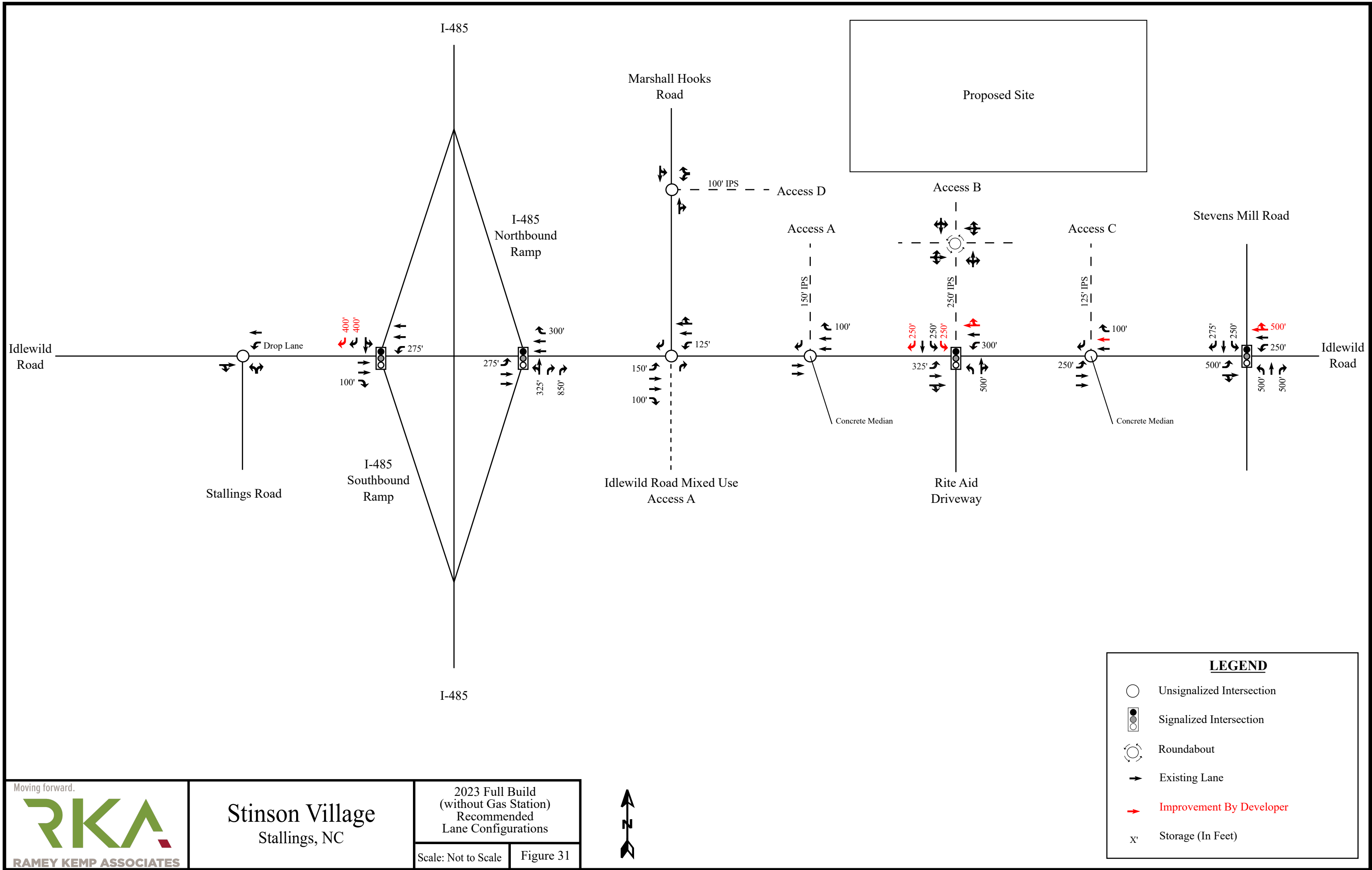


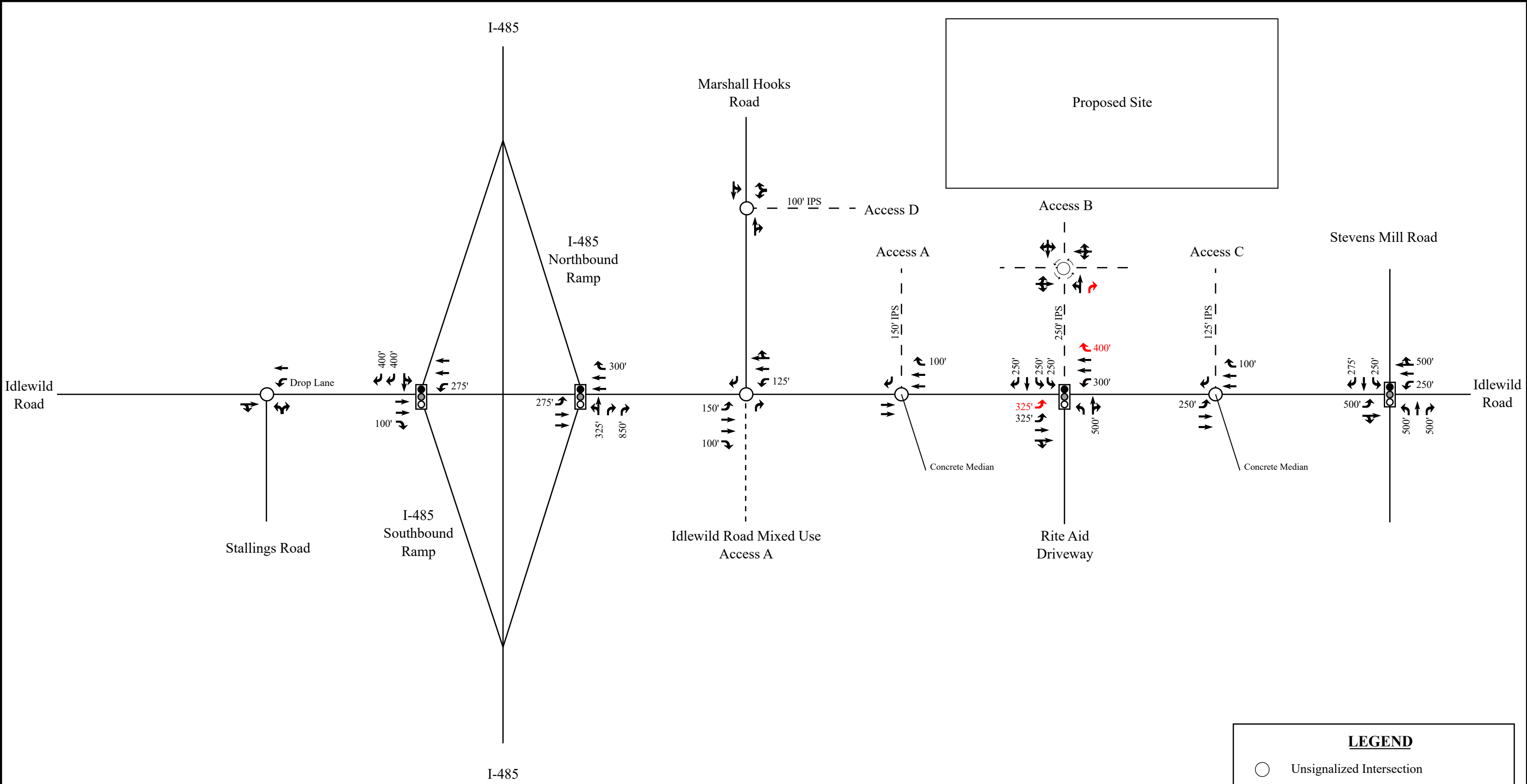


LEGEND

-  Unsignalized Intersection
-  Signalized Intersection
-  Roundabout
-  Existing Lane
-  Improvement By Developer
-  X' Storage (In Feet)

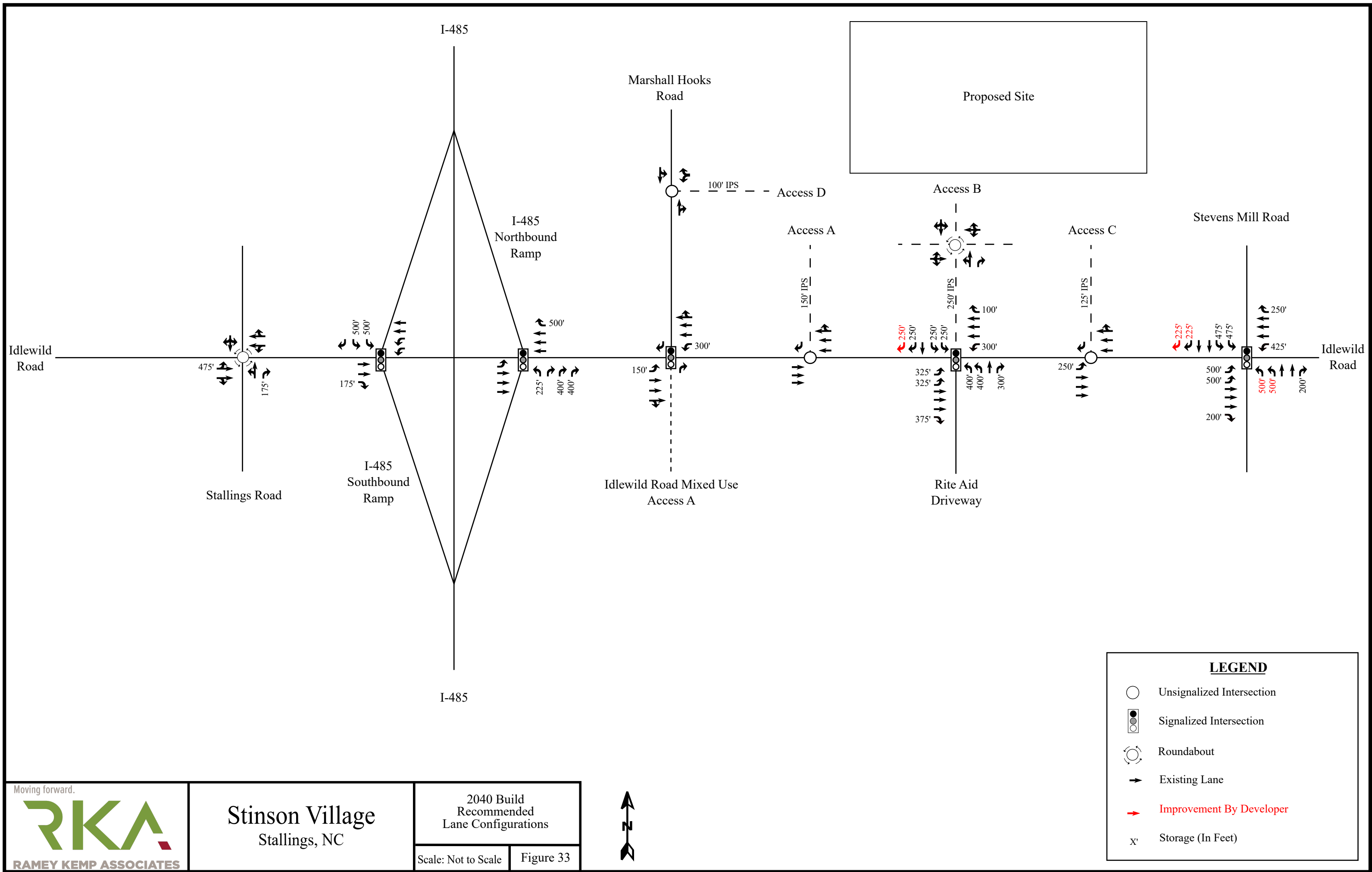






LEGEND

- Unsignalized Intersection
- Signalized Intersection
- Roundabout
- Existing Lane
- Improvement By Developer
- X' Storage (In Feet)



TECHNICAL APPENDIX

APPENDIX A

TRAFFIC COUNT DATA

We Count because YOU Count



File Name : Matthews(Idlewild and Stallings) AM Peak

Site Code :

Start Date : 10/2/2018

Page No : 1

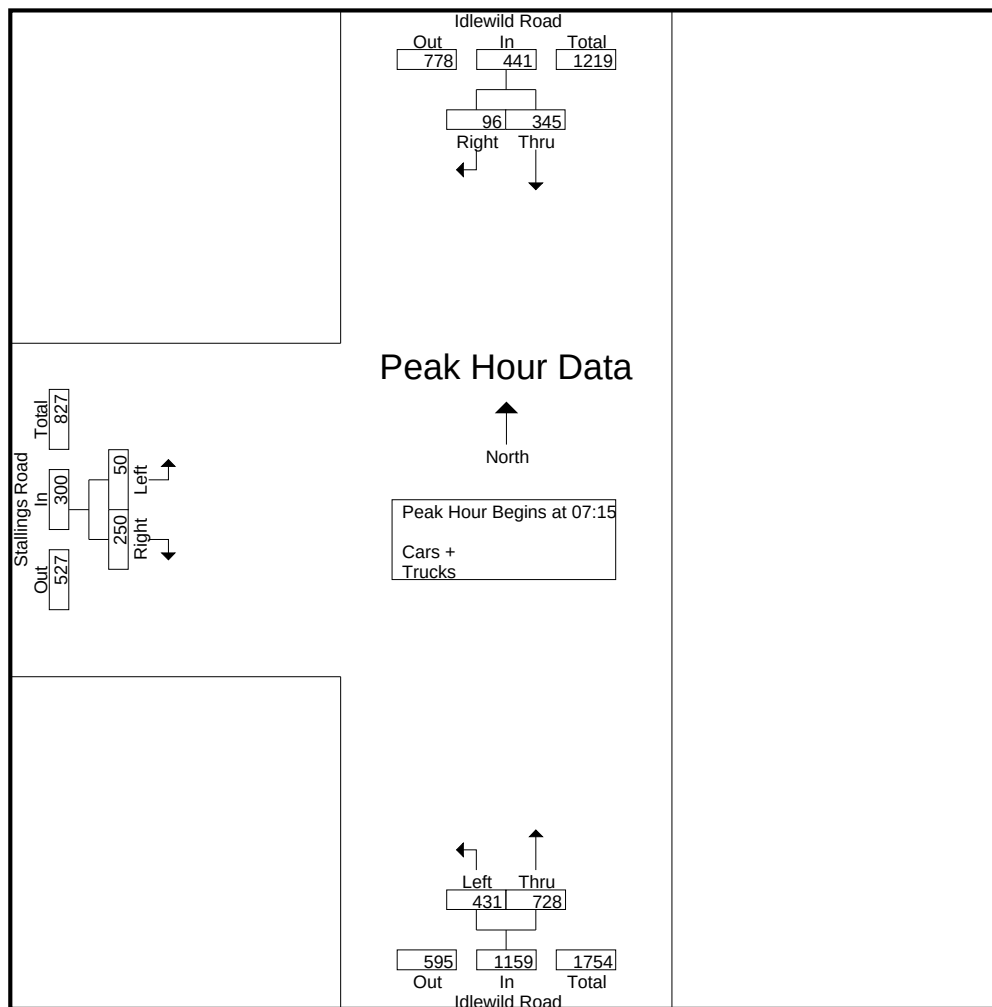
Groups Printed- Cars + - Trucks

Start Time	Idlewild Road Southbound			Idlewild Road Northbound			Stallings Road Eastbound			Int. Total
	Right	Thru	App. Total	Thru	Left	App. Total	Right	Left	App. Total	
07:00	25	93	118	152	80	232	42	8	50	400
07:15	25	88	113	194	127	321	65	13	78	512
07:30	22	78	100	209	138	347	61	8	69	516
07:45	25	93	118	164	96	260	80	13	93	471
Total	97	352	449	719	441	1160	248	42	290	1899
08:00	24	86	110	161	70	231	44	16	60	401
08:15	16	106	122	186	81	267	25	18	43	432
08:30	11	79	90	154	51	205	27	8	35	330
08:45	14	78	92	155	48	203	31	11	42	337
Total	65	349	414	656	250	906	127	53	180	1500
Grand Total	162	701	863	1375	691	2066	375	95	470	3399
Apprch %	18.8	81.2		66.6	33.4		79.8	20.2		
Total %	4.8	20.6	25.4	40.5	20.3	60.8	11	2.8	13.8	
Cars +	162	698	860	1370	691	2061	375	95	470	3391
% Cars +	100	99.6	99.7	99.6	100	99.8	100	100	100	99.8
Trucks	0	3	3	5	0	5	0	0	0	8
% Trucks	0	0.4	0.3	0.4	0	0.2	0	0	0	0.2



File Name : Matthews(Idlewild and Stallings) AM Peak
 Site Code :
 Start Date : 10/2/2018
 Page No : 2

	Idlewild Road Southbound			Idlewild Road Northbound			Stallings Road Eastbound			
Start Time	Right	Thru	App. Total	Thru	Left	App. Total	Right	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15										
07:15	25	88	113	194	127	321	65	13	78	512
07:30	22	78	100	209	138	347	61	8	69	516
07:45	25	93	118	164	96	260	80	13	93	471
08:00	24	86	110	161	70	231	44	16	60	401
Total Volume	96	345	441	728	431	1159	250	50	300	1900
% App. Total	21.8	78.2		62.8	37.2		83.3	16.7		
PHF	.960	.927	.934	.871	.781	.835	.781	.781	.806	.921





Site Code :

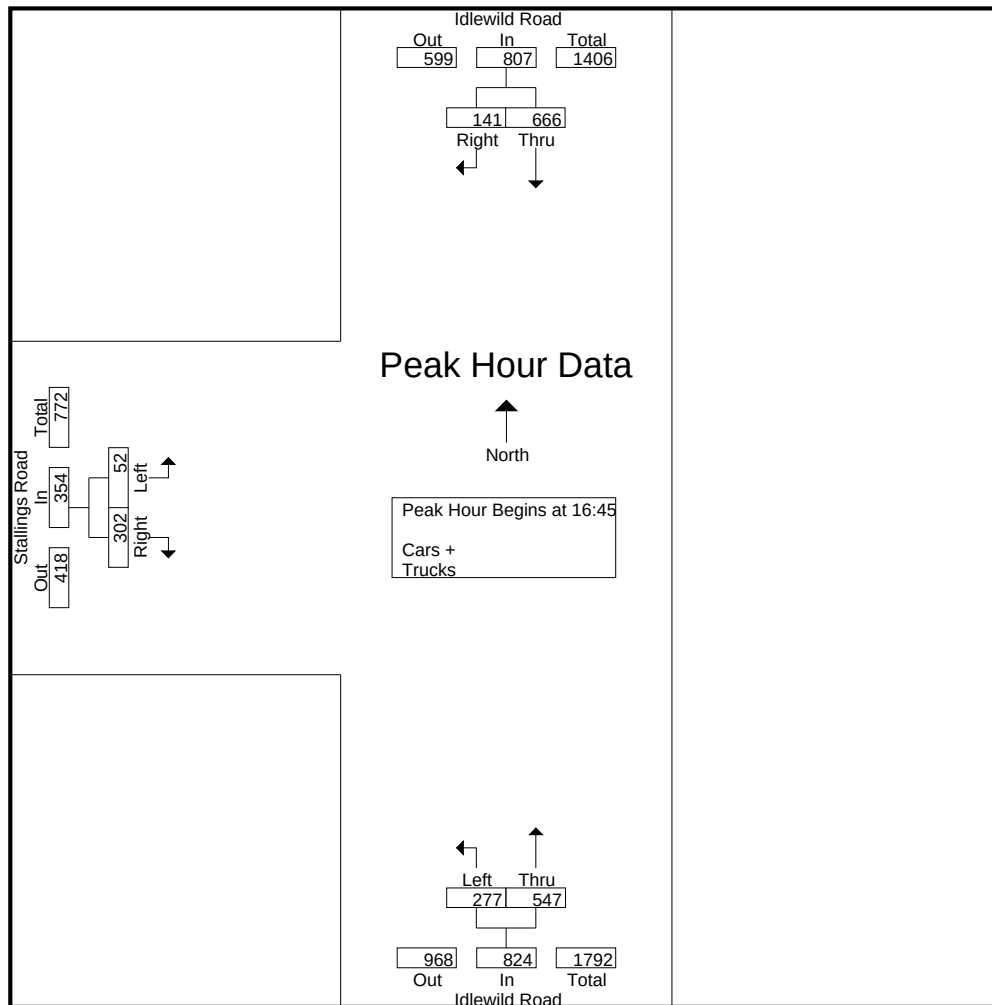
Page No : 1

[illegible]



File Name : Matthews(Idlewild and Stallings) PM Peak
 Site Code :
 Start Date : 10/2/2018
 Page No : 2

	Idlewild Road Southbound			Idlewild Road Northbound			Stallings Road Eastbound			
Start Time	Right	Thru	App. Total	Thru	Left	App. Total	Right	Left	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:45										
16:45	40	158	198	116	66	182	82	9	91	471
17:00	33	181	214	131	71	202	66	20	86	502
17:15	31	175	206	152	60	212	84	16	100	518
17:30	37	152	189	148	80	228	70	7	77	494
Total Volume	141	666	807	547	277	824	302	52	354	1985
% App. Total	17.5	82.5		66.4	33.6		85.3	14.7		
PHF	.881	.920	.943	.900	.866	.904	.899	.650	.885	.958



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File Name : Matthews(Idlewild and I-485 SB Ramps) AM Peak

Site Code :

Start Date : 6/6/2018

Page No : 1

Groups Printed- Cars + - Trucks

	I-485 SB Ramps Southbound				Idlewild Road Westbound				I-485 SB Ramps Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00	84	0	34	118	0	141	130	271	0	0	0	0	54	92	0	146	535
07:15	123	0	44	167	0	144	88	232	0	0	0	0	24	110	0	134	533
07:30	137	0	33	170	0	179	90	269	0	0	0	0	24	116	0	140	579
07:45	112	1	44	157	0	163	99	262	0	0	0	0	30	115	0	145	564
Total	456	1	155	612	0	627	407	1034	0	0	0	0	132	433	0	565	2211
08:00	63	0	39	102	0	153	101	254	0	0	0	0	31	123	0	154	510
08:15	71	2	38	111	0	144	94	238	0	0	0	0	21	79	0	100	449
08:30	42	0	53	95	0	135	77	212	0	0	0	0	23	77	0	100	407
08:45	40	0	48	88	0	119	73	192	0	0	0	0	29	64	0	93	373
Total	216	2	178	396	0	551	345	896	0	0	0	0	104	343	0	447	1739
Grand Total	672	3	333	1008	0	1178	752	1930	0	0	0	0	236	776	0	1012	3950
Apprch %	66.7	0.3	33		0	61	39		0	0	0		23.3	76.7	0		
Total %	17	0.1	8.4	25.5	0	29.8	19	48.9	0	0	0	0	6	19.6	0	25.6	
Cars +	668	3	320	991	0	1169	747	1916	0	0	0	0	233	768	0	1001	3908
% Cars +	99.4	100	96.1	98.3	0	99.2	99.3	99.3	0	0	0	0	98.7	99	0	98.9	98.9
Trucks	4	0	13	17	0	9	5	14	0	0	0	0	3	8	0	11	42
% Trucks	0.6	0	3.9	1.7	0	0.8	0.7	0.7	0	0	0	0	1.3	1	0	1.1	1.1

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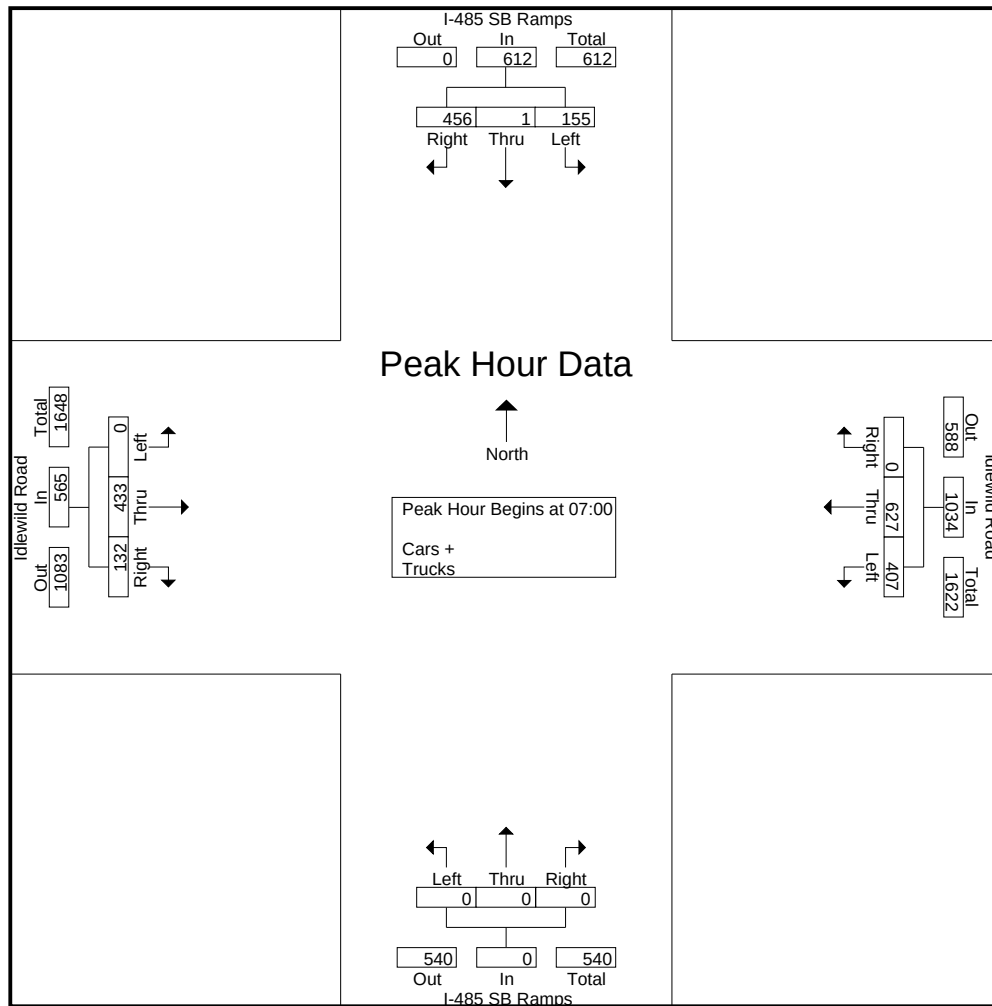
File Name : Matthews(Idlewild and I-485 SB Ramps) AM Peak

Site Code :

Start Date : 6/6/2018

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	I-485 SB Ramps Southbound				Idlewild Road Westbound				I-485 SB Ramps Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 07:00																	
07:00	84	0	34	118	0	141	130	271	0	0	0	0	54	92	0	146	535
07:15	123	0	44	167	0	144	88	232	0	0	0	0	24	110	0	134	533
07:30	137	0	33	170	0	179	90	269	0	0	0	0	24	116	0	140	579
07:45	112	1	44	157	0	163	99	262	0	0	0	0	30	115	0	145	564
Total Volume	456	1	155	612	0	627	407	1034	0	0	0	0	132	433	0	565	2211
% App. Total	74.5	0.2	25.3		0	60.6	39.4		0	0	0		23.4	76.6	0		
PHF	.832	.250	.881	.900	.000	.876	.783	.954	.000	.000	.000	.000	.611	.933	.000	.967	.955



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File Name : Matthews(Idlewild and I-485 SB Ramps) PM Peak

Site Code :

Start Date : 6/6/2018

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Groups Printed- Cars + - Trucks

	I-485 SB Ramps Southbound				Idlewild Road Westbound				I-485 SB Ramps Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
16:00	53	0	52	105	0	125	55	180	0	0	0	0	24	143	0	167	452
16:15	57	0	63	120	0	121	54	175	0	0	0	0	21	162	0	183	478
16:30	61	0	85	146	0	128	42	170	0	0	0	0	23	186	0	209	525
16:45	61	0	58	119	0	135	66	201	0	0	0	0	30	182	0	212	532
Total	232	0	258	490	0	509	217	726	0	0	0	0	98	673	0	771	1987
17:00	64	1	74	139	0	173	67	240	0	0	0	0	33	190	0	223	602
17:15	93	1	75	169	0	167	63	230	0	0	0	0	34	211	0	245	644
17:30	76	1	61	138	0	151	61	212	0	0	0	0	36	185	0	221	571
17:45	67	0	55	122	0	156	74	230	0	0	0	0	26	191	0	217	569
Total	300	3	265	568	0	647	265	912	0	0	0	0	129	777	0	906	2386
Grand Total	532	3	523	1058	0	1156	482	1638	0	0	0	0	227	1450	0	1677	4373
Apprch %	50.3	0.3	49.4		0	70.6	29.4		0	0	0		13.5	86.5	0		
Total %	12.2	0.1	12	24.2	0	26.4	11	37.5	0	0	0	0	5.2	33.2	0	38.3	
Cars +	527	3	515	1045	0	1148	476	1624	0	0	0	0	227	1448	0	1675	4344
% Cars +	99.1	100	98.5	98.8	0	99.3	98.8	99.1	0	0	0	0	100	99.9	0	99.9	99.3
Trucks	5	0	8	13	0	8	6	14	0	0	0	0	0	2	0	2	29
% Trucks	0.9	0	1.5	1.2	0	0.7	1.2	0.9	0	0	0	0	0	0.1	0	0.1	0.7

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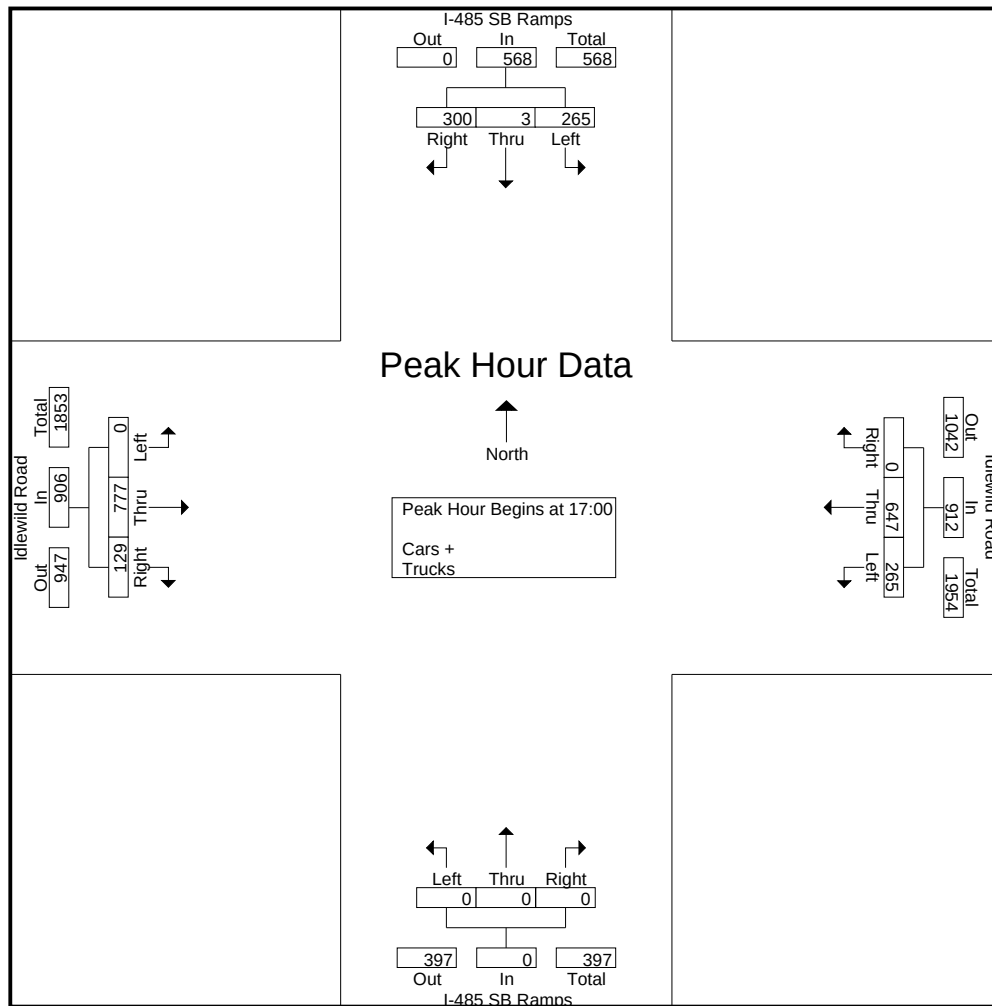
File Name : Matthews(Idlewild and I-485 SB Ramps) PM Peak

Site Code :

Start Date : 6/6/2018

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	I-485 SB Ramps Southbound				Idlewild Road Westbound				I-485 SB Ramps Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 17:00																	
17:00	64	1	74	139	0	173	67	240	0	0	0	0	33	190	0	223	602
17:15	93	1	75	169	0	167	63	230	0	0	0	0	34	211	0	245	644
17:30	76	1	61	138	0	151	61	212	0	0	0	0	36	185	0	221	571
17:45	67	0	55	122	0	156	74	230	0	0	0	0	26	191	0	217	569
Total Volume	300	3	265	568	0	647	265	912	0	0	0	0	129	777	0	906	2386
% App. Total	52.8	0.5	46.7		0	70.9	29.1		0	0	0		14.2	85.8	0		
PHF	.806	.750	.883	.840	.000	.935	.895	.950	.000	.000	.000	.000	.896	.921	.000	.924	.926



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File Name : Matthews(Idlewild and I-485 NB Ramps) AM Peak

Site Code :

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Groups Printed- Cars + - Trucks

	I-485 Ramp Southbound				Idlewild Road Westbound				I-485 Ramp Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00	0	0	0	0	84	240	0	324	30	0	25	55	0	90	40	130	509
07:15	0	0	0	0	76	200	0	276	36	0	28	64	0	105	50	155	495
07:30	0	0	0	0	103	243	0	346	50	0	31	81	0	92	58	150	577
07:45	0	0	0	0	85	220	0	305	39	0	41	80	0	94	65	159	544
Total	0	0	0	0	348	903	0	1251	155	0	125	280	0	381	213	594	2125
08:00	0	0	0	0	73	237	0	310	43	0	29	72	0	101	56	157	539
08:15	0	0	0	0	62	208	0	270	29	2	26	57	0	90	37	127	454
08:30	0	0	0	0	71	170	0	241	32	0	26	58	0	108	20	128	427
08:45	0	0	0	0	36	157	0	193	50	0	33	83	0	97	19	116	392
Total	0	0	0	0	242	772	0	1014	154	2	114	270	0	396	132	528	1812
Grand Total	0	0	0	0	590	1675	0	2265	309	2	239	550	0	777	345	1122	3937
Apprch %	0	0	0		26	74	0		56.2	0.4	43.5		0	69.3	30.7		
Total %	0	0	0	0	15	42.5	0	57.5	7.8	0.1	6.1	14	0	19.7	8.8	28.5	
Cars +	0	0	0	0	583	1671	0	2254	304	2	237	543	0	766	344	1110	3907
% Cars +	0	0	0	0	98.8	99.8	0	99.5	98.4	100	99.2	98.7	0	98.6	99.7	98.9	99.2
Trucks	0	0	0	0	7	4	0	11	5	0	2	7	0	11	1	12	30
% Trucks	0	0	0	0	1.2	0.2	0	0.5	1.6	0	0.8	1.3	0	1.4	0.3	1.1	0.8

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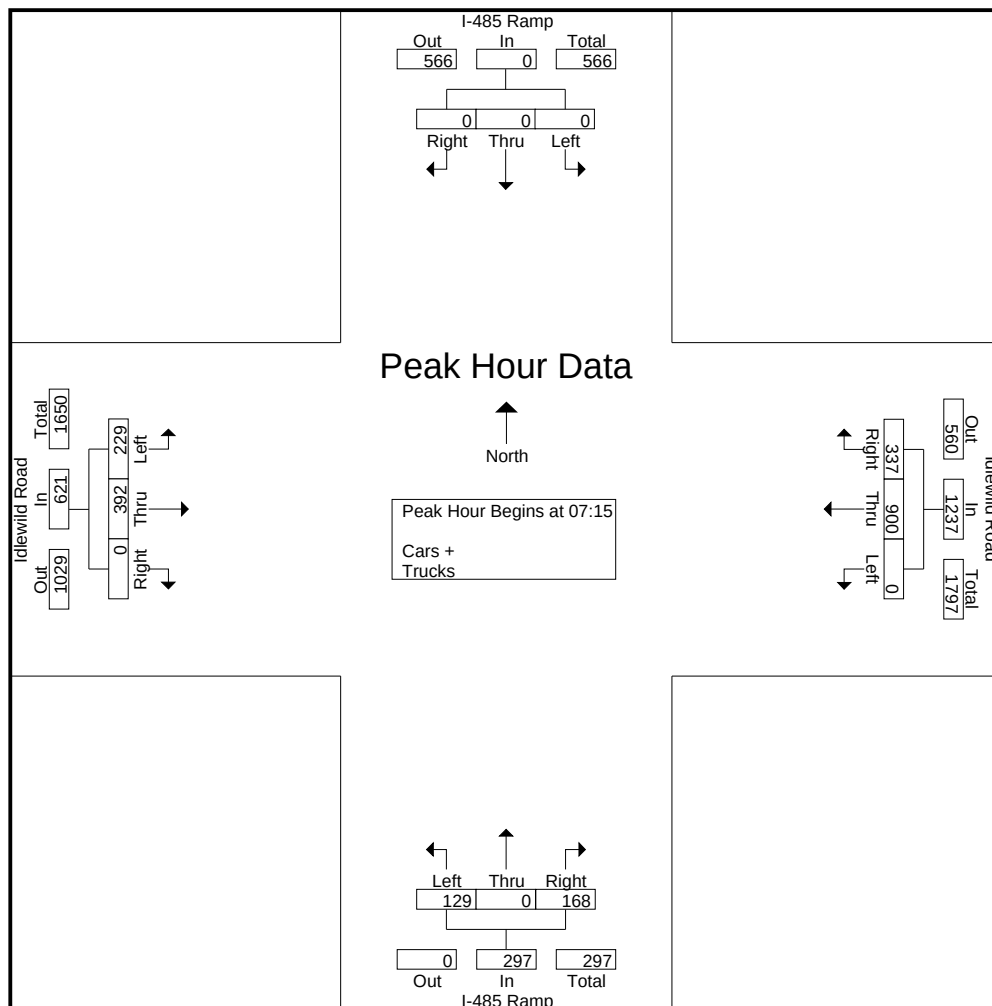
File Name : Matthews(Idlewild and I-485 NB Ramps) AM Peak

Site Code :

Start Date : 6/6/2018

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	I-485 Ramp Southbound				Idlewild Road Westbound				I-485 Ramp Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15																	
07:15	0	0	0	0	76	200	0	276	36	0	28	64	0	105	50	155	495
07:30	0	0	0	0	103	243	0	346	50	0	31	81	0	92	58	150	577
07:45	0	0	0	0	85	220	0	305	39	0	41	80	0	94	65	159	544
08:00	0	0	0	0	73	237	0	310	43	0	29	72	0	101	56	157	539
Total Volume	0	0	0	0	337	900	0	1237	168	0	129	297	0	392	229	621	2155
% App. Total	0	0	0	0	27.2	72.8	0		56.6	0	43.4		0	63.1	36.9		
PHF	.000	.000	.000	.000	.818	.926	.000	.894	.840	.000	.787	.917	.000	.933	.881	.976	.934



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File Name : Matthews(Idlewild and I-485 NB Ramps) PM Peak

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Groups Printed- Cars + - Trucks

	I-485 NB Ramps Southbound				Idlewild Road Westbound				I-485 NB Ramps Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
16:00	0	0	0	0	65	121	0	186	113	0	46	159	0	155	39	194	539
16:15	0	0	0	0	67	116	0	183	105	0	51	156	0	173	38	211	550
16:30	0	0	0	0	49	135	0	184	133	0	63	196	0	210	54	264	644
16:45	0	0	0	0	79	127	0	206	122	0	70	192	0	190	51	241	639
Total	0	0	0	0	260	499	0	759	473	0	230	703	0	728	182	910	2372
17:00	0	0	0	0	80	176	0	256	127	0	62	189	0	191	69	260	705
17:15	0	0	0	0	74	159	0	233	98	0	67	165	0	216	64	280	678
17:30	0	0	0	0	74	162	0	236	96	0	45	141	0	184	53	237	614
17:45	0	0	0	0	58	163	0	221	109	0	59	168	0	182	60	242	631
Total	0	0	0	0	286	660	0	946	430	0	233	663	0	773	246	1019	2628
Grand Total	0	0	0	0	546	1159	0	1705	903	0	463	1366	0	1501	428	1929	5000
Apprch %	0	0	0		32	68	0		66.1	0	33.9		0	77.8	22.2		
Total %	0	0	0	0	10.9	23.2	0	34.1	18.1	0	9.3	27.3	0	30	8.6	38.6	
Cars +	0	0	0	0	534	1155	0	1689	896	0	463	1359	0	1499	426	1925	4973
% Cars +	0	0	0	0	97.8	99.7	0	99.1	99.2	0	100	99.5	0	99.9	99.5	99.8	99.5
Trucks	0	0	0	0	12	4	0	16	7	0	0	7	0	2	2	4	27
% Trucks	0	0	0	0	2.2	0.3	0	0.9	0.8	0	0	0.5	0	0.1	0.5	0.2	0.5

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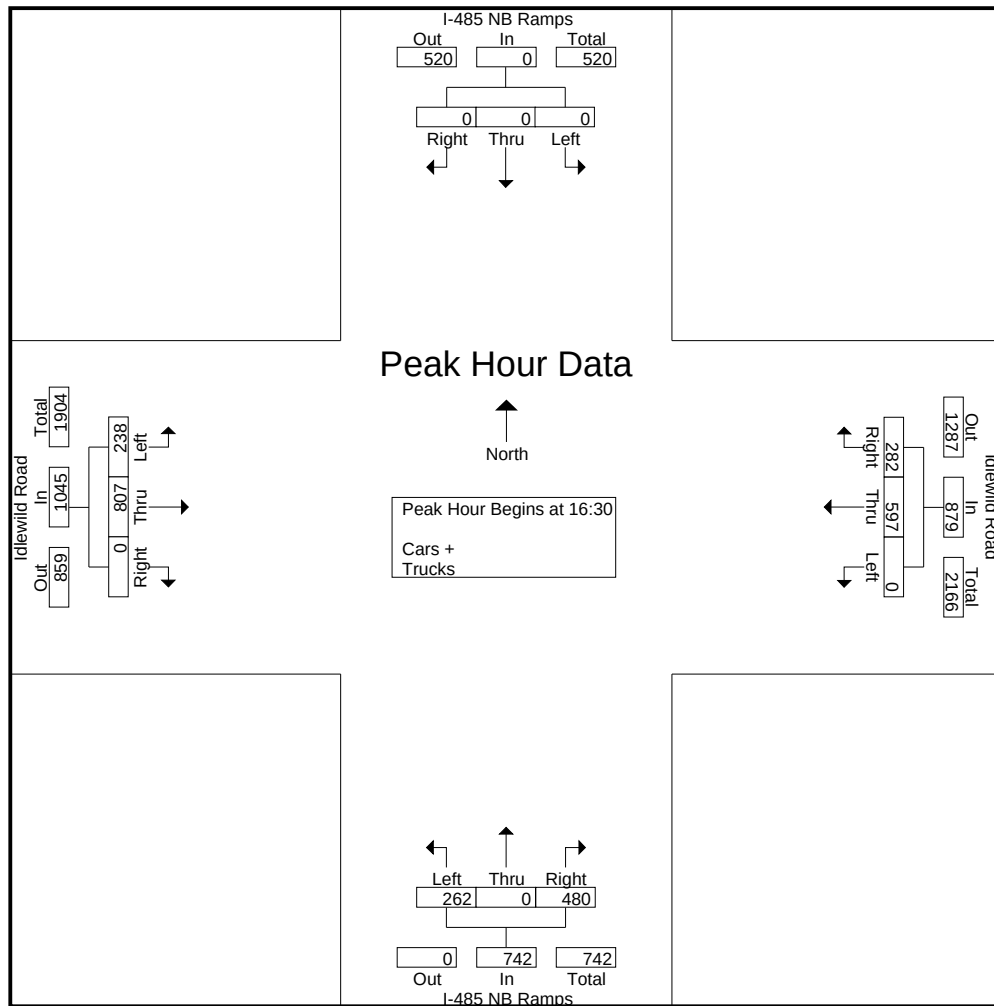
File Name : Matthews(Idlewild and I-485 NB Ramps) PM Peak

Site Code :

Start Date : 6/6/2018

Page No : 2

	I-485 NB Ramps Southbound				Idlewild Road Westbound				I-485 NB Ramps Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 16:30																	
16:30	0	0	0	0	49	135	0	184	133	0	63	196	0	210	54	264	644
16:45	0	0	0	0	79	127	0	206	122	0	70	192	0	190	51	241	639
17:00	0	0	0	0	80	176	0	256	127	0	62	189	0	191	69	260	705
17:15	0	0	0	0	74	159	0	233	98	0	67	165	0	216	64	280	678
Total Volume	0	0	0	0	282	597	0	879	480	0	262	742	0	807	238	1045	2666
% App. Total	0	0	0	0	32.1	67.9	0		64.7	0	35.3		0	77.2	22.8		
PHF	.000	.000	.000	.000	.881	.848	.000	.858	.902	.000	.936	.946	.000	.934	.862	.933	.945



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File Name : Matthews(Idlewild and Marshall Hooks) AM Peak

Site Code :

Start Date : 6/6/2018

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Groups Printed- Cars + - Trucks

	Marshall Hooks Road Southbound				Idlewild Road Westbound				Boyd Funderburk Road Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00	0	0	0	0	0	325	1	326	0	0	1	1	0	122	0	122	449
07:15	0	1	0	1	0	281	0	281	0	0	0	0	1	142	0	143	425
07:30	0	0	0	0	0	334	1	335	0	0	0	0	0	145	0	145	480
07:45	0	0	0	0	0	312	1	313	0	0	0	0	3	139	0	142	455
Total	0	1	0	1	0	1252	3	1255	0	0	1	1	4	548	0	552	1809
08:00	0	0	0	0	0	197	0	197	0	0	0	0	0	235	0	235	432
08:15	0	0	0	0	0	144	0	144	0	0	0	0	0	248	0	248	392
08:30	0	0	0	0	0	241	0	241	0	0	0	0	0	145	0	145	386
08:45	0	0	0	0	0	189	0	189	0	0	0	0	0	144	0	144	333
Total	0	0	0	0	0	771	0	771	0	0	0	0	0	772	0	772	1543
Grand Total	0	1	0	1	0	2023	3	2026	0	0	1	1	4	1320	0	1324	3352
Apprch %	0	100	0		0	99.9	0.1		0	0	100		0.3	99.7	0		
Total %	0	0	0	0	0	60.4	0.1	60.4	0	0	0	0	0.1	39.4	0	39.5	
Cars +	0	1	0	1	0	1991	2	1993	0	0	1	1	3	1295	0	1298	3293
% Cars +	0	100	0	100	0	98.4	66.7	98.4	0	0	100	100	75	98.1	0	98	98.2
Trucks	0	0	0	0	0	32	1	33	0	0	0	0	1	25	0	26	59
% Trucks	0	0	0	0	0	1.6	33.3	1.6	0	0	0	0	25	1.9	0	2	1.8

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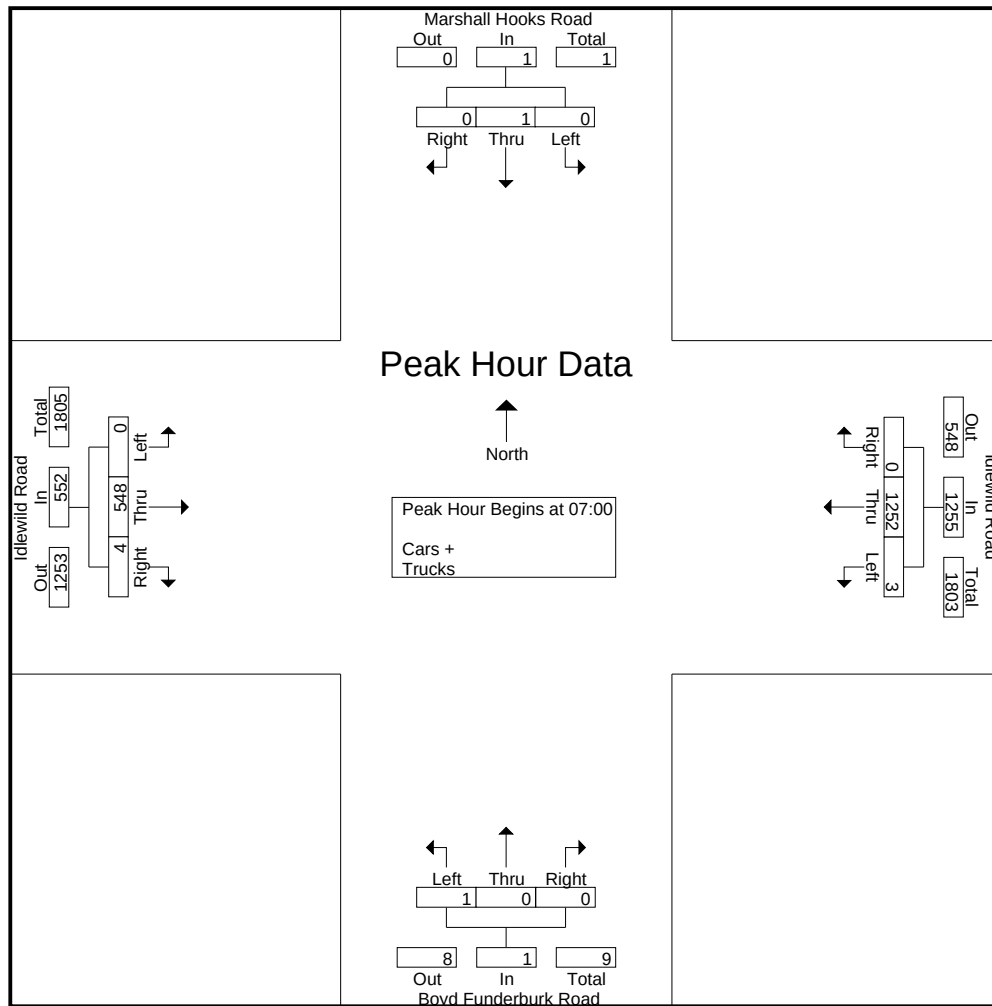
File Name : Matthews(Idlewild and Marshall Hooks) AM Peak

Site Code :

Start Date : 6/6/2018

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	Marshall Hooks Road Southbound				Idlewild Road Westbound				Boyd Funderburk Road Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 07:00																	
07:00	0	0	0	0	0	325	1	326	0	0	1	1	0	122	0	122	449
07:15	0	1	0	1	0	281	0	281	0	0	0	0	1	142	0	143	425
07:30	0	0	0	0	0	334	1	335	0	0	0	0	0	145	0	145	480
07:45	0	0	0	0	0	312	1	313	0	0	0	0	3	139	0	142	455
Total Volume	0	1	0	1	0	1252	3	1255	0	0	1	1	4	548	0	552	1809
% App. Total	0	100	0		0	99.8	0.2		0	0	100		0.7	99.3	0		
PHF	.000	.250	.000	.250	.000	.937	.750	.937	.000	.000	.250	.250	.333	.945	.000	.952	.942



Burns Service Inc.

1202 Langdon Terrace Drive
Indian Trail, NC, 28079

We Count because YOU Count

File Name : Matthews(Idlewild and Marshall Hooks) PM Peak

Site Code :

Start Date : 6/6/2018

Page No : 1

Groups Printed- Cars + - Trucks

	Marshall Hooks Road Southbound				Idlewild Road Westbound				Boyd Funderburk Road Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
16:00	0	0	0	0	0	169	0	169	0	0	0	0	0	283	0	283	452
16:15	0	0	0	0	0	161	0	161	0	0	0	0	1	279	0	280	441
16:30	0	0	0	0	0	151	0	151	0	0	0	0	0	328	0	328	479
16:45	0	0	0	0	0	205	0	205	0	0	0	0	0	299	0	299	504
Total	0	0	0	0	0	686	0	686	0	0	0	0	1	1189	0	1190	1876
17:00	1	0	0	1	1	227	0	228	0	0	0	0	0	315	0	315	544
17:15	0	0	0	0	0	230	1	231	0	0	0	0	0	309	0	309	540
17:30	0	0	0	0	0	230	0	230	0	0	0	0	0	259	1	260	490
17:45	0	0	0	0	2	229	1	232	0	0	1	1	0	277	0	277	510
Total	1	0	0	1	3	916	2	921	0	0	1	1	0	1160	1	1161	2084
Grand Total	1	0	0	1	3	1602	2	1607	0	0	1	1	1	2349	1	2351	3960
Apprch %	100	0	0		0.2	99.7	0.1		0	0	100		0	99.9	0		
Total %	0	0	0	0	0.1	40.5	0.1	40.6	0	0	0	0	0	59.3	0	59.4	
Cars +	1	0	0	1	3	1582	2	1587	0	0	1	1	1	2323	1	2325	3914
% Cars +	100	0	0	100	100	98.8	100	98.8	0	0	100	100	100	98.9	100	98.9	98.8
Trucks	0	0	0	0	0	20	0	20	0	0	0	0	0	26	0	26	46
% Trucks	0	0	0	0	0	1.2	0	1.2	0	0	0	0	0	1.1	0	1.1	1.2

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Indian Trail, NC, 28079

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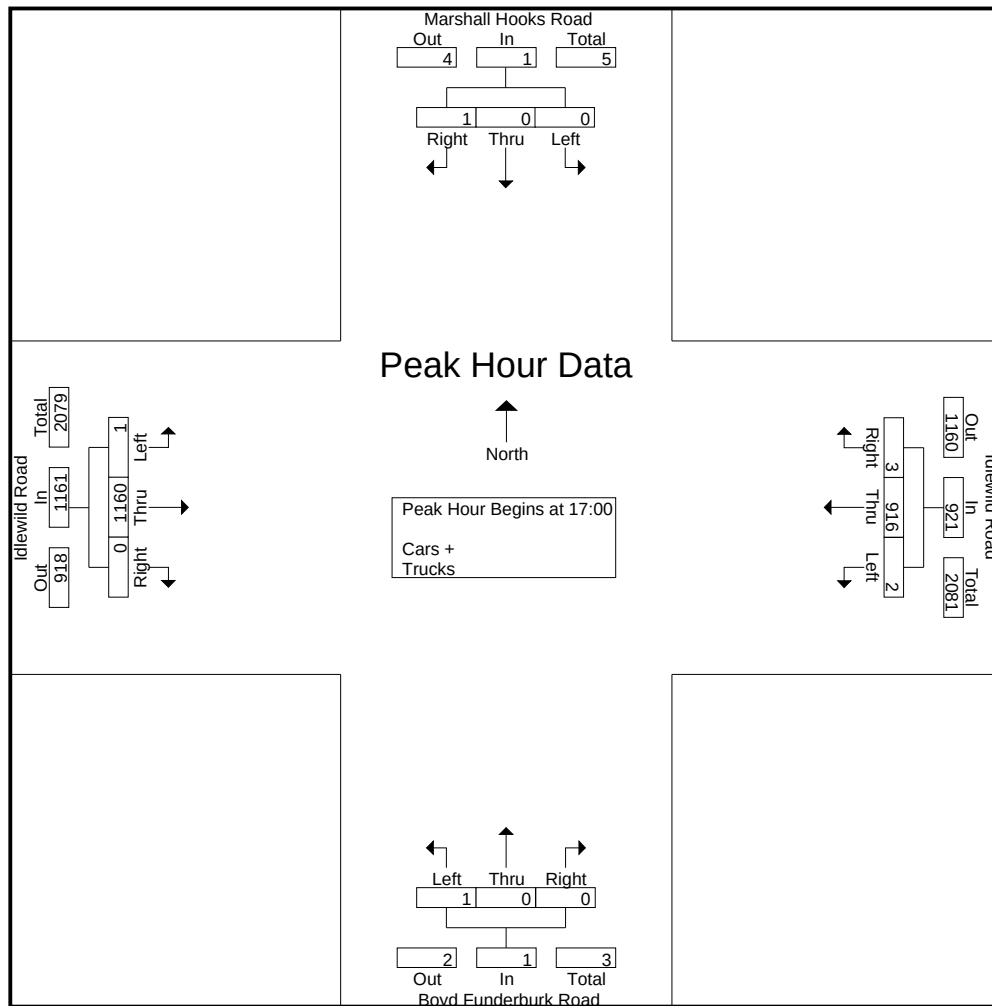
File Name : Matthews(Idlewild and Marshall Hooks) PM Peak

Site Code :

Start Date : 6/6/2018

Page No : 2

	Marshall Hooks Road Southbound				Idlewild Road Westbound				Boyd Funderburk Road Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 17:00																	
17:00	1	0	0	1	1	227	0	228	0	0	0	0	0	315	0	315	544
17:15	0	0	0	0	0	230	1	231	0	0	0	0	0	309	0	309	540
17:30	0	0	0	0	0	230	0	230	0	0	0	0	0	259	1	260	490
17:45	0	0	0	0	2	229	1	232	0	0	1	1	0	277	0	277	510
Total Volume	1	0	0	1	3	916	2	921	0	0	1	1	0	1160	1	1161	2084
% App. Total	100	0	0		0.3	99.5	0.2		0	0	100		0	99.9	0.1		
PHF	.250	.000	.000	.250	.375	.996	.500	.992	.000	.000	.250	.250	.000	.921	.250	.921	.958



Burns Service Inc.

1202 Langdon Terrace Drive
Indian Trail, NC, 28079

We Count because YOU Count

File Name : Matthews(Idlewild and Idlewild Market Access) AM Peak

Site Code :

Start Date : 6/6/2018

Page No : 1

Groups Printed- Cars + - Trucks

	Idlewild Road Westbound				Idlewild Market Access Northbound				Idlewild Road Eastbound				
Start Time	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Right	Thru	UTrn	App. Total	Int. Total
07:00	312	14	0	326	2	7	0	9	1	97	0	98	433
07:15	267	27	1	295	6	7	0	13	1	121	0	122	430
07:30	288	11	0	299	2	15	0	17	2	97	0	99	415
07:45	297	18	0	315	1	10	0	11	3	111	0	114	440
Total	1164	70	1	1235	11	39	0	50	7	426	0	433	1718
08:00	285	14	0	299	7	17	0	24	2	115	0	117	440
08:15	267	27	0	294	4	14	0	18	1	98	0	99	411
08:30	225	11	0	236	8	10	0	18	2	103	0	105	359
08:45	179	23	0	202	5	9	0	14	1	102	0	103	319
Total	956	75	0	1031	24	50	0	74	6	418	0	424	1529
Grand Total	2120	145	1	2266	35	89	0	124	13	844	0	857	3247
Apprch %	93.6	6.4	0		28.2	71.8	0		1.5	98.5	0		
Total %	65.3	4.5	0	69.8	1.1	2.7	0	3.8	0.4	26	0	26.4	
Cars +	2106	144	1	2251	35	89	0	124	13	832	0	845	3220
% Cars +	99.3	99.3	100	99.3	100	100	0	100	100	98.6	0	98.6	99.2
Trucks	14	1	0	15	0	0	0	0	0	12	0	12	27
% Trucks	0.7	0.7	0	0.7	0	0	0	0	0	1.4	0	1.4	0.8

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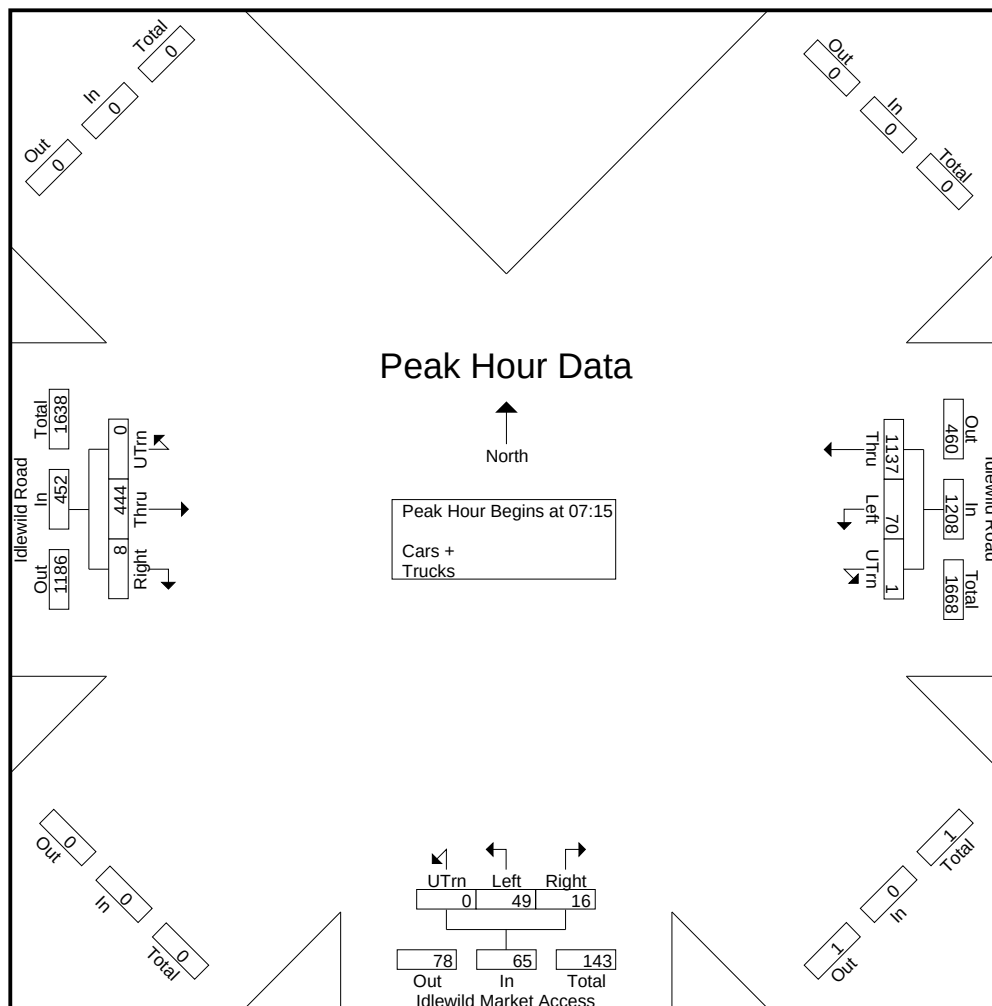
File Name : Matthews(Idlewild and Idlewild Market Access) AM Peak

Site Code :

Start Date : 6/6/2018

Page No : 2

	Idlewild Road Westbound				Idlewild Market Access Northbound				Idlewild Road Eastbound				
Start Time	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Right	Thru	UTrn	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15													
07:15	267	27	1	295	6	7	0	13	1	121	0	122	430
07:30	288	11	0	299	2	15	0	17	2	97	0	99	415
07:45	297	18	0	315	1	10	0	11	3	111	0	114	440
08:00	285	14	0	299	7	17	0	24	2	115	0	117	440
Total Volume	1137	70	1	1208	16	49	0	65	8	444	0	452	1725
% App. Total	94.1	5.8	0.1		24.6	75.4	0		1.8	98.2	0		
PHF	.957	.648	.250	.959	.571	.721	.000	.677	.667	.917	.000	.926	.980



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Site Code :

Start Date : 6/6/2018

Page No : 1

Groups Printed- Cars + - Trucks

Start Time	Idlewild Road Westbound				Idlewild Market Access Northbound				Idlewild Road Eastbound				Int. Total
	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Right	Thru	UTrn	App. Total	
16:00	129	24	0	153	25	13	0	38	4	222	0	226	417
16:15	157	21	0	178	24	19	0	43	0	240	0	240	461
16:30	150	26	0	176	35	25	0	60	7	239	0	246	482
16:45	163	21	0	184	44	22	0	66	11	247	0	258	508
Total	599	92	0	691	128	79	0	207	22	948	0	970	1868
17:00	199	20	0	219	43	31	0	74	10	243	0	253	546
17:15	190	24	0	214	52	38	0	90	5	243	0	248	552
17:30	192	16	0	208	54	20	0	74	8	220	0	228	510
17:45	184	26	0	210	52	27	0	79	4	233	0	237	526
Total	765	86	0	851	201	116	0	317	27	939	0	966	2134
Grand Total	1364	178	0	1542	329	195	0	524	49	1887	0	1936	4002
Apprch %	88.5	11.5	0		62.8	37.2	0		2.5	97.5	0		
Total %	34.1	4.4	0	38.5	8.2	4.9	0	13.1	1.2	47.2	0	48.4	
Cars +	1350	177	0	1527	329	193	0	522	49	1868	0	1917	3966
% Cars +	99	99.4	0	99	100	99	0	99.6	100	99	0	99	99.1
Trucks	14	1	0	15	0	2	0	2	0	19	0	19	36
% Trucks	1	0.6	0	1	0	1	0	0.4	0	1	0	1	0.9

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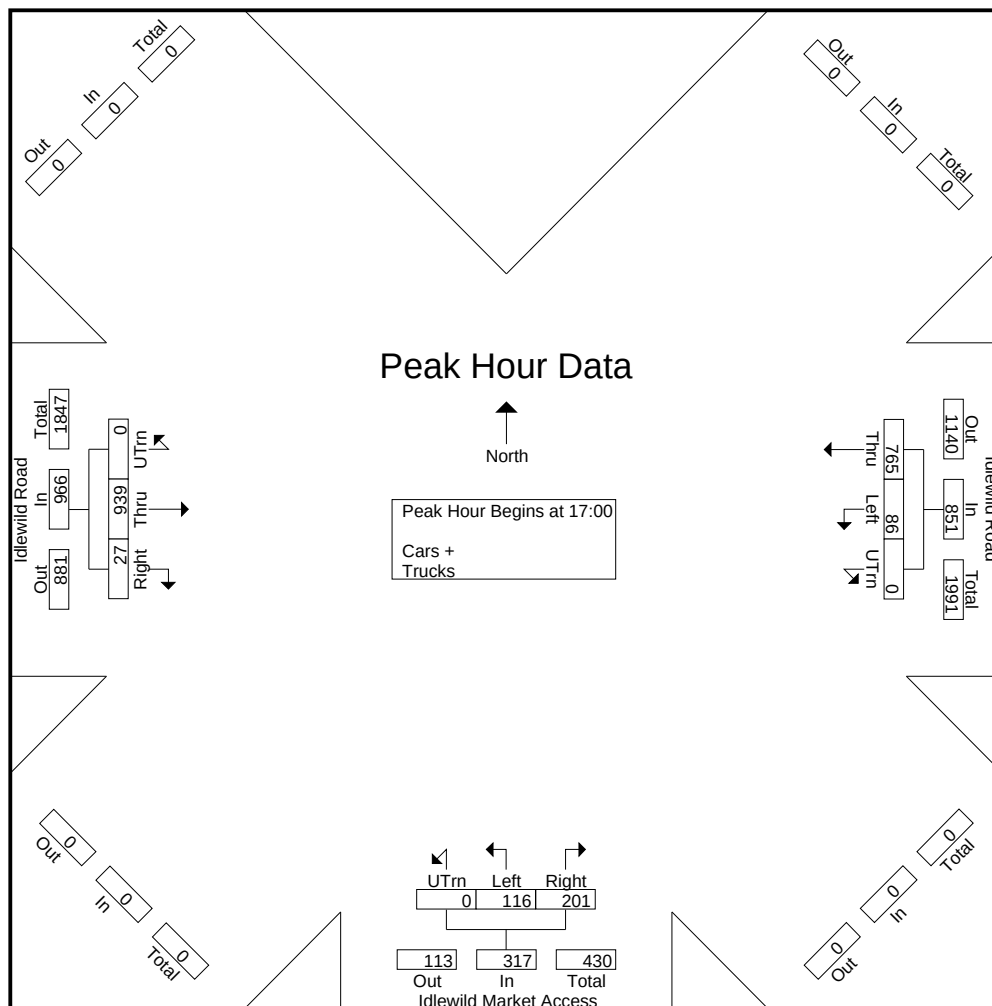
File Name : Matthews(Idlewild and Idlewild Market Access) PM Peak

Site Code :

Start Date : 6/6/2018

Page No : 2

	Idlewild Road Westbound				Idlewild Market Access Northbound				Idlewild Road Eastbound				
Start Time	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Right	Thru	UTrn	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 17:00													
17:00	199	20	0	219	43	31	0	74	10	243	0	253	546
17:15	190	24	0	214	52	38	0	90	5	243	0	248	552
17:30	192	16	0	208	54	20	0	74	8	220	0	228	510
17:45	184	26	0	210	52	27	0	79	4	233	0	237	526
Total Volume	765	86	0	851	201	116	0	317	27	939	0	966	2134
% App. Total	89.9	10.1	0		63.4	36.6	0		2.8	97.2	0		
PHF	.961	.827	.000	.971	.931	.763	.000	.881	.675	.966	.000	.955	.966



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We Count because YOU Count

File Name : Matthews(Idlewild and Stevens Mill) AM Peak

Site Code :

Start Date : 6/6/2018

Page No : 1

Groups Printed- Cars + - Trucks

	Stevens Mill Road Southbound				Idlewild Road Westbound				Stevens Mill Road Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00	60	27	32	119	12	225	10	247	15	9	25	49	9	83	8	100	515
07:15	78	44	28	150	9	206	23	238	15	10	24	49	13	99	11	123	560
07:30	70	52	24	146	11	226	22	259	14	27	20	61	22	89	9	120	586
07:45	66	33	24	123	6	212	20	238	17	25	18	60	14	88	15	117	538
Total	274	156	108	538	38	869	75	982	61	71	87	219	58	359	43	460	2199
08:00	51	30	19	100	11	228	15	254	16	25	15	56	24	89	20	133	543
08:15	48	17	16	81	8	209	9	226	13	12	22	47	4	89	15	108	462
08:30	51	23	16	90	14	169	5	188	6	9	22	37	13	99	19	131	446
08:45	45	19	19	83	17	154	16	187	14	6	11	31	14	96	21	131	432
Total	195	89	70	354	50	760	45	855	49	52	70	171	55	373	75	503	1883
Grand Total	469	245	178	892	88	1629	120	1837	110	123	157	390	113	732	118	963	4082
Apprch %	52.6	27.5	20		4.8	88.7	6.5		28.2	31.5	40.3		11.7	76	12.3		
Total %	11.5	6	4.4	21.9	2.2	39.9	2.9	45	2.7	3	3.8	9.6	2.8	17.9	2.9	23.6	
Cars +	469	245	178	892	85	1619	114	1818	106	123	156	385	113	718	118	949	4044
% Cars +	100	100	100	100	96.6	99.4	95	99	96.4	100	99.4	98.7	100	98.1	100	98.5	99.1
Trucks	0	0	0	0	3	10	6	19	4	0	1	5	0	14	0	14	38
% Trucks	0	0	0	0	3.4	0.6	5	1	3.6	0	0.6	1.3	0	1.9	0	1.5	0.9

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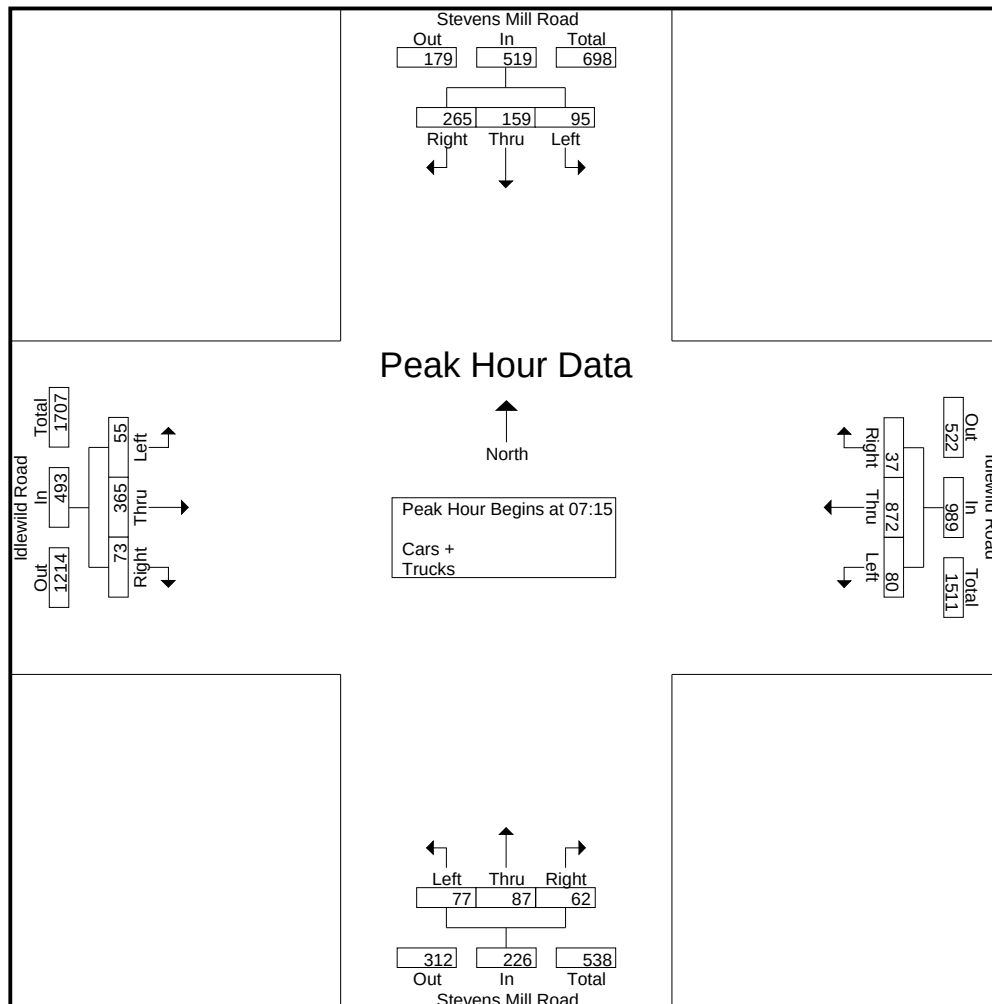
File Name : Matthews(Idlewild and Stevens Mill) AM Peak

Site Code :

Start Date : 6/6/2018

Page No : 2

	Stevens Mill Road Southbound				Idlewild Road Westbound				Stevens Mill Road Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 07:15																	
07:15	78	44	28	150	9	206	23	238	15	10	24	49	13	99	11	123	560
07:30	70	52	24	146	11	226	22	259	14	27	20	61	22	89	9	120	586
07:45	66	33	24	123	6	212	20	238	17	25	18	60	14	88	15	117	538
08:00	51	30	19	100	11	228	15	254	16	25	15	56	24	89	20	133	543
Total Volume	265	159	95	519	37	872	80	989	62	87	77	226	73	365	55	493	2227
% App. Total	51.1	30.6	18.3		3.7	88.2	8.1		27.4	38.5	34.1		14.8	74	11.2		
PHF	.849	.764	.848	.865	.841	.956	.870	.955	.912	.806	.802	.926	.760	.922	.688	.927	.950



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Groups Printed- Cars + - Trucks

	Stevens Mill Road Southbound				Idlewild Road Westbound				Stevens Mill Road Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
16:00	23	17	21	61	24	125	17	166	17	27	24	68	21	197	49	267	562
16:15	26	26	16	68	27	148	16	191	17	22	17	56	21	199	47	267	582
16:30	30	16	17	63	28	119	5	152	27	25	26	78	20	226	54	300	593
16:45	22	20	18	60	32	160	10	202	22	28	22	72	23	225	61	309	643
Total	101	79	72	252	111	552	48	711	83	102	89	274	85	847	211	1143	2380
17:00	41	24	16	81	36	154	9	199	23	32	22	77	22	216	50	288	645
17:15	44	18	19	81	15	174	13	202	27	33	24	84	25	224	43	292	659
17:30	42	20	16	78	35	158	10	203	26	29	14	69	24	200	54	278	628
17:45	45	26	18	89	35	169	9	213	22	30	22	74	17	223	62	302	678
Total	172	88	69	329	121	655	41	817	98	124	82	304	88	863	209	1160	2610
Grand Total	273	167	141	581	232	1207	89	1528	181	226	171	578	173	1710	420	2303	4990
Apprch %	47	28.7	24.3		15.2	79	5.8		31.3	39.1	29.6		7.5	74.3	18.2		
Total %	5.5	3.3	2.8	11.6	4.6	24.2	1.8	30.6	3.6	4.5	3.4	11.6	3.5	34.3	8.4	46.2	
Cars +	273	163	141	577	232	1193	88	1513	180	226	170	576	173	1696	420	2289	4955
% Cars +	100	97.6	100	99.3	100	98.8	98.9	99	99.4	100	99.4	99.7	100	99.2	100	99.4	99.3
Trucks	0	4	0	4	0	14	1	15	1	0	1	2	0	14	0	14	35
% Trucks	0	2.4	0	0.7	0	1.2	1.1	1	0.6	0	0.6	0.3	0	0.8	0	0.6	0.7

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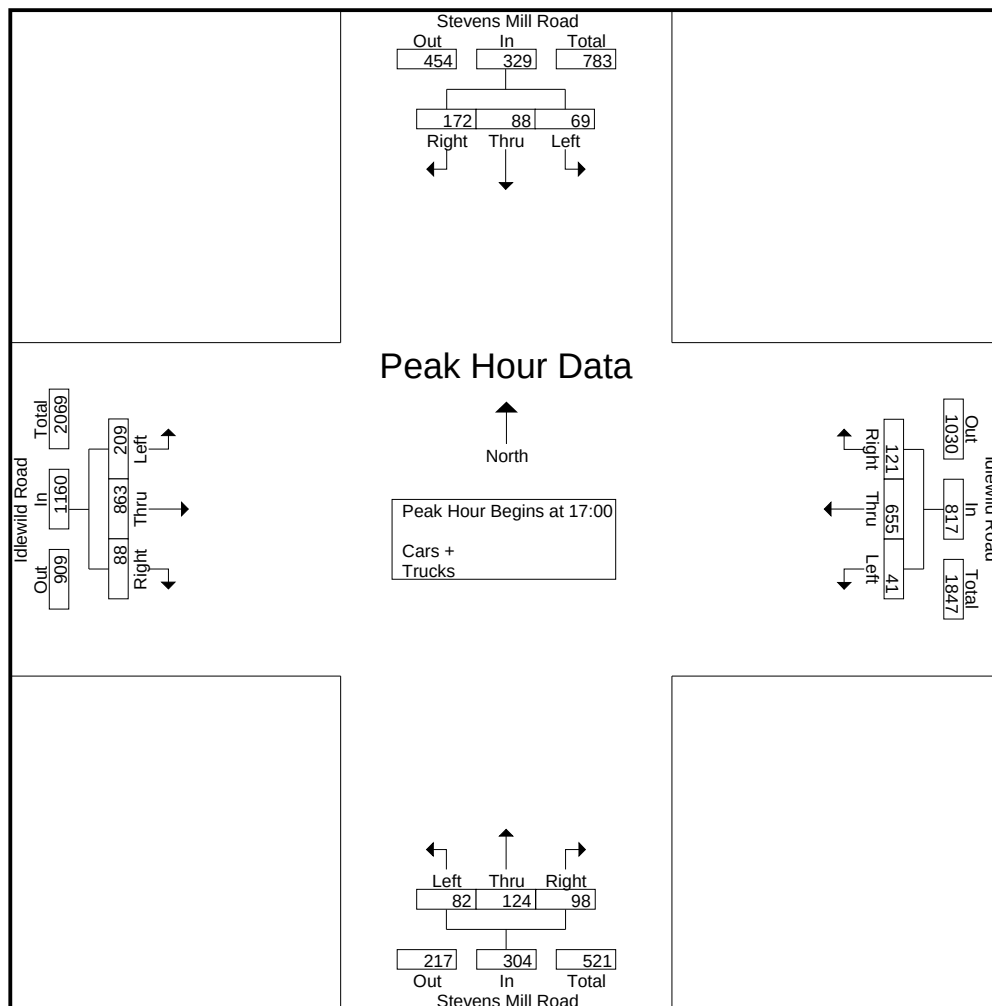
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	Stevens Mill Road Southbound				Idlewild Road Westbound				Stevens Mill Road Northbound				Idlewild Road Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	41	24	16	81	36	154	9	199	23	32	22	77	22	216	50	288	645
17:15	44	18	19	81	15	174	13	202	27	33	24	84	25	224	43	292	659
17:30	42	20	16	78	35	158	10	203	26	29	14	69	24	200	54	278	628
17:45	45	26	18	89	35	169	9	213	22	30	22	74	17	223	62	302	678
Total Volume	172	88	69	329	121	655	41	817	98	124	82	304	88	863	209	1160	2610
% App. Total	52.3	26.7	21		14.8	80.2	5		32.2	40.8	27		7.6	74.4	18		
PHF	.956	.846	.908	.924	.840	.941	.788	.959	.907	.939	.854	.905	.880	.963	.843	.960	.962



APPENDIX B

TIA SCOPING DOCUMENT

Stinson Village TIA

RKA Scoping Assumption

July 19, 2020

Analysis Scenarios

- 2019 Existing
- 2022 No-Build
 - Projected traffic volumes plus trips for mixed use development on south side of Idlewild Road
 - Existing lane configurations plus improvements from mixed use development on south side of Idlewild Road
- 2022 Build Phase 1
 - 2022 No-Build plus proposed Phase 1 trips
- 2022 Build Phase 1 with Gas Station
 - 2022 Build Phase 1 plus proposed gas station
- 2023 No-Build
 - Projected traffic volumes plus trips for mixed use development on south side of Idlewild Road
 - Existing lane configurations plus improvements from mixed use development on south side of Idlewild Road
- 2023 Full Build
 - 2023 No-Build plus proposed Full Build trips
- 2023 Full Build with Gas Station
 - 2023 Full Build plus proposed gas station

Growth Rate

- The growth rate was calculated along Idlewild Road at two different count stations. The average growth rate through the study area was calculated to be approximately 2.5%.



NCDOT Traffic Impact Analysis Need Screening / Scoping Request



TIA Need
Screening



TIA
Scoping



TIA
Submittal

A Traffic Impact Analysis (TIA) may be required for developments based on the site trip generation estimates, site context, or at the discretion of the NCDOT District Engineer. The Applicant or the TIA Consultant shall submit this form along with the site plan to the District Engineer to determine the TIA need and, if a TIA is required, initiate the TIA scoping process. Without an approved scope, the TIA is incomplete and will be rejected until the study is revised to conform to NCDOT's TIA requirements.

Project Name: Stinson Village Previous Name: If Applicable _____

Location: North of Idlewild Road, east of I-485 County: Union Municipality: Stallings

Project Description: A proposed mixed use site consisting of apartments, townhomes, and commercial development.

Project Contact: Applicant
Company Name JLA3, LLC
Contact Person John Armistead
Phone Number 704-618-2345
Email john.armistead3@gmail.com
Mailing Address 2121 Bucknell Avenue
Charlotte, NC 28207

TIA Consultant
Ramey Kemp & Associates
Andrew Eagle, PE, PTOE
704-549-4260
aeagle@rameykemp.com
8210 University Executive Park Drive, 220
Charlotte, NC 28262

Site Plan Prepared By: Design Resource Group

See site plan/vicinity map requirements on page 2.

Parcel Size: 72.32 Acre(s)

Site Plan Date: 3-31-2020

Anticipated Build-Out Year: 2023

Weekday Site Trip Generation - Do NOT adjust for mode split, pass-by, internal capture, or diverted trips.

ITE LUC	Proposed Land Use	Size	Unit	Daily Trips	Peak Hour Type	AM Peak Hour Trips			PM Peak Hour Trips			Data Source
						Enter	Exit	Total	Enter	Exit	Total	
220	Multifam. (Low-Ri)	203	DU	1494	Adj. Street	21	72	93	70	41	111	ITE Equation
222	Multifam.(High-Ri)	408	DU	2222	Adj. Street	35	101	136	104	67	171	ITE Equation
565	Day Care Center	4000	SF	192	Adj. Street	23	21	44	21	23	44	ITE Rate
912	Drive-In Bank	4000	SF	402	Adj. Street	22	16	38	41	41	82	ITE Rate
932	High-Turn. Rest.	5000	SF	562	Generator	40	30	70	45	42	87	ITE Rate
934	Fast-Food Rest.	3500	SF	1650	Adj. Street	72	69	141	59	55	114	ITE Rate
934	Fast-Food Rest.	4500	SF	2120	Adj. Street	92	89	181	76	71	147	ITE Rate
936	Coffe Shop w/o Dr.	3500	SF	2642	Adj. Street	181	173	354	64	63	127	ITE Rate
960	Super Conven. Mar.	4993	SF	4184	Adj. Street	208	207	415	173	173	346	ITE Rate
Total				15468		694	778	1472	653	576	1229	

Refer to the current [NCDOT Congestion Management Capacity Analysis Guidelines](#) for acceptable trip calculation methods and data sources.

**Explain local or other data sources, if used: See attached Trip Generation Table

- ☒ The estimated site trips meet NCDOT's TIA trip threshold of 3,000 daily trips.
- ☒ The estimated site trips meet the municipal TIA trip threshold of 1000 daily trips, 100 peak hour trips
- ☒ This project is located in a known [STIP](#) and/ or local CIP project # U-4913
- ☒ This project includes a rezoning request.
- ☐ The proposed site access is located within 1,000 feet of an interchange.
- ☐ The Applicant requests for a new or modified control-of-access break.
- ☐ The Applicant requests for a new or modified median break.

Applicant's Signature _____

Print Name _____

Date _____



NCDOT Traffic Impact Analysis Need Screening / Scoping Request



TIA Need
Screening



TIA
Scoping



TIA
Submittal

Site Plan/Vicinity Map Requirement for TIA Need Screening: While the site plan may not be finalized during the TIA scoping stage, the graphic representation of the proposed development shall provide adequate details on the development scope and context. More specifically, the site plan/map shall clearly show the location and type of each access point, spacing to adjacent and opposing driveways or intersections, internal street network, proposed buildings/parcels with their anticipated uses and sizes at full build-out and, if applicable, any nearby interstate, US, NC or Secondary Roads (SR).

Project Name: Stinson Village

Project Reference Number: _____

- ☒ **A TIA is Required by the Local Government.** In addition, the study area is expected to include NCDOT maintained transportation facilities.
- ☒ **A TIA is Required by NCDOT,** per the [Policy on Street and Driveway Access to North Carolina Highways](#).

If either or both of the boxes above are checked, the Applicant/TIA Consultant is hereby requested to fill out as much as possible of the following TIA scoping checklist, and return it along with the supporting documents to NCDOT prior to the scoping meeting.

- ☐ **A TIA is NOT required.** This decision is based on the development information presented above. Changes in the development plan will require re-evaluation of the TIA need, and may necessitate a TIA. The Applicant should inform the District Engineer of any significant changes in a timely fashion to avoid delays or rejections of the driveway permit / encroachment agreement applications.

Additional Comments:

The TIA need decision is made by the NCDOT Division _____ District _____ on _____.

NCDOT District Representative's Signature
Email concurrence may be used in lieu of the signature.

Print Name



NCDOT TIA Scoping Checklist



Project Name: Stinson Village

TIA Scoping Date: 7-19-2020

☒ **TIA Need Screening Forms are Attached.** Project Reference #: _____ Decision Date: _____

☒ **Site Plan and Access**

☒ Provide a site plan illustrating site access, internal and external roadways, buildings and land uses.

Refer to NCDOT's [Policy on Street and Driveway Access to North Carolina Highways](#) pages 14 and 15 for site plan requirements.

☒ Identify site access.

New Access	On Road	Access Type		Driveway Spacing		
	Road Name	Permitted Movements	Traffic Control	Distance (ft)	Direction	Nearest Intersection / Access
Access A	Idlewild Road	RIRO	2-Way Stop	440	West	Rite Aid Signal
Access B	Idlewild Road	Conventional Full-Mvmt	Signal	0		Rite Aid Signal
Access C	Idlewild Road	RIRO w/ Left-Over	2-Way Stop	695	East	Rite Aid Signal
Access D	Marshall Hooks Rd	Conventional Full-Mvmt	2-Way Stop	430	North	Idlewild Road
Access E						
Access F						
Access G						
Access H						
Existing Access	Existing Intersection of		Access Modification	Proposed Interconnectivity (If Applicable)		
	Road A	Road B		Connector #	Road Connected	Adjacent Development
Access 1			Please Select	Connector 1		
Access 2				Connector 2		
Access 3				Connector 3		
Access 4				Connector 4		

☐ Additional access clarifications and provisions (e.g., proposed control-of-access or median breaks, modifications of existing access, loading/unloading area access, bike/pedestrian accommodation).

☐ **Proposed K-12 School Site**

☐ NCDOT [MSTA School Traffic Calculator](#) for Select School Type shall be used.

☐ Peak Hour Factors (PHFs) shall be adjusted/weighted for new school trips (0.5 PHF by default).

☐ Internal school circulation analysis is required, and should be submitted in advance or concurrent with the TIA submittal.

☐ Clarify traffic operation plans (e.g. traffic circulation pattern, pedestrian access, drop-off/pick-up zone location and configuration, queue storage area and, if applicable, staggered start times).



NCDOT TIA Scoping Checklist



☒ Trip Generation

The TIA Consultant shall prepare trip generation estimates following the current [NCDOT Congestion Management Capacity Analysis Guidelines](#), and submit the calculation sheets and supporting information to the District Engineer for approval prior to capacity analysis.

ITE LUC	Proposed Land Use	Size	Unit	Daily Trips	Peak Hour Type	AM Peak Hour Trips			PM Peak Hour Trips			Data Source
						Enter	Exit	Total	Enter	Exit	Total	
220	Multifam. (Low-Ri)	203	DU	1494	Adj. Street	21	72	93	70	41	111	ITE Equation
222	Multifam. (High-Ri)	408	DU	2222	Adj. Street	35	101	136	104	67	171	ITE Equation
565	Day Care Center	4000	SF	192	Adj. Street	23	21	44	21	23	44	ITE Rate
912	Drive-In Bank	4000	SF	402	Adj. Street	22	16	38	41	41	82	ITE Rate
932	High-Turn. Rest.	5000	SF	562	Generator	40	30	70	45	42	87	ITE Rate
934	Fast-Food Rest.	3500	SF	1650	Adj. Street	72	69	141	59	55	114	ITE Rate
934	Fast-Food Rest.	4500	SF	2120	Adj. Street	92	89	181	76	71	147	ITE Rate
936	Coffe Shop w/o Dr.	3500	SF	2642	Adj. Street	181	173	354	64	63	127	ITE Rate
960	Super Conven. Mar.	4993	SF	4184	Adj. Street	208	207	415	173	173	346	ITE Rate
Unadjusted Site Trips				15468		694	778	1472	653	576	1229	
Internal Capture Trips (Attach Calculation Sheets)				136		46	46	92	22	22	44	Please Select
Internal Capture % of Unadjusted Site Trips				1 %		6 %			4 %			
LUC	Proposed Land Use	Any Internal Trips?		Pass-By % of External Trips								
		Please Select		%		%			%			Please Select
				%		%			%			
				%		%			%			
				%		%			%			
				%		%			%			
Pass-By Trips (Attach Calculation Sheets)						78	78	156	84	84	168	
Adjacent Street Volumes				25000								Please Select
Non-Pass-By Primary Trips												
Diverted Trips, if Applicable and Justifiable												Please Select

**Explain local or other data sources, if used:

See attached trip generation table

☐ Existing Site Trip Information for Redevelopment Projects (Attach separate sheets as needed)

ITE LUC	Existing Land Use	Size	Unit	Daily Trips	Peak Hour Type	AM Peak Hour Trips			PM Peak Hour Trips			Data Source
						Enter	Exit	Total	Enter	Exit	Total	
					Please Select							Please Select
Total Existing Site Trips												



NCDOT TIA Scoping Checklist



☒ Trip Distribution

- ☒ Trip distribution diagrams are submitted concurrently with this document (attach separate sheets).
- ☐ Trip distribution diagrams will be submitted separately, along with supporting information, to the District Engineer for review and approval prior to capacity analysis. The trip distribution shall be based on the current and anticipated traffic patterns, as well as instructions noted below.

If required by the District Engineer, the following additional diagrams shall also be submitted:

- ☐ Mixed-Use Developments (separate diagrams for residential, commercial, and office trips)
- ☐ Inter-Development Trips (if 'internal' trips cross public streets)
- ☒ Pass-By Trips
- ☐ Diverted Trips
- ☐ Each Analysis Period

☐ Mode Split

- ☐ Provide Data Source and Justification

Mode Period	Auto		
AM Peak	%	%	%
PM Peak	%	%	%
Daily	%	%	%
	%	%	%

- ☐ Identify proper infrastructure and accommodation for other modes of travel.

☒ Analysis Peak Periods:

- ☒ Weekday AM Peak 7:00-9:00 AM
- ☒ Weekday PM Peak 4:00-6:00 PM
- ☐ Weekday Midday Peak _____
- ☐ Weekday PM School Peak _____
- ☐ Weekend _____ Peak _____
- ☐ Other _____



NCDOT TIA Scoping Checklist



☒ Study Area Intersections and Data Collection

The study area shall include the site access intersections (both new and existing) identified under “Site Plan and Access” on page 1, as well as the following external and, if applicable, internal intersections.

External Intersection	Intersection of		Traffic Control	Intersection Turning Movement Counts			Notes
	Road A	Road B		New / Existing	Date of Counts	Growth Adjustment	
#1	Idlewild Road	Stallings Road	2-Way Stop	Use Existing Counts	10-02-18	2.5%	
#2	Idlewild Road	I-485 SB Ramps	Signal	Use Existing Counts	06-06-18	2.5%	
#3	Idlewild Road	I-485 NB Ramps	Signal	Use Existing Counts	06-06-18	2.5%	
#4	Idlewild Road	Marshall Hooks	2-Way Stop	Use Existing Counts	06-06-18	2.5%	
#5	Idlewild Road	Rite Aid Signal	Signal	Use Existing Counts	06-06-18	2.5%	
#6	Idlewild Road	Stevens Mill Road	Signal	Use Existing Counts	06-06-18	2.5%	
#7							
#8							
#9							
#10							
#11							
#12							

Internal Intersection	Intersection of		Access Type		Intersection Spacing		
	Road A	Road B	Traffic Control	Permitted Movements	Distance (ft)	Direction	Nearest Intersection
#101	Access B	Internal Roadway	All-Way Stop	Roundabout	460	North	Idlewild Road
#102							
#103							
#104							
#105							

The following data will be collected:

- ☐ New traffic turning movement counts in ☐ 15-min intervals ☐ 5-min intervals (near schools)
Unless otherwise noted above, new traffic counts shall be collected at the existing study intersections during the analysis periods. Weekday counts shall avoid Mondays, Fridays, holidays, school breaks, road closures, and major weather events.
- ☐ To account for the impact of existing and/or proposed school traffic, PHFs will be adjusted for:
intersections numbered: _____
and access points numbered: _____
- ☐ Traffic Forecast Data for TIP: _____
- ☒ Roadway/Intersection Configuration & Traffic Control
- ☒ Traffic Signal Phasing & Timing Data
- ☐ Crash Data: _____ Period: _____
- ☐ Other: _____



NCDOT TIA Scoping Checklist



☒ Future Year Conditions

☒ Project Build-Out Year: Phase 1 2022, Full Build 2023

☒ Future Analysis Year(s): _____

☒ Identify below any funded/committed future transportation improvements, as well as any approved but incomplete developments near the site.

Funded STIP / Local CIP Project	Project Description		Year Complete
Nearby Approved Development	Location	Future Land Use (exclude any completed phases)	Committed Improvements
Idlewild Mixed Use	South of Idlewild Road	Mixed Use	Yes

☒ Annual Growth Factor: 2 %

Justification/Data Source: 2.5% growth rate based on historic traffic count data

☒ Local Comprehensive Transportation Plan Compliance

☒ Identify Applicable Local Transportation Planning Documents

SR-1501 (Idlewild Road) is a Needs Improvement - Boulevard, per the CRTPO Comprehensive Transportation Plan

☐ Identify Applicable Roadways inside the Study Area

Road Name	Classification	Speed Limit	Proposed Cross-Section	Proposed Right-of-Way	Compliance Requirements	Affect Study Intersection #



NCDOT TIA Scoping Checklist



☒ Study Method

The traffic analysis shall follow the current [NCDOT Congestion Management Capacity Analysis Guidelines](#), [Policy on Street and Driveway Access to North Carolina Highways](#), and use the current approved version of analysis software (e.g. Synchro/SimTraffic, HCS, Sidra Intersection, TransModeler).

The study shall include the following analysis scenarios for each analysis period.

1. Existing Conditions
2. Future No-Build Conditions (existing + background growth + approved developments + committed or funded improvements)
3. Future Build Conditions (future no-build + site trips)
4. Future Build with Improvements Conditions (future build traffic with improvements to mitigate the proposed development's impacts) and, if applicable:
- ☐ 5. TIP Design Year Analysis _____
- ☐ 6. Alternative Access Scenario (without proposed control-of-access or median break / modification)

The following additional analysis/outputs should be provided as warranted:

- ☐ Signal Warrant Analysis for accesses/intersections _____
- ☐ Multi-Modal Level of Service Analysis
- ☐ School Loading Zone Traffic Simulation
- ☒ Phasing Analysis (scope separately as needed)
- ☒ Safety/Crash Analysis
- ☐ Control-of-Access Modification Justification
- ☐ Median Break / Modification Justification
- ☐ Other _____

☒ Submittals

In addition to the hardcopies required below, the TIA Consultant shall provide the District Engineer and, if required, the local government an electronic copy of the study documents, including the latest site plan, figures and appendices, in searchable PDF files and the original traffic analysis files (e.g., Synchro, HCS). To expedite review, the NCDOT electronic submittals shall also be delivered concurrently to:

☒ Div. Traffic Engr ☐ Regional Traffic Engr ☐ Congestion Management ☐ Other _____

Submittals	NCDOT		Local Government	
	Electronic	Hardcopy	Electronic	Hardcopy
Trip Generation & Distribution	Required		Please Select	
Draft TIA Report	Required			
Final Sealed TIA Report	Required	2		1

☐ **Additional Comments** (municipal TIA requirements, approved variations from NCDOT guidelines)



NCDOT TIA Scoping Checklist



Agreement by All Parties

The undersigned agree to the contents and methodology described above for completing the required traffic impact analysis for the proposed development identified herein. Any changes to the above methodology contemplated by the Applicant or the TIA Consultant must be submitted to the District Engineer in writing. If approved by NCDOT, then such changes may be accepted for the TIA report. Subsequent revisions to the development plan (e.g. land use, density, site access, or schedule) may require additional scoping and analysis, and may modify the TIA requirements.

This agreement shall become effective on the date approved by NCDOT, and shall expire ____ months after the effective date or upon significant changes to the roadway network and/or development assumptions, whichever occurs first. Once expired, renewal or re-scoping will be required for subsequent TIA submittals.

APPLICANT

_____ Signature	_____ Print Name	_____ Date
--------------------	---------------------	---------------

TIA CONSULTANT

_____ Signature	_____ Print Name	_____ Date
--------------------	---------------------	---------------

LOCAL GOVERNMENT REPRESENTATIVE (If Applicable)

_____ Signature	_____ Print Name	_____ Date
--------------------	---------------------	---------------

Email concurrence may be used in lieu of the signature.

NCDOT DISTRICT REPRESENTATIVE

Reviewed and approved by the NCDOT Division ____ District ____ on _____.

_____ Signature	_____ Print Name
--------------------	---------------------

Email concurrence may be used in lieu of the signature.



NCDOT TIA Submittal Checklist



Submittal: Final Sealed TIA Report Document Date: 2-19-2021
Project Name: Stinson Village Previous Name: If Applicable _____
NCDOT Division: 10 District: 3 County: Union Municipality: Stallings
TIA Consultant: Ramey Kamp & Associates Submitted By: J. Andrew Eagle
Phone Number: 704-549-4260 Email: Aeagle@Rameykemp.Com
TIA Scoping Checklist Approval Date: 7-27-2020 Unadjusted Daily Site Trips: 15,468

- ☒ The approved TIA Scoping Checklist is included in this submittal.
☐ LOS D or better is expected at all study intersections after proposed mitigations.
☒ The study report is sealed by a NC Professional Engineer with expertise in traffic engineering.
☒ This study has identified all known deficiencies with and without the proposed development.
☒ This study has identified mitigation measures to adequately accommodate the site trips.

Explain here if any of the boxes above are unchecked:

Some stop controlled approaches, unsignalized left turn movements, and some signalized approaches are expected to operate at LOS E or LOS F. Improvements were not recommended for some of these due to either minimal impact from the proposed development, or the proposed development is not the main cause of the poor level of service.

The undersigned affirms that, except for the deviations noted below, the TIA submittal conforms to the current NCDOT Congestion Management Capacity Analysis Guidelines, Policy on Street and Driveway Access to North Carolina Highways, and the TIA Scoping Checklist approved by the NCDOT District Office. The undersigned also acknowledges that the TIA will be rejected if the deviations and justifications are not properly documented and approved by NCDOT.

Deviations and Justifications (e.g., changes in site plan, development schedule, site trip and off-site trip estimates, study area, data collection, analysis period and method. Attached separate sheets if needed.)

J. Andrew Eagle
TIA Consultant's Signature
(Professional Engineer of TIA Record)

James Andrew Eagle
Print Name

2-19-2021
Date



Moving forward.



Stinson Village Stallings, NC

Site Location Map

Scale: Not to Scale

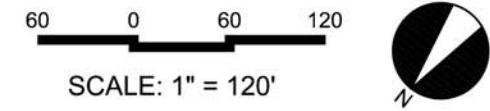


LEGEND

-  Proposed Site Location
-  Study Intersection

IDLEWILD SITE

STALLINGS, NORTH CAROLINA



SITE DATA
TAX MAP NO:

07075020, 07075019,
07075018, 07075017A, 0707017B,
07075028, 07075023, 19511201,
07075022, 07075022A, 19511224,
19511202, 19511213

ZONING:
PROPOSED ZONING:

MU-2
MU-2

TOTAL SITE AREA:

±72.32 ACRES

EXISTING LAND USE:
PROPOSED USE:

VACANT (WOODED LAND)
MULTIFAMILY RESIDENTIAL,
TOWNHOMES, COMMERCIAL

WATERSHED:

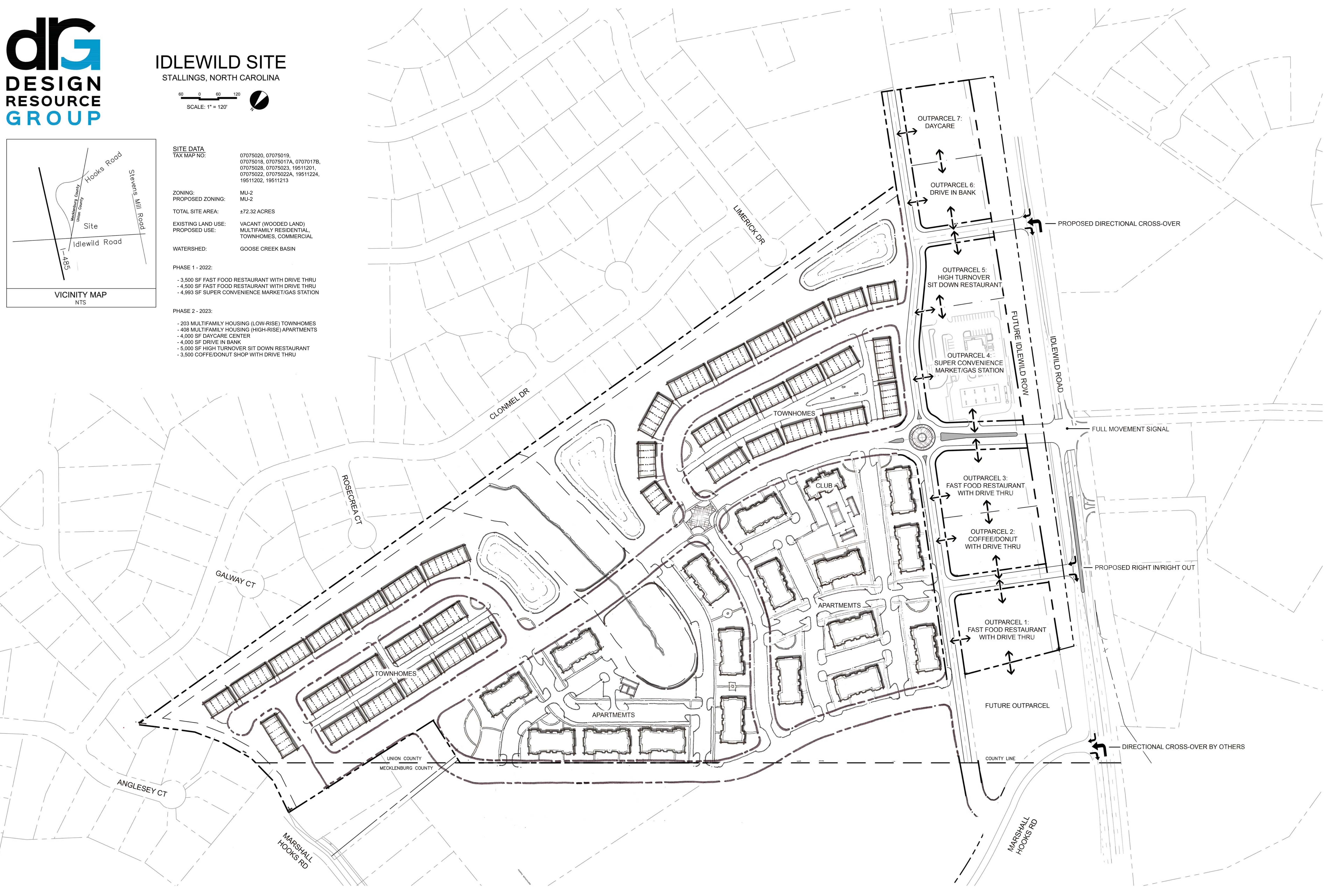
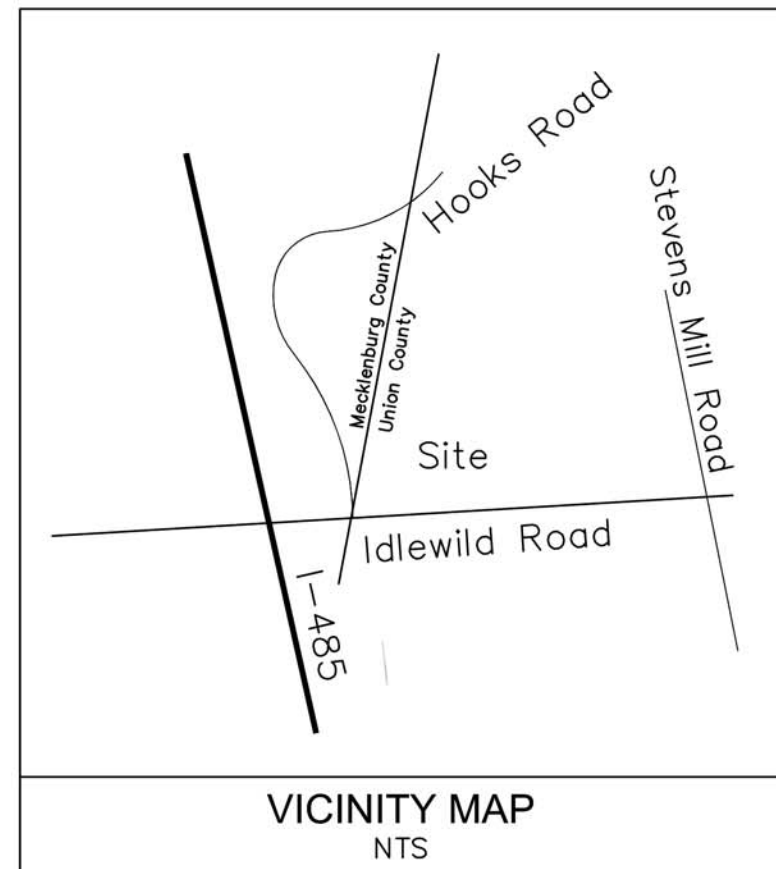
GOOSE CREEK BASIN

PHASE 1 - 2022:

- 3,500 SF FAST FOOD RESTAURANT WITH DRIVE THRU
- 4,500 SF FAST FOOD RESTAURANT WITH DRIVE THRU
- 4,993 SF SUPER CONVENIENCE MARKET/GAS STATION

PHASE 2 - 2023:

- 203 MULTIFAMILY HOUSING (LOW-RISE) TOWNHOMES
- 408 MULTIFAMILY HOUSING (HIGH-RISE) APARTMENTS
- 4,000 SF DAYCARE CENTER
- 4,000 SF DRIVE IN BANK
- 5,000 SF HIGH TURNOVER SIT DOWN RESTAURANT
- 3,500 COFFEE/DONUT SHOP WITH DRIVE THRU



Full Build Trip Generation

ITE Code	Land Use	Size	Units	Weekday								
				Daily			AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total	In	Out	Total
220	Multifamily Housing (Low-Rise)	203	DU	747	747	1,494	21	72	93	70	41	111
	Internal Capture Trips						1	15	16	2	1	3
	New External Trips						20	57	77	68	40	108
221	Multifamily Housing (Mid-Rise)	408	DU	1,111	1,111	2,222	35	101	136	104	67	171
	Internal Capture Trips						1	20	21	3	1	4
	New External Trips						34	81	115	101	66	167
565	Day Care Center	4,000	SF	96	96	192	23	21	44	21	23	44
	Internal Capture Trips						0	0	0	0	0	0
	New External Trips						23	21	44	21	23	44
912	Drive-In Bank	4,000	SF	201	201	402	22	16	38	41	41	82
	Internal Capture Trips						0	0	0	0	0	0
	Pass-By Trips						6	6	12	15	15	30
	New External Trips						16	10	26	26	26	52
932	High-Turnover (Sit-Down) Restaurant	5,000	SF	281	281	562	40	30	70	45	42	87
	Internal Capture Trips						4	0	4	0	1	1
	Pass-By Trips						-	-	-	19	19	38
	New External Trips						36	30	66	26	22	48
934	Fast-Food Restaurant with Drive-Thru	3,500	SF	825	825	1,650	72	69	141	59	55	114
	Internal Capture Trips						6	1	7	0	1	1
	Pass-By Trips						33	33	66	29	29	58
	New External Trips						33	35	68	30	25	55
934	Fast-Food Restaurant with Drive-Thru	4,500	SF	1,060	1,060	2,120	92	89	181	76	71	147
	Internal Capture Trips						8	1	9	1	2	3
	Pass-By Trips						43	43	86	36	36	72
	New External Trips						41	45	86	39	33	72
936	Coffee/Donut Shop w/o Drive-Thru	3,500	SF	1,321	1,321	2,642	181	173	354	64	63	127
	Internal Capture Trips						16	1	17	1	1	2
	New External Trips						165	172	337	63	62	125
960	Super Convenience Market/Gas Sation	4,993	SF	2,092	2,092	4,184	208	207	415	173	173	346
	Internal Capture Trips						0	0	0	0	0	0
	Pass-By Trips (based on ITE Code 945 percentages)						129	129	258	97	97	194
	New External Trips						79	78	157	76	76	152
Total Trips				7,734	7,734	15,468	694	778	1,472	653	576	1,229
Total Internal Capture Trips (Limited to 10% reduction)			36				38	74	7	7	44	
Total Pass-By Trips (Limited to 10% of Adjacent Street Traffic)			78				78	156	84	84	168	
Total New External Trips			580				662	1,242	562	485	1,017	

(1) Based on ITE Trip Generation – 10th Edition

HISTORICAL TRAFFIC GROWTH RATE

Year	Road Name: Idlewild Road Route ID: 40003174060 Location #: 0600000767	Road Name: Idlewild Road Route ID: 40001501090 Location #: 0900000289
2018	24500	25000
2017		
2016	27000	24000
2015		
2014	22000	20000
2013		
2012	20000	18000
2011		
2010	20000	20000
2009		

2016-18	-4.74%	2.06%
2014-18	2.73%	5.74%
2012-18	3.44%	5.63%
2010-18	2.57%	2.83%

A growth rate of 2.5% per year is recommended

NCHRP 684 Internal Trip Capture Estimation Tool					
Project Name:	Stinson Village			Organization:	RKA
Project Location:	Stallings, NC			Performed By:	TCP
Scenario Description:	Full Build			Date:	5/21/2020
Analysis Year:	2023			Checked By:	JAE
Analysis Period:	AM Street Peak Hour			Date:	5/22/2020

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office						
Retail						
Restaurant	932/934/936	16,500	SF	746	385	361
Cinema/Entertainment						
Residential	220/221	611	DU	229	56	173
Hotel						
All Other Land Uses ²	565/912/960	12,993	SF	497	253	244
				1,472	694	778

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office	1.10	0%	0%	1.10	0%	0%
Retail	1.10	0%	0%	1.10	0%	0%
Restaurant	1.10	0%	0%	1.10	0%	0%
Cinema/Entertainment	1.10	0%	0%	1.10	0%	0%
Residential	1.10	0%	0%	1.10	0%	0%
Hotel	1.10	0%	0%	1.10	0%	0%
All Other Land Uses ²	1.10	0%	0%	1.10	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	3	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	38	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	1,619	764	855
Internal Capture Percentage	5%	5%	5%
External Vehicle-Trips ⁵	1,398	658	740
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	9%	1%
Cinema/Entertainment	N/A	N/A
Residential	5%	20%
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Stinson Village
Analysis Period:	AM Street Peak Hour

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.10	0	0	1.10	0	0
Retail	1.10	0	0	1.10	0	0
Restaurant	1.10	385	424	1.10	361	397
Cinema/Entertainment	1.10	0	0	1.10	0	0
Residential	1.10	56	62	1.10	173	190
Hotel	1.10	0	0	1.10	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	123	56		0	16	12
Cinema/Entertainment	0	0	0		0	0
Residential	4	2	38	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	98	0	0	0
Retail	0		212	0	1	0
Restaurant	0	0		0	3	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	85	0		0
Hotel	0	0	25	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	38	386	424	351	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	3	59	62	54	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	278	278	253	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	3	394	397	358	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	38	152	190	138	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	268	268	244	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

²Person-Trips

³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool					
Project Name:	Stinson Village			Organization:	RKA
Project Location:	Stallings, NC			Performed By:	TCP
Scenario Description:	Full Build			Date:	5/21/2020
Analysis Year:	2023			Checked By:	JAE
Analysis Period:	PM Street Peak Hour			Date:	5/22/2020

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office						
Retail						
Restaurant	932/934/936	16,500	SF	475	244	231
Cinema/Entertainment						
Residential		611	DU	282	174	108
Hotel						
All Other Land Uses ²	565/912/960	12,993	SF	472	235	237
				1,229	653	576

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office	1.10	0%	0%	1.10	0%	0%
Retail	1.10	0%	0%	1.10	0%	0%
Restaurant	1.10	0%	0%	1.10	0%	0%
Cinema/Entertainment	1.10	0%	0%	1.10	0%	0%
Residential	1.10	0%	0%	1.10	0%	0%
Hotel	1.10	0%	0%	1.10	0%	0%
All Other Land Uses ²	1.10	0%	0%	1.10	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		4000	4000		4000	
Retail					4000	
Restaurant					4000	
Cinema/Entertainment					4000	
Residential		4000	4000			
Hotel					4000	

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	5	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	2	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	1,352	718	634
Internal Capture Percentage	1%	1%	1%
External Vehicle-Trips ⁵	1,215	646	569
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	1%	2%
Cinema/Entertainment	N/A	N/A
Residential	3%	2%
Hotel	N/A	N/A

¹ Land Use Codes (LUCs) from <i>Trip Generation Manual</i> , published by the Institute of Transportation Engineers.
² Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
³ Enter trips assuming no transit or non-motorized trips (as assumed in ITE <i>Trip Generation Manual</i>).
⁴ Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be
⁵ Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
⁶ Person-Trips
*Indicates computation that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Stinson Village
Analysis Period:	PM Street Peak Hour

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.10	0	0	1.10	0	0
Retail	1.10	0	0	1.10	0	0
Restaurant	1.10	244	268	1.10	231	254
Cinema/Entertainment	1.10	0	0	1.10	0	0
Residential	1.10	174	191	1.10	108	119
Hotel	1.10	0	0	1.10	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	8	104		20	5	18
Cinema/Entertainment	0	0	0		0	0
Residential	5	5	2	0		4
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	1	0	8	0
Retail	0		78	0	88	0
Restaurant	0	0		0	31	0
Cinema/Entertainment	0	0	8		8	0
Residential	0	0	4	0		0
Hotel	0	0	13	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	2	266	268	242	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	5	186	191	169	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	259	259	235	0	0

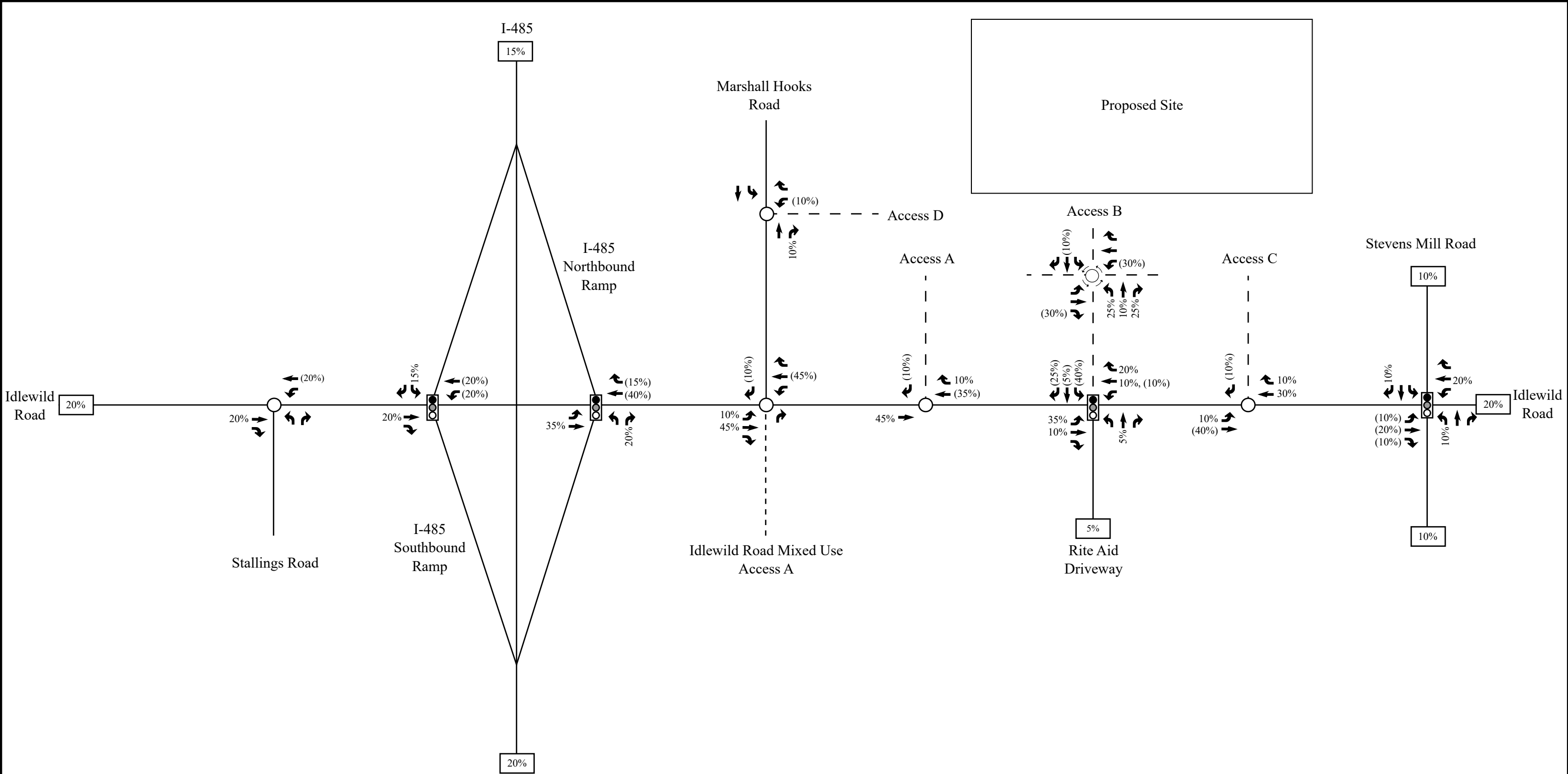
Table 9-P (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	5	249	254	226	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	2	117	119	106	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	261	261	237	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

²Person-Trips

³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.



Moving forward.



RAMEY KEMP ASSOCIATES

Stinson Village

Stallings, NC

Proposed Site

Primary

Trip Distribution Percentages

Scale: Not to Scale

○

Unsignalized Intersection

◫

Signalized Intersection

⦿

Roundabout

X% →

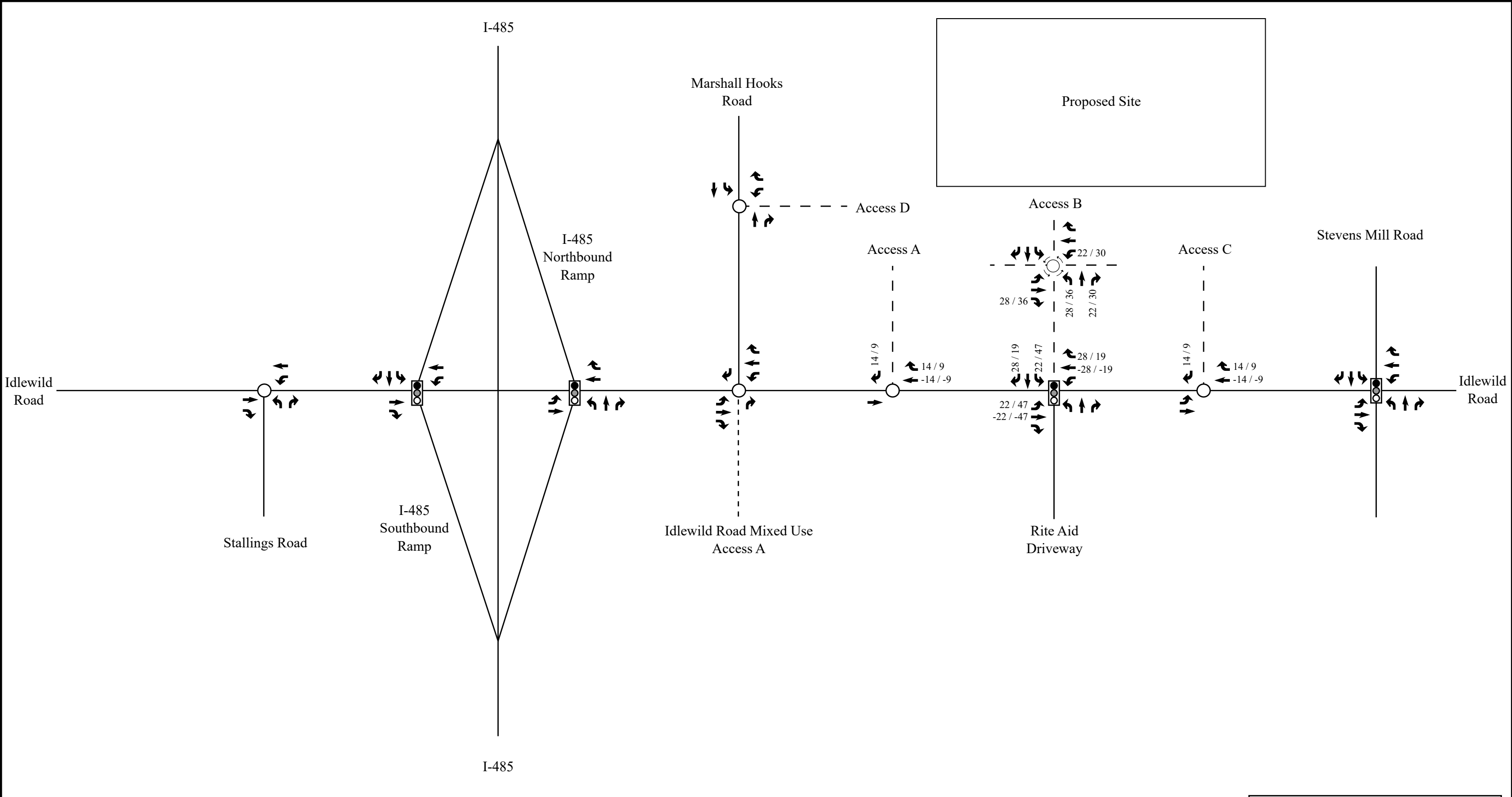
Entering Trip Distributions

(Y%) →

Exiting Trip Distributions

XX%

Regional Trip Distribution



Moving forward.



RAMEY KEMP ASSOCIATES

Stinson Village

Stallings, NC

Proposed Site

Pass-By

Trip Assignment

Scale: Not to Scale



LEGEND

 Unsignalized Intersection

 Signalized Intersection

 Roundabout

X / Y

 AM / PM Peak Hour Traffic Volume

APPENDIX C

ADJACENT DEVELOPMENT INFORMATION

TRAFFIC IMPACT STUDY

FOR THE

Idlewild Road Mixed Use

LOCATED
IN
MATTHEWS AND STALLINGS, NORTH CAROLINA

Prepared For:
North 44 Property Management, Inc.
7800 Kennedy Road, Suite 404
Markham, Ontario L3R 2 C7

Prepared By:
Ramey Kemp & Associates, Inc.
8307 University Executive Park Drive, Suite 260
Charlotte, NC 28262
License #C-0910

April, 2019
RKA Project #18181.01



4. PROJECTED TRAFFIC

4.1. Site Traffic

In order to determine the future traffic conditions after the proposed development is completed, an estimate of traffic projected to travel to / from the proposed development is required. The average weekday daily, AM peak hour, and PM peak hour site trips for this study were calculated based on the ITE *Trip Generation Manual*, 10th Edition.

4.1.1. Trip Generation

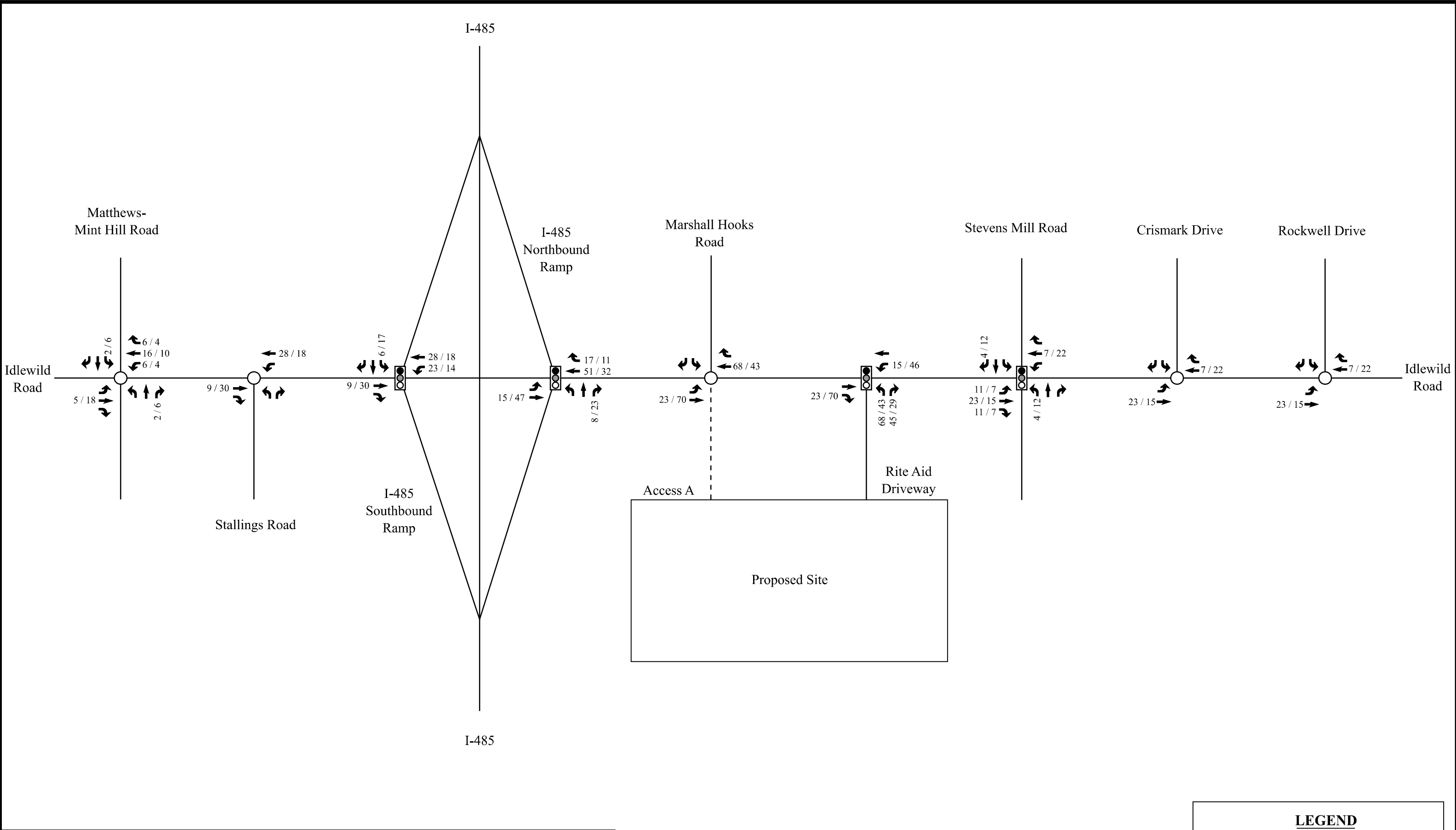
The site is proposed to be constructed in two phases. Phase 1 will consist of up to 127 multifamily low-rise homes, and 270 multifamily mid-rise homes. An additional 121 multifamily low-rise homes, a 120-room hotel, a 20,000 square foot medical office, 10,000 square feet of shopping center, and a 6,000 square foot sit-down restaurant will also be built in the 2020 Full Build scenario. The existing Rite Aid Driveway would provide access to Phase 1. One site access is expected to be built on Idlewild Road as a right-in / right-out with a left over. This access would be constructed after Phase 1. The site is expected to be fully built by the year 2020. Table 2 summarizes the trip generation for the 2020 Phase 1 scenario while Table 3 summarizes the trip generation for 2020 Full Build scenario.

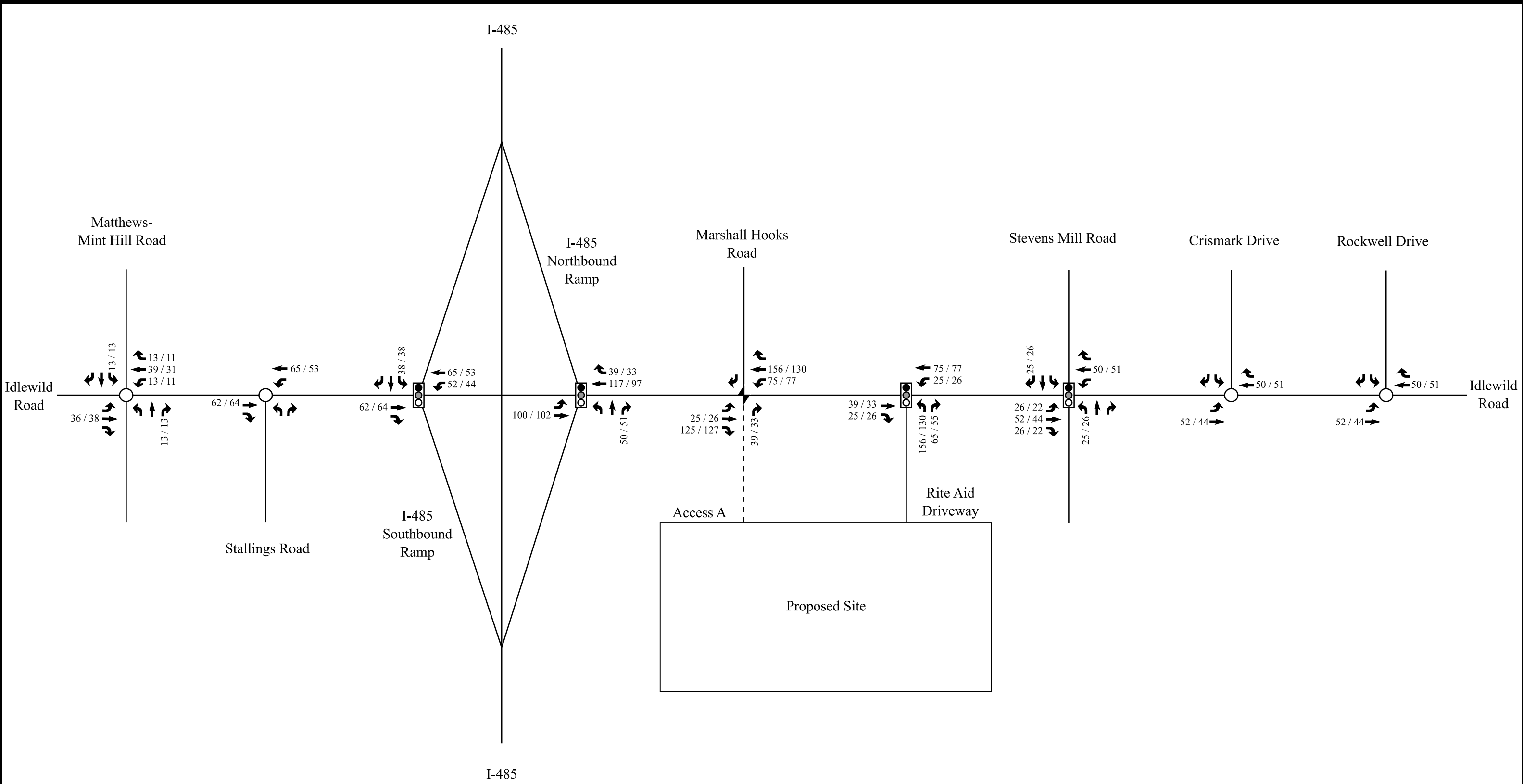
**TABLE 2
PROPOSED SITE PHASE 1 TRIP GENERATION**

LAND USE	SIZE	DAILY TRIPS (VPD)	PEAK HOUR TRIPS (VPH)			
			AM		PM	
			ENTER	EXIT	ENTER	EXIT
Multifamily-low (220)	127 DU	920	14	46	46	27
Multifamily-mid (221)	270 DU	1,470	24	67	70	45
Total New External Trips		2,390	38	113	116	72

**TABLE 3
PROPOSED SITE FULL BUILD TRIP GENERATION**

LAND USE	SIZE	DAILY TRIPS (VPD)	PEAK HOUR TRIPS (VPH)			
			AM		PM	
			ENTER	EXIT	ENTER	EXIT
Multifamily-low (220)	248 DU	1,836	26	87	84	49
Internal Capture Trips			2	7	1	4
Multifamily-mid (221)	270 DU	1,470	24	67	70	45
Internal Capture Trips			1	6	1	4
Hotel (310)	120 Rooms	928	32	23	33	31
Internal Capture Trips			1	2	3	3
Medical Office (720)	20,000 SF	696	44	12	19	50
Internal Capture Trips			4	1	1	0
Shopping Center (820)	10,000 SF	1,258	97	60	48	51
Internal Capture Trips			9	6	4	5
Passy-By Trips			-	-	16	16
Sit-Down Restaurant (932)	6,000 SF	674	48	36	54	50
Internal Capture Trips			4	3	5	5
Pass-By Trips			-	-	21	21
Total Trips		6,862	271	285	308	276
Total Internal Capture Trips		-	21	25	15	21
Total Pass-By Trips		-	-	-	23	23
Total New External Trips		6,862	250	260	256	218





LEGEND

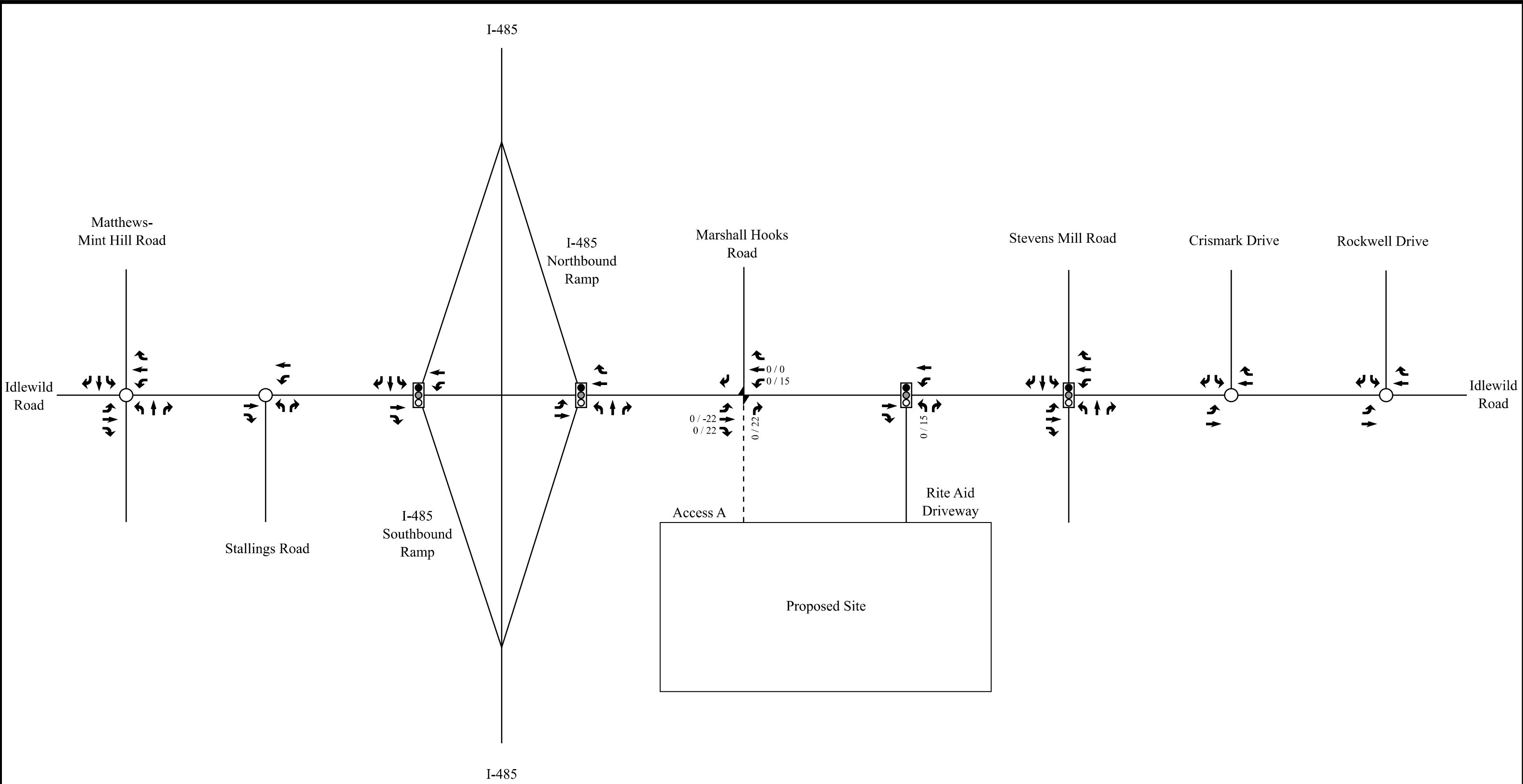
Unsignalized Intersection

Signalized Intersection

Directional Crossover

X / Y → AM / PM Peak Hour Traffic Volume

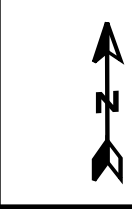




Idlewild Road
Matthews, NC

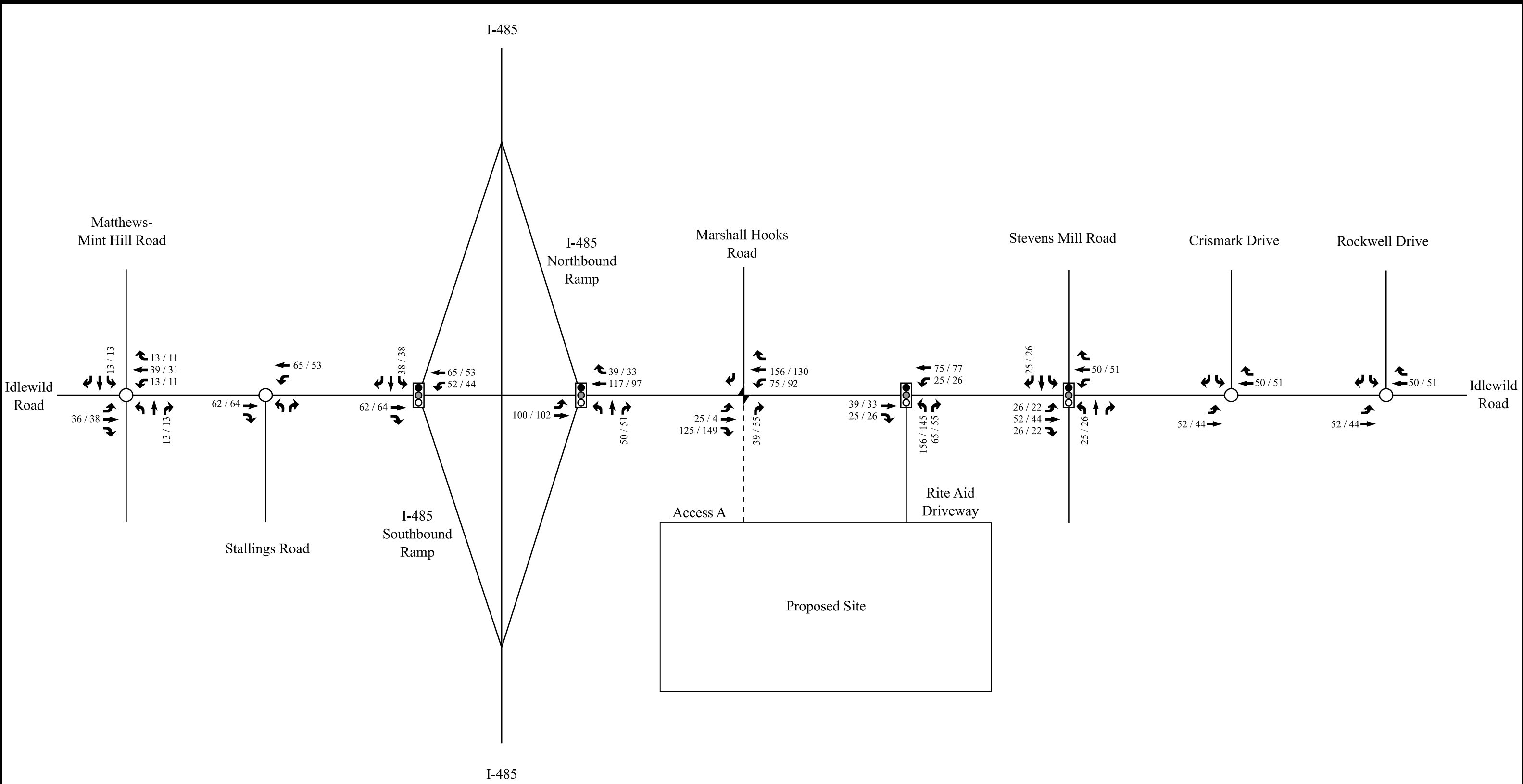
Proposed Site - Full Build
Pass-By
Trip Assignment

Scale: Not to Scale	Figure 10
---------------------	-----------



LEGEND

- Unsignalized Intersection
- ◫ Signalized Intersection
- ↔ Directional Crossover
- X / Y → AM / PM Peak Hour Traffic Volume



LEGEND

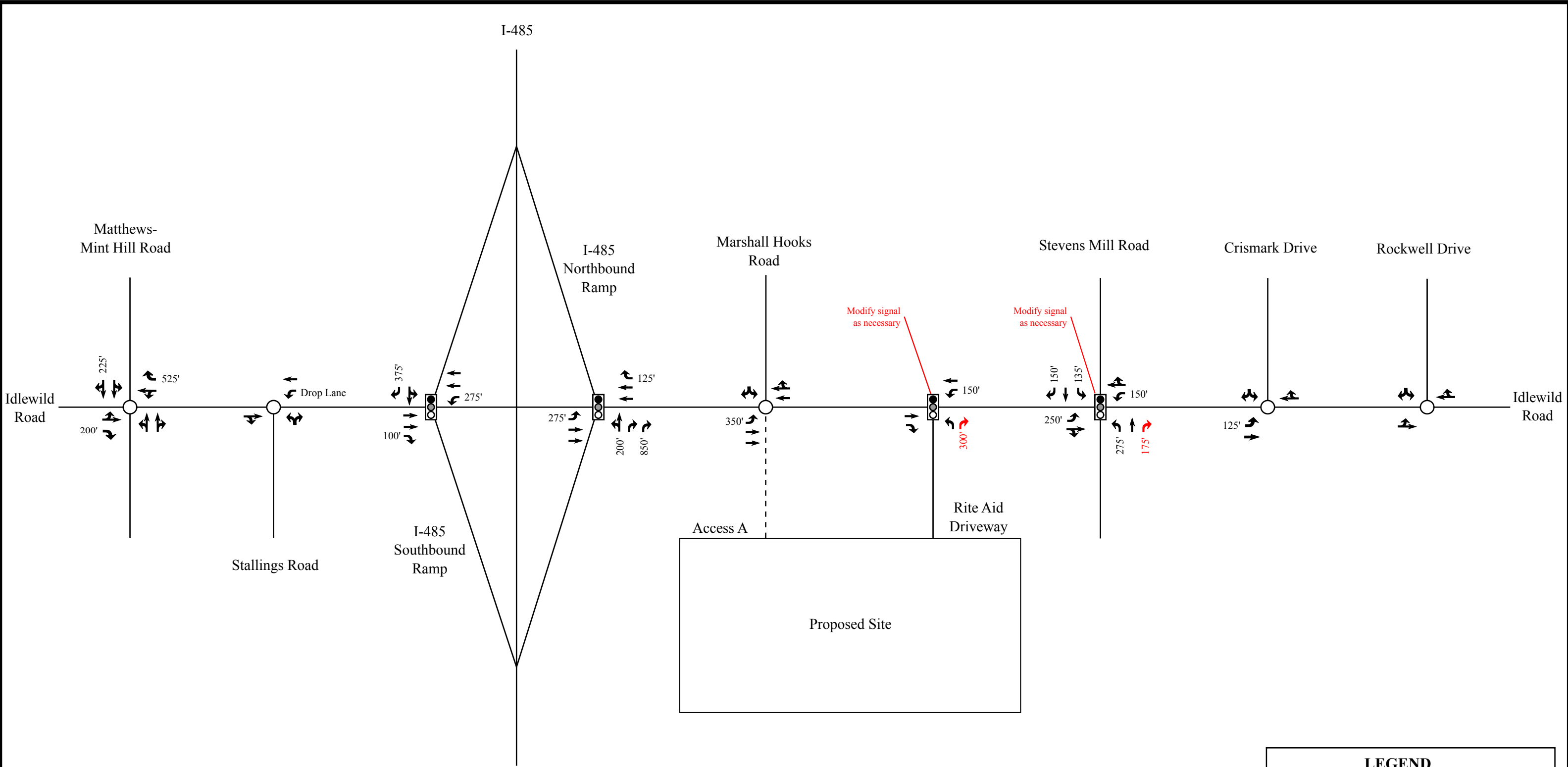
Unsignalized Intersection

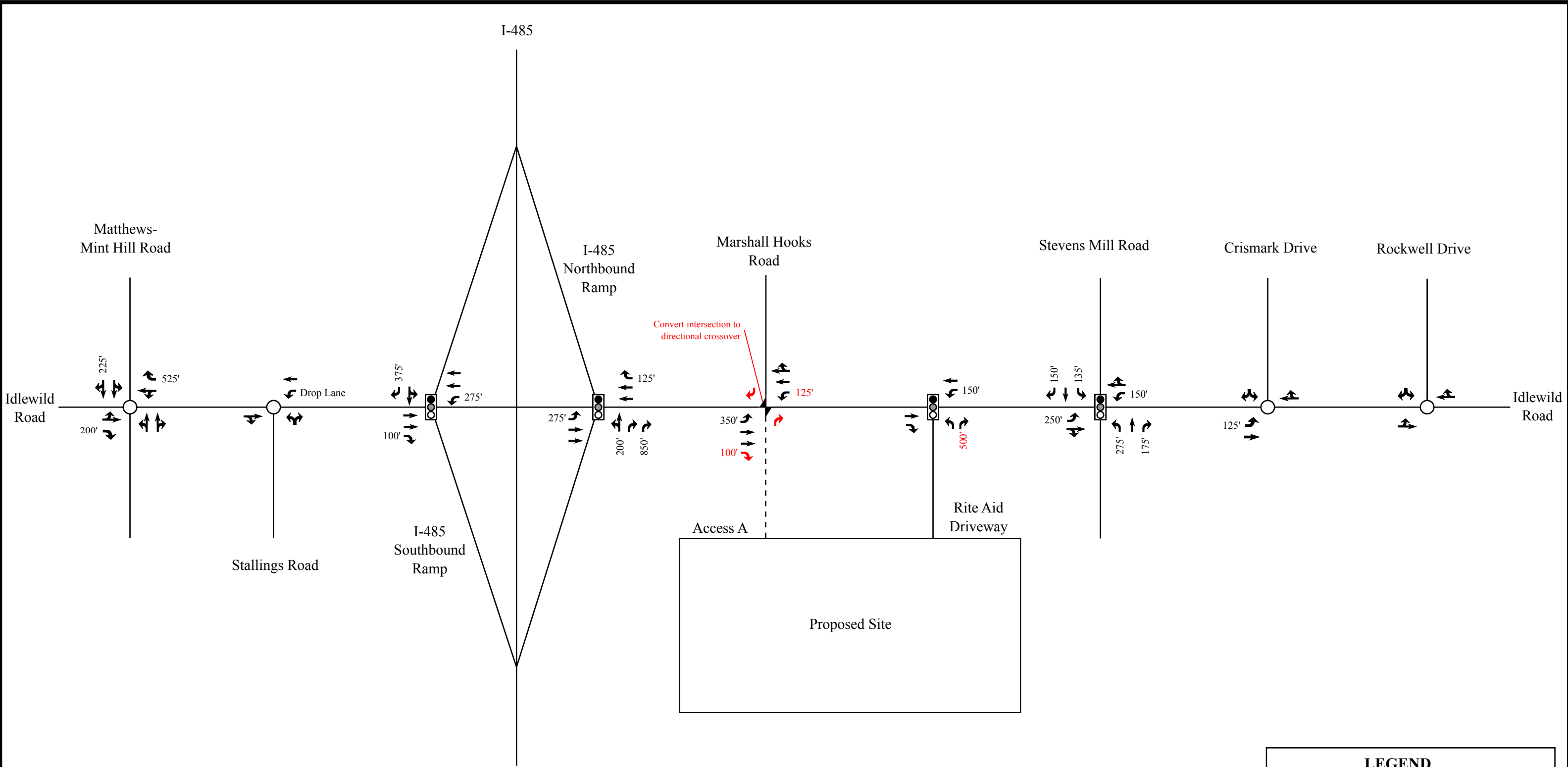
Signalized Intersection

Directional Crossover

X / Y → AM / PM Peak Hour Traffic Volume







LEGEND

-  Unsignalized Intersection
-  Signalized Intersection
-  Directional Crossover
-  Existing Lane
-  Improvement By Developer
-  X' Storage (In Feet)

APPENDIX D

SIGNAL DATA

PHASING DIAGRAM

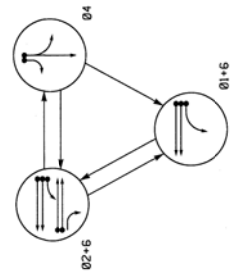


TABLE OF OPERATION

SIGNAL FACE	PHASE	
	1	2
11	11	12
21,22	21	22
41,42	41	42
61,62	61	62

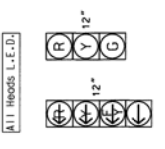
STANDARD SIGNAL FACE CLEARANCES FOR FLASHING LEFT TURN SIGNAL

TO	11	12	21	22	41	42	61	62
11	11	12	21	22	41	42	61	62

2070L LOOP & DETECTOR INSTALLATION

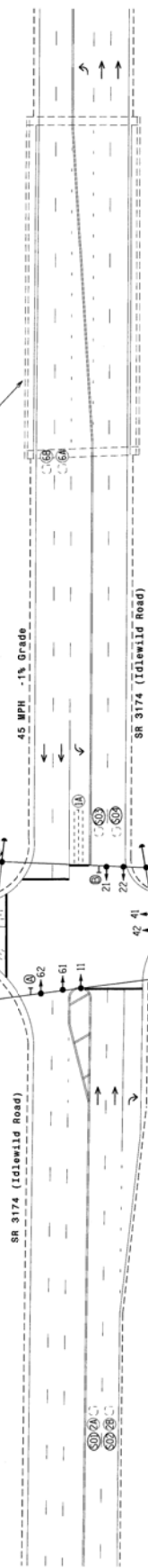
LOOP	SIZE (FT)	DISTANCE FROM STORM (FT)	DETECTOR PROGRAMMING	
			INDUCTIVE	DETECTOR
1A	6x40	0	2-4-2	1 Y Y -
2A/501	6x6	300	5	2 Y Y -
2B/502	6x6	300	5	2 Y Y -
4A	6x40	0	2-4-2	4 Y Y -
4B	6x40	0	2-4-2	4 Y Y -
6A	6x6	250	4	6 Y Y -
6B	6x6	250	4	6 Y Y -
503	6x6	+110	3	2 Y Y -
504	6x6	+110	3	2 Y Y -

SIGNAL FACE I.D.



NOTES

- Refer to "Roadway Standard Drawings NC001" dated July 2006 and "Standard Specifications for Roads and Structures" dated July 2006.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 may be logged.
- Set all detector units to presence mode.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #2050.



LEGEND

PROPOSED	EXISTING
Traffic Signal Head	Traffic Signal Head
Modified Signal Head	Modified Signal Head
Sign	Sign
Pedestrian Signal Head	Pedestrian Signal Head
Signal Pole with Sign	Signal Pole with Sign
Signal Pole with Sidewalk Guy	Signal Pole with Sidewalk Guy
Inductive Loop Detector	Inductive Loop Detector
Controller & Cabinet	Controller & Cabinet
Junction Box	Junction Box
2-in Underground Conduit	2-in Underground Conduit
Right of Way	Right of Way
Directional Arrow	Directional Arrow
Pavement Marking Arrow	Pavement Marking Arrow
No Right Turn Sign (R2-1)	No Right Turn Sign (R2-1)
No Left Turn Sign (R2-2)	No Left Turn Sign (R2-2)

Plan of Record

PREPARED BY: C. L. CAMPER DATE: APRIL 2010
 REVIEWED BY: B. HANCOCK DATE: MAY 2010
 SIGNATURE: [Signature] DATE: 6/9/10

REPROCESSED MICROFILM DETECTION WITH LOOP INDUCTIVE FOR PHASE 6.

This copy of record reflects existing field conditions as indicated. This copy may have been modified from the original plans.

2070L TIMING CHART

FEATURE	PHASE			
	1	2	4	6
Min Green 1"	7	12	7	12
Extension 1"	2.0	6.0	2.0	6.0
Min Green 1"	20	90	25	90
Yellow Clearance	3.0	4.5	3.8	4.5
Red Clearance	2.5	1.2	2.0	1.2
Walk 1"	-	-	-	-
Short Walk 1"	-	-	-	-
Seconds Per Activation *	-	1.5	-	1.5
Min Variable Initial *	-	34	-	33
Time Before Reduction *	-	15	-	15
Time To Redden *	-	30	-	2.0
Minimum Gap	-	3.0	-	3.0
Recall Mode	-	MIN RECALL	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	YELLOW
Dead Entry	-	-	-	-
Endurance Gap	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 4 longer than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Plan of Record

REGIONAL SEAL
 NORTH CAROLINA
 24533
 J. H. WILSON
 6/9/10

Seal of the State of North Carolina

SR 3174 (Idlewild Road) at I-485 Inner Loop Ramps

Division 10 Metrolinx County Stillings

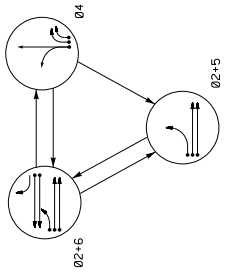
PLN INT: 10/10/2009 REVISED BY: M. HANCOCK

REVISIONS: 11 & Volume density timing for Phase 2

DATE: 6/9/10

Not a certified document.
 This document originally prepared by Metrolinx on 4/16/2009.
 This document shall not be considered a certified document.

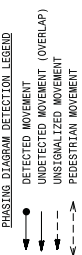
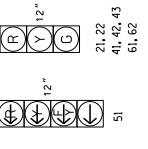
PHASING DIAGRAM



SIGNAL FACE	PHASE			
	02+6	04	02+5	04
21,22	0	0	0	0
41,42,43	0	0	0	0
51	0	0	0	0
61,62	0	0	0	0

SIGNAL FACE I.D.D.

All Heads L-E-D.



INDUCTIVE LOOPS				DETECTOR PROGRAMMING			
LOOP	SIZE	PROXIMITY	PHASE	EXTENSION	PHASE	EXTENSION	SYSTEM LOOP
2A	6X40	0	2-4-2	4	Y	-	-
4B	6X40	0	2-4-2	4	Y	-	-
4C	6X40	0	2-4-2	4	Y	-	-
5A	6X60	0	2-4-2	5	Y	-	-
6A/S05	6X6	300	4	-	6	Y	-
6B/S06	6X6	300	4	-	6	Y	-
S07	6X6	+75	3	-	-	-	-
S08	6X6	+75	3	-	-	-	-

* Microwave Detector

OASIS 2070L LOOP & DETECTOR INSTALLATION

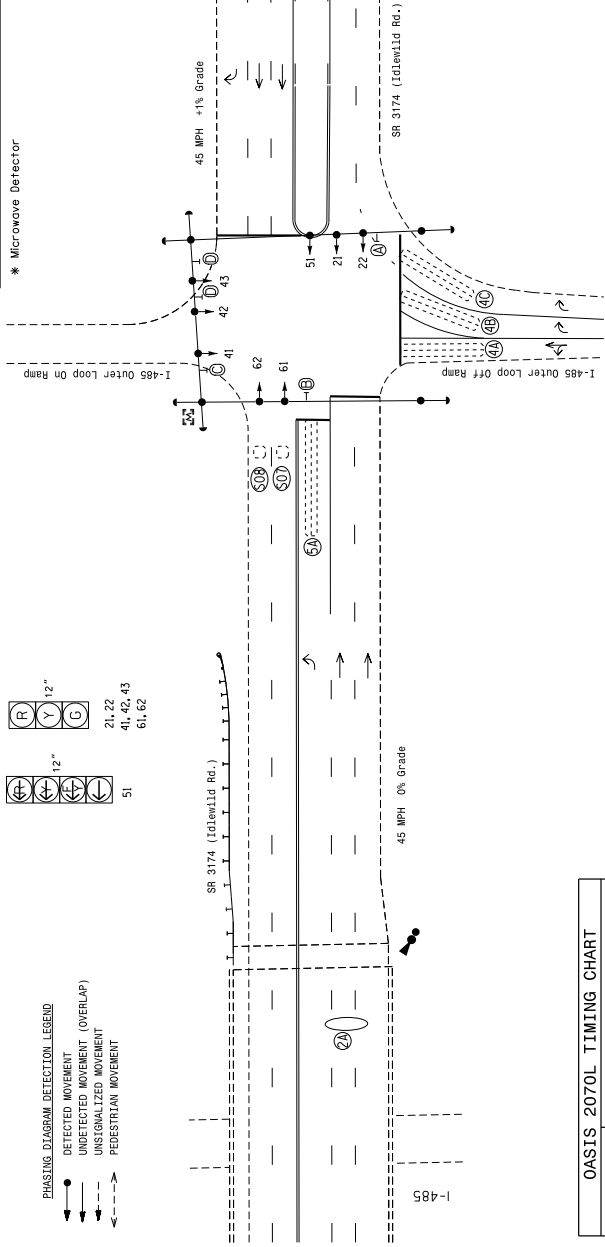
INDUCTIVE LOOPS				DETECTOR PROGRAMMING			
LOOP	SIZE	PROXIMITY	PHASE	EXTENSION	PHASE	EXTENSION	SYSTEM LOOP
2A	6X40	0	2-4-2	4	Y	-	-
4B	6X40	0	2-4-2	4	Y	-	-
4C	6X40	0	2-4-2	4	Y	-	-
5A	6X60	0	2-4-2	5	Y	-	-
6A/S05	6X6	300	4	-	6	Y	-
6B/S06	6X6	300	4	-	6	Y	-
S07	6X6	+75	3	-	-	-	-
S08	6X6	+75	3	-	-	-	-

3 Phase Fully Actuated

SR 3174/1501 (Idolewild Rd.) CLS

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications" for Roads and Structures" dated January 2012. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 5 may be lagged.
- Set all detector units to presence mode.
- Maximum time shown in timing operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Master Asset # 11024, Controller Asset # 1768.



LEGEND

- PROPOSED
- Traffic Signal Head
 - Modified Signal Head
 - Signal Pole with Guy
 - Signal Pole with Sidewalk Guy
 - Inductive Loop Detector
 - Controller & Cabinet
 - Pull Box
 - 2-in Underground Conduit
 - Right of Way with Marker
 - Directional Arrow
 - Pavement Marking Arrow
 - Master Controller & Cabinet
 - Microwave Detection Zone
 - No Right Turn Sign (R3-1)
 - No Left Turn Sign (R3-2)
 - Combined Through and Left Arrow Sign (R3-6L)
 - Right Arrow "Only" Sign (R3-5R)
- EXISTING
- N/A
 - Signal Pole with Guy
 - Signal Pole with Sidewalk Guy
 - Inductive Loop Detector
 - Controller & Cabinet
 - Pull Box
 - 2-in Underground Conduit
 - Right of Way with Marker
 - Directional Arrow
 - Pavement Marking Arrow
 - Master Controller & Cabinet
 - Microwave Detection Zone
 - No Right Turn Sign (R3-1)
 - No Left Turn Sign (R3-2)
 - Combined Through and Left Arrow Sign (R3-6L)
 - Right Arrow "Only" Sign (R3-5R)

Plan of Record			
PREPARED BY	C. Pierce	DATE	August 2017
REVIEWED BY	T. J. Williams	DATE	August 2017
DATE	8/23/2017	DATE	8/23/2017
INTS	1	INTS	1
Added a second right turn loop on the road...			
This plan of record reflects existing field conditions as submitted for review and approval.			
This plan may have been modified from			
the original design.			

OASIS 2070L TIMING CHART		PHASE					
FEATURE		2	4	5	6		
Min Green 1 *	12	7	7	12			
Extension 1 *	6.0	1.0	1.0	6.0			
Min Green 1 *	90	25	25	90			
Yellow Clearance	4.5	3.7	3.0	4.5			
Red Clearance	1.2	1.6	2.4	1.2			
Walk 1 *	-	-	-	-			
Don't Walk 1	-	-	-	-			
Second Ped Activation *	2.0	-	-	-	1.5		
Max Vehicle Delay *	34	-	-	-	34		
Time Before Redaction *	15	-	-	-	15		
Time To Redaction *	30	-	-	-	30		
Minimum Gap	3.0	-	-	-	3.0		
Recall Mode	MIN RECALL	-	-	-	MIN RECALL		
Vehicle Call Memory	YELLOW	-	-	-	YELLOW		
Dual Entry	-	-	-	-	-		
Simultaneous Gap	ON	ON	ON	ON	ON		

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Plan of Record

Prepared in the Office of



Division 10

SR 3174 (Idolewild Rd.) at I-485 Outer Loop Ramps

Division 10

SR 3174 (Idolewild Rd.) at I-485 Outer Loop Ramps

Division 10

SR 3174 (Idolewild Rd.) at I-485 Outer Loop Ramps

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Division 10

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SR 3174 (Idolewild Rd.) at I-485 Outer Loop Ramps

Division 10

SR 3174 (Idolewild Rd.) at I-485 Outer Loop Ramps

Division 10

Division 10

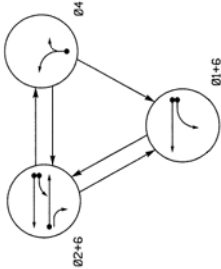
SR 3174 (Idolewild Rd.) at I-485 Outer Loop Ramps

Division 10

SR 3174 (Idolewild Rd.) at I-485 Outer Loop Ramps

Division 10

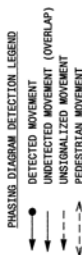
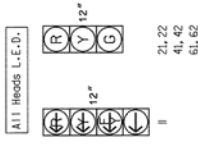
PHASING DIAGRAM



SIGNAL FACE	PHASE			
	1	2	3	4
11	1	2	3	4
21,22	1	2	3	4
41,42	1	2	3	4
51,52	1	2	3	4

1/2 = Flashing Yellow Arrow

SIGNAL FACE I.D.



SIGNAL FACE	PHASE			
	1	2	3	4
11	1	2	3	4
21,22	1	2	3	4
41,42	1	2	3	4
51,52	1	2	3	4

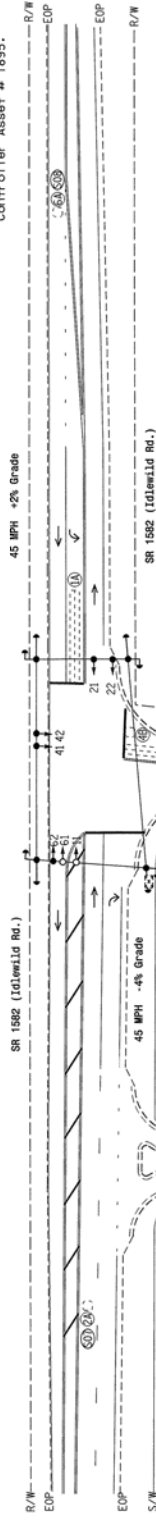
1/2 = Flashing Yellow Arrow

2070L LOOP & DETECTOR INSTALLATION									
LOOP	SIZE (FT)	FROM STORM (FT)	TURN (FT)	NEAR (FT)	DETECTOR PROGRAMMING				
					INDUCTIVE	STRETCH	STRETCH	STRETCH	NEAR
1A	6X60	0	2-4-2	1	Y	Y	Y	Y	Y
2A/507	6X6	300	5	2	Y	Y	Y	Y	Y
4A	6X60	0	2-4-2	4	Y	Y	Y	Y	Y
4B	6X6	0	3	4	Y	Y	Y	Y	Y
6A/508	6X6	300	5	6	Y	Y	Y	Y	Y

3 Phase
Fully Actuated
SR 3174/1501 (Idlewild Rd) CLS

NOTES

1. Refer to "Roadway Standard Drawings MCDOT" dated July 2006 and "Standard Specifications for Roads and Structures" dated July 2006.
2. Do not program signal for late phase flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Reposition signal head numbered 62.
5. Set all detector units to presence mode.
6. Pavement markings are existing.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Closed loop system data: Controller Asset # 1895.



2070L TIMING CHART									
FEATURE	PHASE				1	2	3	4	6
	1	2	3	4					
Min Green 1 *	7	12	7	12	7	12	7	12	7
Extension 1 *	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0
Min Green 1 *	15	90	25	90	15	90	25	90	15
Yellow Clearance	3.0	4.9	3.0	4.9	3.0	4.9	3.0	4.9	3.0
Red Clearance	2.3	1.3	1.9	1.3	2.3	1.3	1.9	1.3	2.3
Walk 1 *	-	-	-	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-	-	-	-
Seconds Per Actuation *	-	2.5	-	-	-	2.5	-	-	-
Max Variable Initial *	-	34	-	-	-	34	-	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-	-
Time To Reduce *	-	30	-	-	-	30	-	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	-	-
Dead Entry	-	-	-	-	-	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON	ON	ON	ON	ON	ON

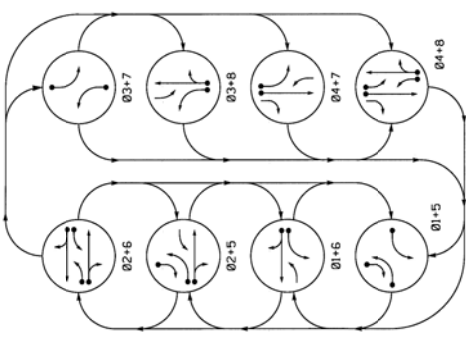
* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Signal Upgrade Corr. File No. 10-08-208
SR 1501 (Idlewild Road)
Idlewild Market Entrance



Division 10	Union County	Stallings
Drawn By: M. M. M. M. M.	Reviewed By: M. M. M. M. M.	Checked By: M. M. M. M. M.
Prepared By: M. M. M. M. M.	Revised By: M. M. M. M. M.	Drawn By: M. M. M. M. M.
Revised By: M. M. M. M. M.	Drawn By: M. M. M. M. M.	Drawn By: M. M. M. M. M.

PHASING DIAGRAM



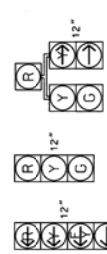
PHASING DIAGRAM DETECTION LEGEND
 —●— DETECTED MOVEMENT
 —○— UNDETECTED MOVEMENT (OVERLAP)
 —○— UNDETECTED MOVEMENT
 —○— PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE							
	1	2	3	4	5	6	7	8
11	1	2	3	4	5	6	7	8
21, 22	R	R	R	R	G	G	G	R
41	R	R	R	R	G	G	G	R
42	R	R	R	R	G	G	G	R
51	R	R	R	R	G	G	G	R
61, 62	R	R	R	R	G	G	G	R
71	R	R	R	R	G	G	G	R
81, 82	R	R	R	R	G	G	G	R

SIGNAL FACE I.D.

All Roads L.E.D.

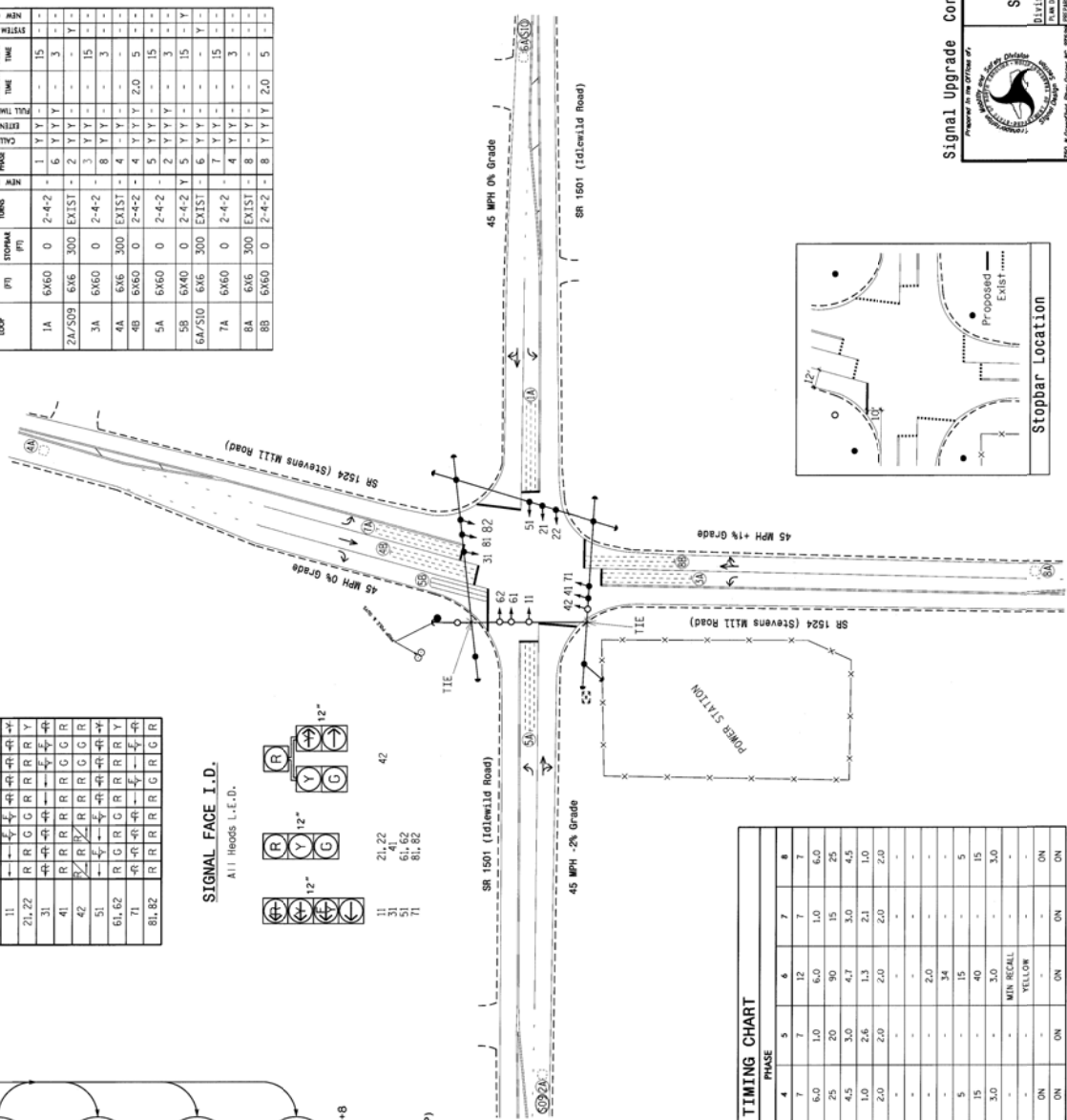


OASIS 2070L LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	INDUCTIVE FROM STOPBAR (FT)	DETECTOR PROGRAMMING		STRETCH TIME	STRETCH DELAY	NEW C&D
			PHASE	TRIPS			
1A	6X60	0	2-4-2	1	Y	-	15
2A/S09	6X6	300	EXIST	2	Y	-	Y
3A	6X60	0	2-4-2	3	Y	-	15
4A	6X6	300	EXIST	4	Y	-	Y
4B	6X60	0	2-4-2	4	Y	-	Y
5A	6X60	0	2-4-2	5	Y	-	15
5B	6X40	0	2-4-2	5	Y	-	Y
6A/S10	6X6	300	EXIST	6	Y	-	Y
7A	6X60	0	2-4-2	7	Y	-	15
8A	6X6	300	EXIST	8	Y	-	Y
8B	6X60	0	2-4-2	8	Y	-	Y

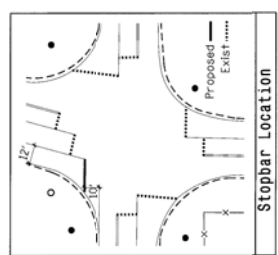
NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be loaded.
- Phase 3 and/or phase 7 may be loaded.
- Set all detector units to reference mode.
- Maximum times shown in timing operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset # 1367.



LEGEND

PROPOSED	EXISTING
Traffic Signal Head	N/A
Modified Signal Head	N/A
Pedestrian Signal Head with Push Button & Sign	N/A
Signal Pole with Guy	N/A
Signal Pole with Sidewalk Guy	N/A
Inductive Loop Detector	N/A
Controller & Cabinet	N/A
2-in Underground Conduit	N/A
Right of Way	N/A
Directional Arrow	N/A
Fence	N/A



OASIS 2070L TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	12	7	7	12	7	7	7
Extension 1 *	1.0	6.0	1.0	1.0	6.0	1.0	6.0	6.0
Max Green 1 *	15	90	20	25	20	90	15	25
Yellow Clearance	3.0	4.7	3.0	4.5	3.0	4.7	3.0	4.5
Red Clearance	2.8	1.3	2.3	1.0	2.6	1.3	2.1	1.0
Red Burnt	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-	-	-
Seconds Per Actuation *	-	2.0	-	-	-	2.0	-	-
Max Variable Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	5	-	15	-	5
Time To Release *	-	40	-	15	-	40	-	15
Minimum Gap	-	3.0	-	3.0	-	3.0	-	3.0
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	-
Dead Entry	-	-	-	ON	-	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Signal Upgrade Corr. File No. 10-11-201

SR 1501 (Idlewild Road)

SR 1524 (Stevens Mill Road)

Division 10 Union County

Drawn By: December 2012

Reviewed By: N. D'Allesio

Scale: 0 40 1"=40'

North Arrow

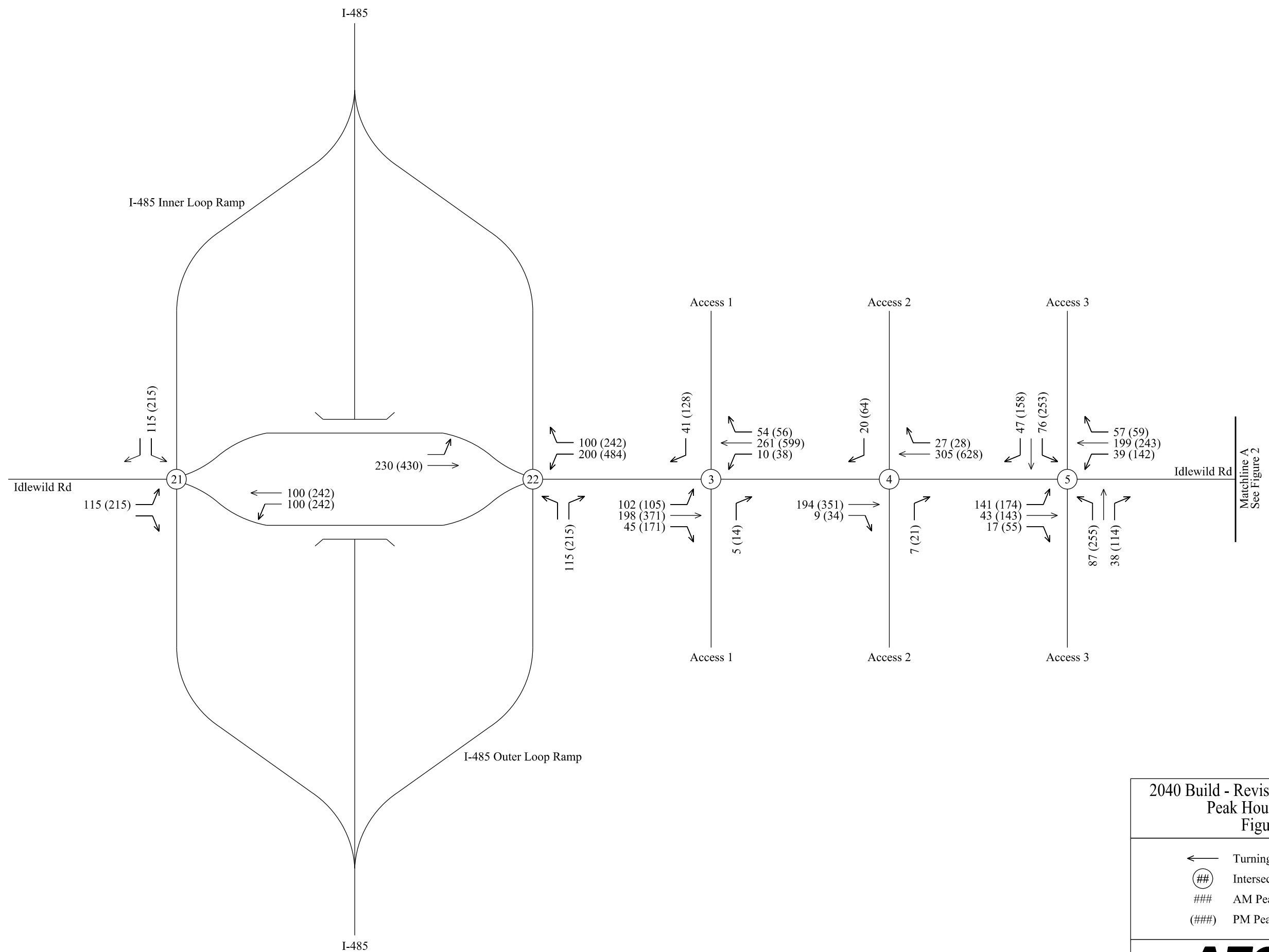
Stamp: CARROLL COUNTY, MD. 24333

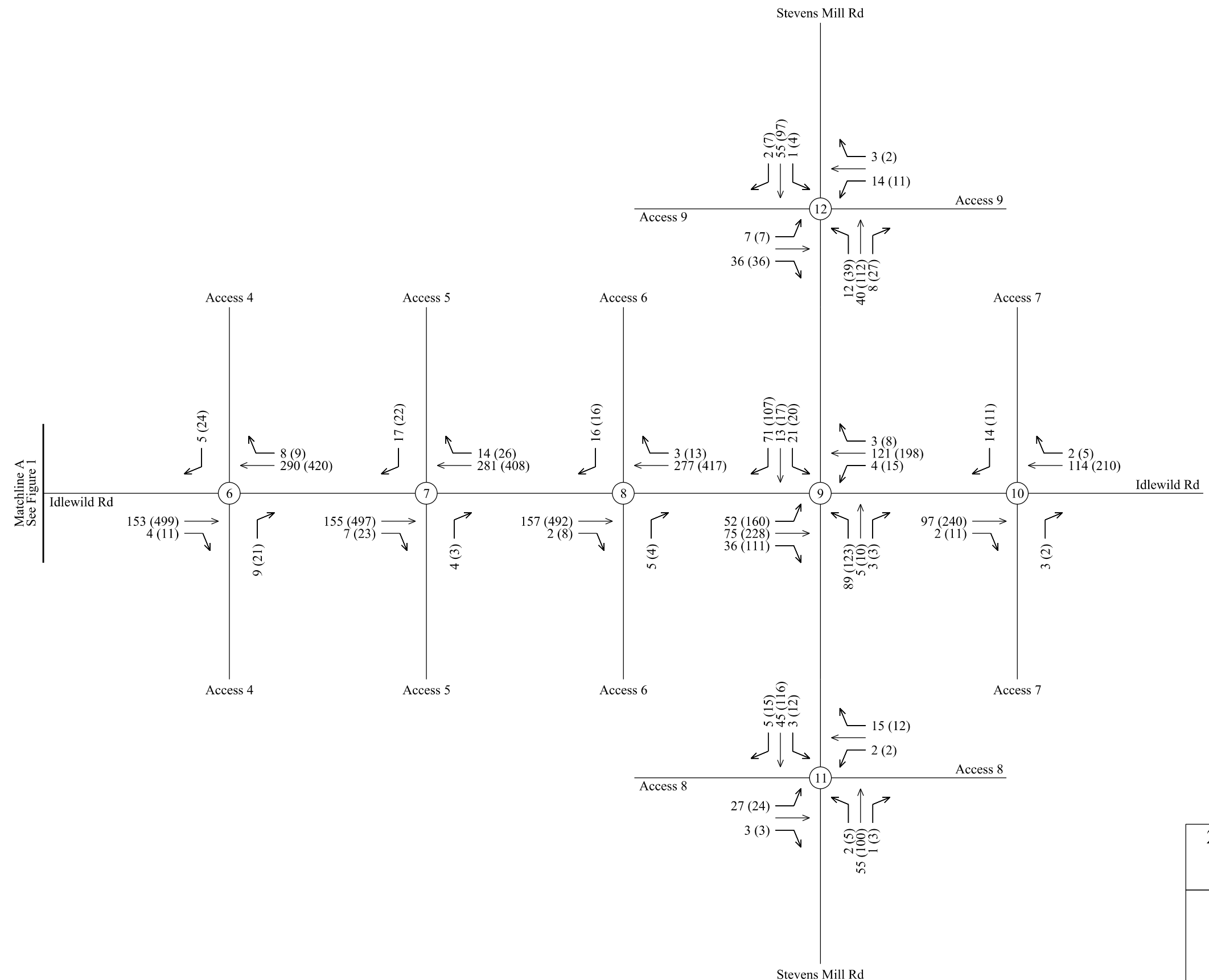
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Stamp: 1613

APPENDIX E

TIP U-4913 INFORMATION

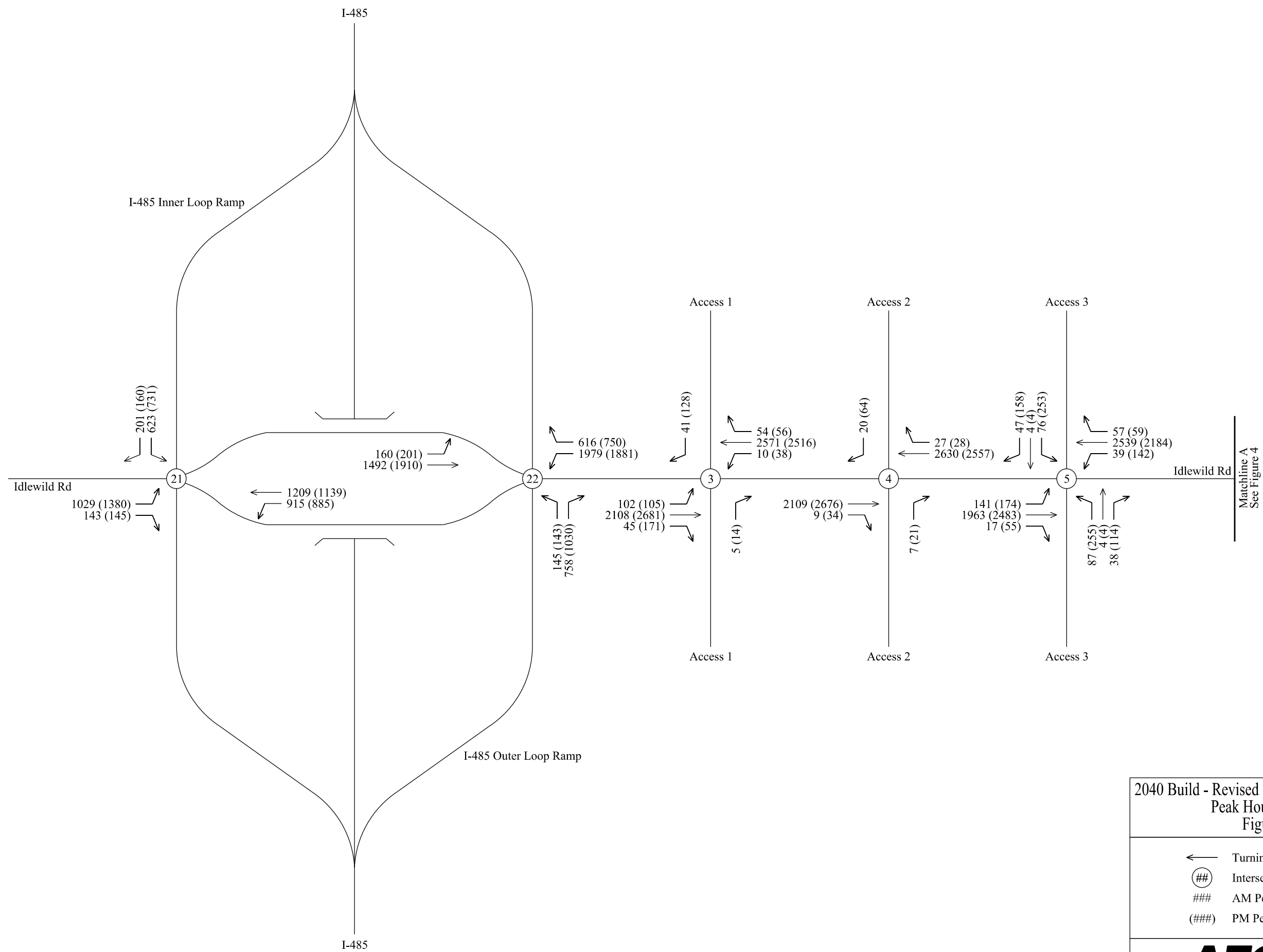




2040 Build - Revised Small Area Plan
Peak Hour Volumes
Figure 12

- ← Turning Movement
- ## Intersection Number
- ### AM Peak Hour Volumes
- (###) PM Peak Hour Volumes

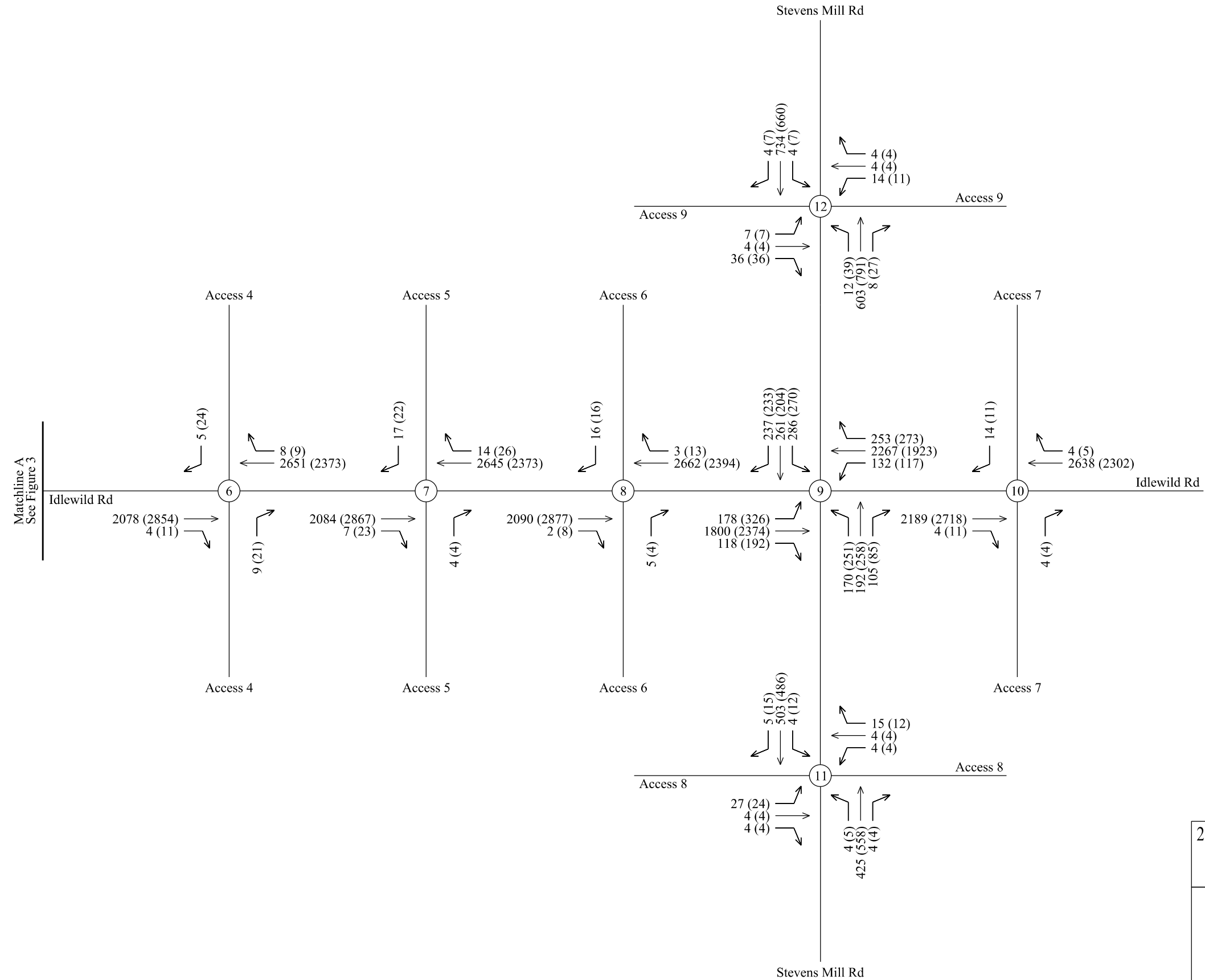




2040 Build - Revised Traditional Intersections
Peak Hour Volumes
Figure 13

- ← Turning Movement
- ## Intersection Number
- ### AM Peak Hour Volumes
- (###) PM Peak Hour Volumes





2040 Build - Revised Traditional Intersections
Peak Hour Volumes
Figure 14

- Turning Movement
- Intersection Number
- AM Peak Hour Volumes
- PM Peak Hour Volumes



APPENDIX F

IDLEWILD ROAD AND STALLINGS ROAD

SYNCHRO REPORTS SIDRA REPORTS

Stinson Village
1: Stallings Road & Idlewild Road

2019 Existing
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	143.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	357	98	442	746	51	256
Future Vol, veh/h	357	98	442	746	51	256
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	397	109	491	829	57	284

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	506	0	2263
Stage 1	-	-	-	-	452
Stage 2	-	-	-	-	1811
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1059	-	~ 45
Stage 1	-	-	-	-	641
Stage 2	-	-	-	-	143
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1059	-	~ 24
Mov Cap-2 Maneuver	-	-	-	-	~ 24
Stage 1	-	-	-	-	641
Stage 2	-	-	-	-	77

Approach	EB	WB	NB
HCM Control Delay, s	0	4.2	\$ 897.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	121	-	-	1059	-
HCM Lane V/C Ratio	2.819	-	-	0.464	-
HCM Control Delay (s)	\$ 897.1	-	-	11.3	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	31.6	-	-	2.5	-

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

Stinson Village
1: Stallings Road & Idlewild Road

2022 No-Build
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	305.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	442	106	476	867	55	276
Future Vol, veh/h	442	106	476	867	55	276
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	491	118	529	963	61	307
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	609	0	2571	550
Stage 1	-	-	-	-	550	-
Stage 2	-	-	-	-	2021	-
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	-	-	970	-	~ 29	535
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	112	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	970	-	~ 13	535
Mov Cap-2 Maneuver	-	-	-	-	~ 13	-
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	~ 51	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		4.6		\$ 2032.3	
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	70	-	-	970	-	
HCM Lane V/C Ratio	5.254	-	-	0.545	-	
HCM Control Delay (s)	\$ 2032.3	-	-	13.1	-	
HCM Lane LOS	F	-	-	B	-	
HCM 95th %tile Q(veh)	40.6	-	-	3.4	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Stinson Village
1: Stallings Road & Idlewild Road

2022 Build Phase 1 (without Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	329					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	459	106	476	883	55	276
Future Vol, veh/h	459	106	476	883	55	276
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	510	118	529	981	61	307
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	628	0	2608	569
Stage 1	-	-	-	-	569	-
Stage 2	-	-	-	-	2039	-
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	-	-	954	-	~ 27	522
Stage 1	-	-	-	-	566	-
Stage 2	-	-	-	-	110	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	954	-	~ 12	522
Mov Cap-2 Maneuver	-	-	-	-	~ 12	-
Stage 1	-	-	-	-	566	-
Stage 2	-	-	-	-	~ 49	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		4.7		\$ 2221.8	
HCM LOS					F	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	65	-	-	954	-	
HCM Lane V/C Ratio	5.658	-	-	0.554	-	
HCM Control Delay (s)	\$ 2221.8	-	-	13.4	-	
HCM Lane LOS	F	-	-	B	-	
HCM 95th %tile Q(veh)	41.2	-	-	3.5	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Stinson Village
1: Stallings Road & Idlewild Road

2022 Build Phase 1 (with Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	385.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	501	106	476	925	55	276
Future Vol, veh/h	501	106	476	925	55	276
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	557	118	529	1028	61	307
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	675	0	2702	616
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	2086	-
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	-	-	916	-	~ 24	491
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	104	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	916	-	~ 10	491
Mov Cap-2 Maneuver	-	-	-	-	~ 10	-
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	~ 44	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		4.8		\$ 2704.3	
HCM LOS					F	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	55	-	-	916	-	
HCM Lane V/C Ratio	6.687	-	-	0.577	-	
HCM Control Delay (s)	\$ 2704.3	-	-	14.2	-	
HCM Lane LOS	F	-	-	B	-	
HCM 95th %tile Q(veh)	42.4	-	-	3.8	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Stinson Village
1: Stallings Road & Idlewild Road

2023 No-Build
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	377					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	452	108	488	887	56	283
Future Vol, veh/h	452	108	488	887	56	283
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	502	120	542	986	62	314

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	622	0	2632	562
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	2070	-
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	-	-	959	-	~ 26	526
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	106	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	959	-	~ 11	526
Mov Cap-2 Maneuver	-	-	-	-	~ 11	-
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	~ 46	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.8	\$ 2509.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	60	-	-	959	-
HCM Lane V/C Ratio	6.278	-	-	0.565	-
HCM Control Delay (s)	\$ 2509.3	-	-	13.5	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	42.9	-	-	3.6	-

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

Stinson Village
1: Stallings Road & Idlewild Road

2023 Full Build (without Gas Station)
Timing Plan: AM Peak Hour

Intersection

Int Delay, s/veh 489.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	523	108	488	976	56	283
Future Vol, veh/h	523	108	488	976	56	283
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	581	120	542	1084	62	314

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	701
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	896
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	896
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5	\$ 3490.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	45	-	-	896	-
HCM Lane V/C Ratio	8.37	-	-	0.605	-
HCM Control Delay (s)	\$ 3490.2	-	-	15	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	44.6	-	-	4.2	-

Notes

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

Stinson Village
1: Stallings Road & Idlewild Road

2023 Full Build (with Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	644.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	565	108	488	1017	56	283
Future Vol, veh/h	565	108	488	1017	56	283
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	628	120	542	1130	62	314
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	748	0	2902	688
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	2214	-
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	-	-	861	-	~ 17	446
Stage 1	-	-	-	-	499	-
Stage 2	-	-	-	-	89	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	861	-	~ 6	446
Mov Cap-2 Maneuver	-	-	-	-	~ 6	-
Stage 1	-	-	-	-	499	-
Stage 2	-	-	-	-	~ 33	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		5.2		\$ 4759.7	
HCM LOS					F	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	34	-	-	861	-	
HCM Lane V/C Ratio	11.078	-	-	0.63	-	
HCM Control Delay (s)	\$ 4759.7	-	-	16	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	45.9	-	-	4.6	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

MOVEMENT SUMMARY

Site: 1 [2040 Build AM]

Idlewild Road and Hooks Road / Stallings Road
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Stallings Road											
3	L2	147	2.0	0.260	9.7	LOS A	1.2	30.3	0.72	0.72	31.0
8	T1	4	2.0	0.260	9.7	LOS A	1.2	30.3	0.72	0.72	30.8
18	R2	300	2.0	0.380	9.2	LOS A	2.1	53.0	0.76	0.77	32.3
Approach		451	2.0	0.380	9.4	LOS A	2.1	53.0	0.74	0.75	31.8
East: Idlewild Road											
1	L2	383	2.0	0.535	9.1	LOS A	4.8	121.1	0.56	0.35	32.1
6	T1	1284	2.0	0.535	1.9	LOS A	4.8	121.1	0.11	0.07	37.2
16	R2	4	2.0	0.535	0.1	LOS A	0.0	0.0	0.00	0.00	37.2
Approach		1672	2.0	0.535	3.5	LOS A	4.8	121.1	0.21	0.13	35.9
North: Hooks Road											
7	L2	11	2.0	0.040	7.7	LOS A	0.2	4.3	0.73	0.69	32.9
4	T1	4	2.0	0.040	7.7	LOS A	0.2	4.3	0.73	0.69	32.7
14	R2	4	2.0	0.040	7.7	LOS A	0.2	4.3	0.73	0.69	31.8
Approach		20	2.0	0.040	7.7	LOS A	0.2	4.3	0.73	0.69	32.6
West: Idlewild Road											
5	L2	4	2.0	0.551	10.8	LOS B	4.8	122.8	0.76	0.67	32.9
2	T1	1058	2.0	0.551	10.0	LOS B	4.8	121.0	0.75	0.63	33.2
12	R2	152	2.0	0.551	9.3	LOS A	4.8	121.0	0.74	0.58	32.4
Approach		1214	2.0	0.551	10.0	LOS A	4.8	122.8	0.75	0.62	33.1
All Vehicles		3358	2.0	0.551	6.7	LOS A	4.8	122.8	0.48	0.40	34.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: Y:\2019 Projects\19413 Village at Idlewild - Stallings, NC\RKA Traffic\TIA 07-17-2020\Analysis\Sidra\Idlewild Road and Stallings Road.sip7

Stinson Village
1: Stallings Road & Idlewild Road

2019 Existing
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	174.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	683	145	284	687	53	310
Future Vol, veh/h	683	145	284	687	53	310
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	759	161	316	763	59	344
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	920	0	2235	840
Stage 1	-	-	-	-	840	-
Stage 2	-	-	-	-	1395	-
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	-	-	742	-	~ 47	365
Stage 1	-	-	-	-	424	-
Stage 2	-	-	-	-	229	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	742	-	~ 27	365
Mov Cap-2 Maneuver	-	-	-	-	~ 27	-
Stage 1	-	-	-	-	424	-
Stage 2	-	-	-	-	131	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	3.9		\$ 1029.3		
HCM LOS				F		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	129	-	-	742	-	
HCM Lane V/C Ratio	3.127	-	-	0.425	-	
HCM Control Delay (s)	\$ 1029.3	-	-	13.4	-	
HCM Lane LOS	F	-	-	B	-	
HCM 95th %tile Q(veh)	38.2	-	-	2.1	-	
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Stinson Village
1: Stallings Road & Idlewild Road

2022 No-Build
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	358.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	800	156	306	792	57	334
Future Vol, veh/h	800	156	306	792	57	334
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	889	173	340	880	63	371
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	1062	0	2536	976
Stage 1	-	-	-	-	976	-
Stage 2	-	-	-	-	1560	-
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	-	-	656	-	~ 30	~ 305
Stage 1	-	-	-	-	365	-
Stage 2	-	-	-	-	190	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	656	-	~ 14	~ 305
Mov Cap-2 Maneuver	-	-	-	-	~ 14	-
Stage 1	-	-	-	-	365	-
Stage 2	-	-	-	-	92	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		4.5		\$ 2230.7	
HCM LOS					F	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	76	-	-	656	-	
HCM Lane V/C Ratio	5.716	-	-	0.518	-	
HCM Control Delay (s)	\$ 2230.7	-	-	16.2	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	48.2	-	-	3	-	
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Stinson Village
1: Stallings Road & Idlewild Road

2022 Build Phase 1 (without Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	360.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	814	156	306	804	57	334
Future Vol, veh/h	814	156	306	804	57	334
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	904	173	340	893	63	371
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1077	0	2564	991
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	1573	-
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	-	-	647	-	~ 29	~ 299
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	188	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	647	-	~ 14	~ 299
Mov Cap-2 Maneuver	-	-	-	-	~ 14	-
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	89	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		4.6		\$ 2266.2	
HCM LOS					F	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	75	-	-	647	-	
HCM Lane V/C Ratio	5.793	-	-	0.526	-	
HCM Control Delay (s)	\$ 2266.2	-	-	16.6	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	48.3	-	-	3.1	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Stinson Village
1: Stallings Road & Idlewild Road

2022 Build Phase 1 (with Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	408.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	845	156	306	836	57	334
Future Vol, veh/h	845	156	306	836	57	334
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	939	173	340	929	63	371
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	1112	0	2635	1026
Stage 1	-	-	-	-	1026	-
Stage 2	-	-	-	-	1609	-
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	-	-	628	-	~ 26	~ 285
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	180	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	628	-	~ 12	~ 285
Mov Cap-2 Maneuver	-	-	-	-	~ 12	-
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	83	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	4.6		\$ 2634.4		
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	66	-	-	628	-	
HCM Lane V/C Ratio	6.582	-	-	0.541	-	
HCM Control Delay (s)	\$ 2634.4	-	-	17.3	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	49.4	-	-	3.2	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Stinson Village
1: Stallings Road & Idlewild Road

2023 No-Build
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	407.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	818	160	313	810	59	342
Future Vol, veh/h	818	160	313	810	59	342
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	909	178	348	900	66	380
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1087	0	2594	998
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	1596	-
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	-	-	642	-	~ 28	~ 296
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	183	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	642	-	~ 13	~ 296
Mov Cap-2 Maneuver	-	-	-	-	~ 13	-
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	84	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		4.7		\$ 2530.3	
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	70	-	-	642	-	
HCM Lane V/C Ratio	6.365	-	-	0.542	-	
HCM Control Delay (s)	\$ 2530.3	-	-	17	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	50.3	-	-	3.3	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Stinson Village
1: Stallings Road & Idlewild Road

2023 Full Build (without Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	556					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	890	160	313	868	59	342
Future Vol, veh/h	890	160	313	868	59	342
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	989	178	348	964	66	380
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1167	0	2738	1078
Stage 1	-	-	-	-	1078	-
Stage 2	-	-	-	-	1660	-
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	-	-	599	-	~ 22	~ 266
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	170	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	599	-	~ 9	~ 266
Mov Cap-2 Maneuver	-	-	-	-	~ 9	-
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	71	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		5		\$ 3634.9	
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	51	-	-	599	-	
HCM Lane V/C Ratio	8.736	-	-	0.581	-	
HCM Control Delay (s)	\$ 3634.9	-	-	19	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	52.5	-	-	3.7	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Stinson Village
1: Stallings Road & Idlewild Road

2023 Full Build (with Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	607.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	925	160	313	902	59	342
Future Vol, veh/h	925	160	313	902	59	342
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1028	178	348	1002	66	380
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1206	0	2815	1117
Stage 1	-	-	-	-	1117	-
Stage 2	-	-	-	-	1698	-
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	-	-	579	-	~ 20	~ 252
Stage 1	-	-	-	-	313	-
Stage 2	-	-	-	-	163	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	579	-	~ 8	~ 252
Mov Cap-2 Maneuver	-	-	-	-	~ 8	-
Stage 1	-	-	-	-	313	-
Stage 2	-	-	-	-	~ 65	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		5.2		\$ 4077.4	
HCM LOS					F	
Minor Lane/Major Mvmt	NBLn1		EBT	EBR	WBL	WBT
Capacity (veh/h)	46		-	-	579	-
HCM Lane V/C Ratio	9.686		-	-	0.601	-
HCM Control Delay (s)	\$ 4077.4		-	-	20.1	-
HCM Lane LOS	F		-	-	C	-
HCM 95th %tile Q(veh)	53.1		-	-	4	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

MOVEMENT SUMMARY

Site: 1 [2040 Build PM]

Idlewild Road and Hooks Road / Stallings Road
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Stallings Road											
3	L2	152	2.0	0.309	11.8	LOS B	1.4	36.5	0.76	0.77	30.2
8	T1	4	2.0	0.309	11.8	LOS B	1.4	36.5	0.76	0.77	30.0
18	R2	383	2.0	0.528	13.0	LOS B	3.3	85.0	0.83	0.89	30.6
Approach		540	2.0	0.528	12.6	LOS B	3.3	85.0	0.81	0.85	30.5
East: Idlewild Road											
1	L2	300	2.0	0.429	7.5	LOS A	3.4	85.7	0.50	0.32	32.9
6	T1	1026	2.0	0.429	1.6	LOS A	3.4	85.7	0.10	0.06	37.4
16	R2	10	2.0	0.429	0.1	LOS A	0.0	0.0	0.00	0.00	37.3
Approach		1336	2.0	0.429	2.9	LOS A	3.4	85.7	0.19	0.12	36.3
North: Hooks Road											
7	L2	6	2.0	0.024	6.3	LOS A	0.1	2.4	0.65	0.57	34.1
4	T1	4	2.0	0.024	6.3	LOS A	0.1	2.4	0.65	0.57	33.8
14	R2	4	2.0	0.024	6.3	LOS A	0.1	2.4	0.65	0.57	32.8
Approach		14	2.0	0.024	6.3	LOS A	0.1	2.4	0.65	0.57	33.6
West: Idlewild Road											
5	L2	4	2.0	0.591	11.0	LOS B	5.4	138.3	0.73	0.59	32.8
2	T1	1257	2.0	0.591	10.3	LOS B	5.4	138.3	0.71	0.55	33.1
12	R2	147	2.0	0.591	9.7	LOS A	5.3	132.4	0.69	0.51	32.3
Approach		1408	2.0	0.591	10.3	LOS B	5.4	138.3	0.71	0.55	33.0
All Vehicles		3298	2.0	0.591	7.6	LOS A	5.4	138.3	0.51	0.42	33.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

APPENDIX G

IDLEWILD ROAD AND I-485 SOUTHBOUND RAMPS

SYNCHRO AND SIDRA REPORTS

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2019 Existing
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗
Traffic Volume (vph)	0	478	135	417	721	0	0	0	0	159	4	467
Future Volume (vph)	0	478	135	417	721	0	0	0	0	159	4	467
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.276							0.953	
Satd. Flow (perm)	0	3539	1583	514	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	531	150	463	801	0	0	0	0	177	4	519
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	531	150	463	801	0	0	0	0	0	181	519
Turn Type		NA	Perm	pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2	6						4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		18.0	18.0	13.0	18.0					13.0	13.0	13.0
Total Split (s)		30.0	30.0	37.0	67.0					53.0	53.0	53.0
Total Split (%)		25.0%	25.0%	30.8%	55.8%					44.2%	44.2%	44.2%
Maximum Green (s)		24.3	24.3	31.7	61.3					47.2	47.2	47.2
Yellow Time (s)		4.5	4.5	3.0	4.5					3.8	3.8	3.8
All-Red Time (s)		1.2	1.2	2.3	1.2					2.0	2.0	2.0
Lost Time Adjust (s)		-0.7	-0.7	-0.3	-0.7						-0.8	-0.8
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		35.1	35.1	66.6	66.6						43.4	43.4
Actuated g/C Ratio		0.29	0.29	0.56	0.56						0.36	0.36
v/c Ratio		0.51	0.32	0.82	0.41						0.28	0.91
Control Delay		40.1	39.6	28.2	14.6						27.5	56.8
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		40.1	39.6	28.2	14.6						27.5	56.8

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2019 Existing
Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D	D	C	B						C	E
Approach Delay		40.0			19.6						49.2	
Approach LOS		D			B						D	
Queue Length 50th (ft)		191	96	262	222						96	367
Queue Length 95th (ft)		266	170	297	131						147	#541
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		1034	462	620	1964						710	633
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.51	0.32	0.75	0.41						0.25	0.82

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 42 (35%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 32.7

Intersection LOS: C

Intersection Capacity Utilization 60.9%

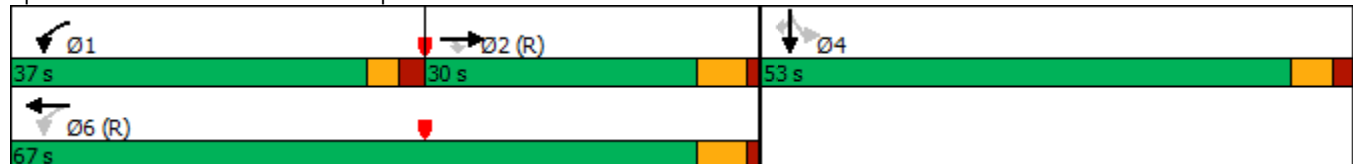
ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

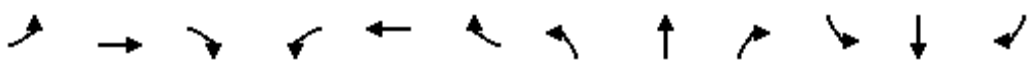
Queue shown is maximum after two cycles.

Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2022 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗
Traffic Volume (vph)	0	573	145	501	840	0	0	0	0	209	4	503
Future Volume (vph)	0	573	145	501	840	0	0	0	0	209	4	503
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	637	161	557	933	0	0	0	0	232	4	559
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	637	161	557	933	0	0	0	0	0	236	559
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		29.0	29.0	43.0	72.0					48.0	48.0	48.0
Total Split (%)		24.2%	24.2%	35.8%	60.0%					40.0%	40.0%	40.0%
Maximum Green (s)		22.0	22.0	36.0	65.0					41.0	41.0	41.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		24.0	24.0	38.0	67.0						43.0	43.0
Actuated g/C Ratio		0.20	0.20	0.32	0.56						0.36	0.36
v/c Ratio		0.90	0.51	0.99	0.47						0.37	0.99
Control Delay		64.0	49.3	59.8	12.7						30.6	73.3
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		64.0	49.3	59.8	12.7						30.6	73.3

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2022 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		E	D	E	B						C	E
Approach Delay		61.0			30.3						60.6	
Approach LOS		E			C						E	
Queue Length 50th (ft)		255	112	430	265						134	426
Queue Length 95th (ft)		#360	184	#651	133						205	#663
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		707	316	560	1975						636	567
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.90	0.51	0.99	0.47						0.37	0.99

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 80 (67%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 46.1

Intersection LOS: D

Intersection Capacity Utilization 67.9%

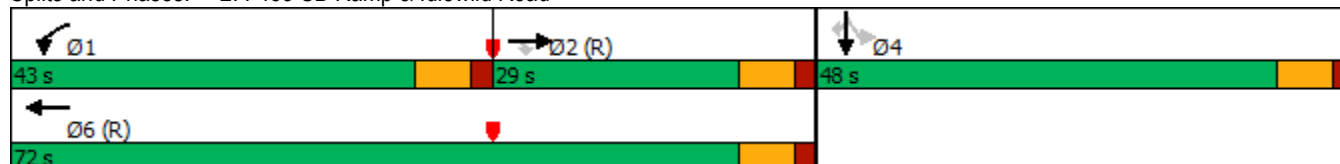
ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2022 Build Phase 1 (without Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑	↑
Traffic Volume (vph)	0	590	145	517	856	0	0	0	0	222	4	503
Future Volume (vph)	0	590	145	517	856	0	0	0	0	222	4	503
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	656	161	574	951	0	0	0	0	247	4	559
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	656	161	574	951	0	0	0	0	0	251	559
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		28.0	28.0	44.0	72.0					48.0	48.0	48.0
Total Split (%)		23.3%	23.3%	36.7%	60.0%					40.0%	40.0%	40.0%
Maximum Green (s)		21.0	21.0	37.0	65.0					41.0	41.0	41.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		23.0	23.0	39.0	67.0						43.0	43.0
Actuated g/C Ratio		0.19	0.19	0.32	0.56						0.36	0.36
v/c Ratio		0.97	0.53	1.00	0.48						0.39	0.99
Control Delay		75.9	50.9	59.0	9.2						31.1	73.3
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		75.9	50.9	59.0	9.2						31.1	73.3

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2022 Build Phase 1 (without Gas Station)
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		E	D	E	A						C	E
Approach Delay		70.9			28.0						60.2	
Approach LOS		E			C						E	
Queue Length 50th (ft)		267	113	414	171						144	426
Queue Length 95th (ft)		#389	186	#678	116						219	#663
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		678	303	575	1975						636	567
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.97	0.53	1.00	0.48						0.39	0.99

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 94 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 47.4

Intersection LOS: D

Intersection Capacity Utilization 70.0%

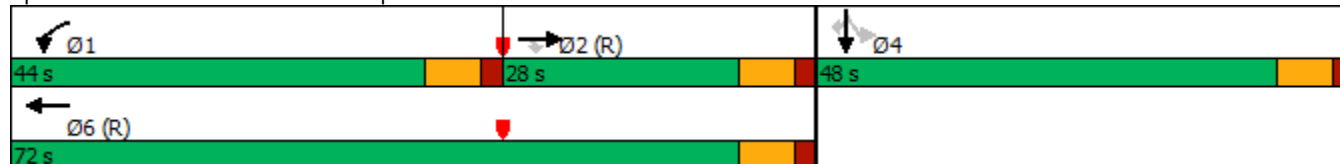
ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

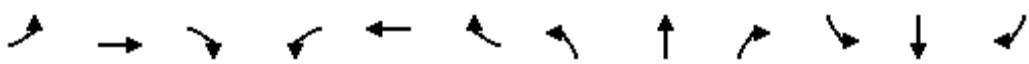
2022 Build Phase 1 (with Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑	↑
Traffic Volume (vph)	0	632	145	559	898	0	0	0	0	253	4	503
Future Volume (vph)	0	632	145	559	898	0	0	0	0	253	4	503
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	702	161	621	998	0	0	0	0	281	4	559
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	702	161	621	998	0	0	0	0	0	285	559
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		28.0	28.0	44.0	72.0					48.0	48.0	48.0
Total Split (%)		23.3%	23.3%	36.7%	60.0%					40.0%	40.0%	40.0%
Maximum Green (s)		21.0	21.0	37.0	65.0					41.0	41.0	41.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		23.0	23.0	39.0	67.0						43.0	43.0
Actuated g/C Ratio		0.19	0.19	0.32	0.56						0.36	0.36
v/c Ratio		1.04	0.53	1.08	0.51						0.45	0.99
Control Delay		91.4	50.9	79.4	9.7						32.2	73.3
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		91.4	50.9	79.4	9.7						32.2	73.3

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2022 Build Phase 1 (with Gas Station)
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		F	D	E	A						C	E
Approach Delay		83.8			36.4						59.4	
Approach LOS		F			D						E	
Queue Length 50th (ft)		~307	113	~532	238						168	426
Queue Length 95th (ft)		#431	186	#750	187						249	#663
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		678	303	575	1975						636	567
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		1.04	0.53	1.08	0.51						0.45	0.99

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 99 (83%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 54.6

Intersection LOS: D

Intersection Capacity Utilization 75.2%

ICU Level of Service D

Analysis Period (min) 15

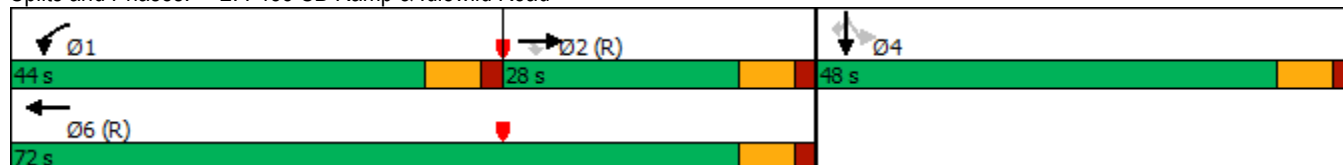
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

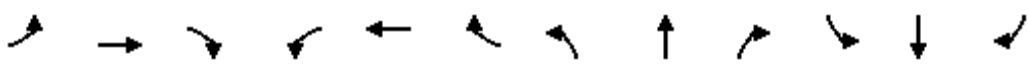
Queue shown is maximum after two cycles.

Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗
Traffic Volume (vph)	0	586	149	512	860	0	0	0	0	214	4	515
Future Volume (vph)	0	586	149	512	860	0	0	0	0	214	4	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	651	166	569	956	0	0	0	0	238	4	572
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	651	166	569	956	0	0	0	0	0	242	572
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		29.0	29.0	43.0	72.0					48.0	48.0	48.0
Total Split (%)		24.2%	24.2%	35.8%	60.0%					40.0%	40.0%	40.0%
Maximum Green (s)		22.0	22.0	36.0	65.0					41.0	41.0	41.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		24.0	24.0	38.0	67.0						43.0	43.0
Actuated g/C Ratio		0.20	0.20	0.32	0.56						0.36	0.36
v/c Ratio		0.92	0.53	1.02	0.48						0.38	1.01
Control Delay		66.6	49.8	63.9	11.7						30.8	78.9
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		66.6	49.8	63.9	11.7						30.8	78.9

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		E	D	E	B						C	E
Approach Delay		63.2			31.2						64.6	
Approach LOS		E			C						E	
Queue Length 50th (ft)		262	116	~454	274						138	~448
Queue Length 95th (ft)		#372	189	#672	135						211	#684
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		707	316	560	1975						636	567
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.92	0.53	1.02	0.48						0.38	1.01

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 81 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 48.1

Intersection LOS: D

Intersection Capacity Utilization 69.1%

ICU Level of Service C

Analysis Period (min) 15

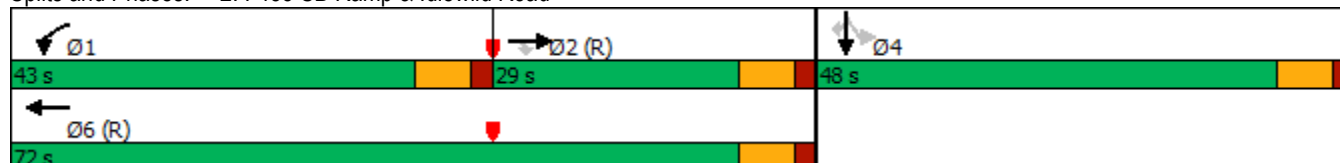
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

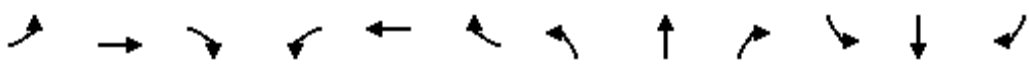
Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (without Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗
Traffic Volume (vph)	0	657	149	600	949	0	0	0	0	268	4	515
Future Volume (vph)	0	657	149	600	949	0	0	0	0	268	4	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	730	166	667	1054	0	0	0	0	298	4	572
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	730	166	667	1054	0	0	0	0	0	302	572
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		28.0	28.0	44.0	72.0					48.0	48.0	48.0
Total Split (%)		23.3%	23.3%	36.7%	60.0%					40.0%	40.0%	40.0%
Maximum Green (s)		21.0	21.0	37.0	65.0					41.0	41.0	41.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		23.0	23.0	39.0	67.0						43.0	43.0
Actuated g/C Ratio		0.19	0.19	0.32	0.56						0.36	0.36
v/c Ratio		1.08	0.55	1.16	0.53						0.47	1.01
Control Delay		102.9	51.5	108.3	8.0						32.8	78.9
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		102.9	51.5	108.3	8.0						32.8	78.9

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (without Gas Station)
Timing Plan: AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
LOS		F	D	F	A						C	E
Approach Delay		93.4			46.9						63.0	
Approach LOS		F			D						E	
Queue Length 50th (ft)		~331	117	~608	237						179	~448
Queue Length 95th (ft)		#455	191	m#821	190						265	#684
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		678	303	575	1975						636	567
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		1.08	0.55	1.16	0.53						0.47	1.01

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 98 (82%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 62.9

Intersection LOS: E

Intersection Capacity Utilization 79.0%

ICU Level of Service D

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

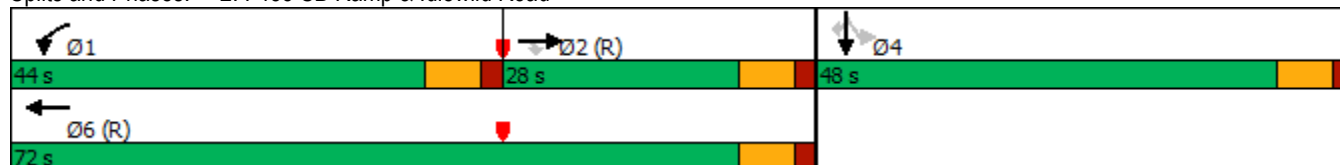
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

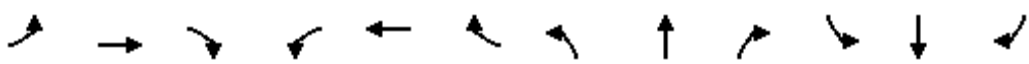
Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (without Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗↗
Traffic Volume (vph)	0	657	149	600	949	0	0	0	0	268	4	515
Future Volume (vph)	0	657	149	600	949	0	0	0	0	268	4	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		400
Storage Lanes	0		1	1		0	0		0	0		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.88
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	2787
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	2787
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	730	166	667	1054	0	0	0	0	298	4	572
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	730	166	667	1054	0	0	0	0	0	302	572
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		33.0	33.0	55.0	88.0					32.0	32.0	32.0
Total Split (%)		27.5%	27.5%	45.8%	73.3%					26.7%	26.7%	26.7%
Maximum Green (s)		26.0	26.0	48.0	81.0					25.0	25.0	25.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		30.0	30.0	48.3	83.3						26.7	26.7
Actuated g/C Ratio		0.25	0.25	0.40	0.69						0.22	0.22
v/c Ratio		0.83	0.42	0.94	0.43						0.77	0.92
Control Delay		52.2	42.6	31.5	2.1						57.7	67.6
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		52.2	42.6	31.5	2.1						57.7	67.6

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (without Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D	D	C	A						E	E
Approach Delay		50.4			13.5						64.1	
Approach LOS		D			B						E	
Queue Length 50th (ft)		289	111	365	0						220	247
Queue Length 95th (ft)		#393	181	m#692	0						#344	#361
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								400
Base Capacity (vph)		884	395	737	2456						399	627
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.83	0.42	0.91	0.43						0.76	0.91

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 98 (82%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 35.7

Intersection LOS: D

Intersection Capacity Utilization 79.0%

ICU Level of Service D

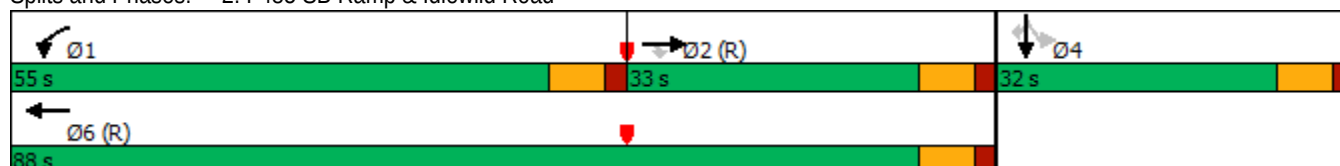
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

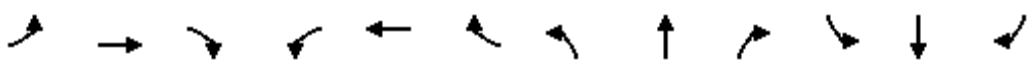
Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (with Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗
Traffic Volume (vph)	0	699	149	641	990	0	0	0	0	299	4	515
Future Volume (vph)	0	699	149	641	990	0	0	0	0	299	4	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	777	166	712	1100	0	0	0	0	332	4	572
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	777	166	712	1100	0	0	0	0	0	336	572
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		28.0	28.0	44.0	72.0					48.0	48.0	48.0
Total Split (%)		23.3%	23.3%	36.7%	60.0%					40.0%	40.0%	40.0%
Maximum Green (s)		21.0	21.0	37.0	65.0					41.0	41.0	41.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		23.0	23.0	39.0	67.0						43.0	43.0
Actuated g/C Ratio		0.19	0.19	0.32	0.56						0.36	0.36
v/c Ratio		1.15	0.55	1.24	0.56						0.53	1.01
Control Delay		126.0	51.5	140.1	6.1						34.2	78.9
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		126.0	51.5	140.1	6.1						34.2	78.9

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (with Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		F	D	F	A						C	E
Approach Delay		112.9			58.8						62.3	
Approach LOS		F			E						E	
Queue Length 50th (ft)		~371	117	~682	195						204	~448
Queue Length 95th (ft)		#496	191	m#826	m171						298	#684
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		678	303	575	1975						636	567
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		1.15	0.55	1.24	0.56						0.53	1.01

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 96 (80%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.24

Intersection Signal Delay: 73.6

Intersection LOS: E

Intersection Capacity Utilization 84.1%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

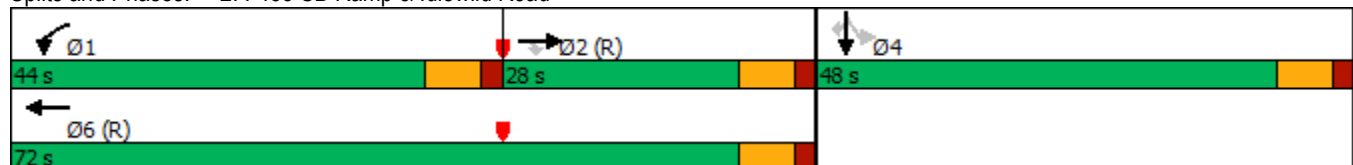
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

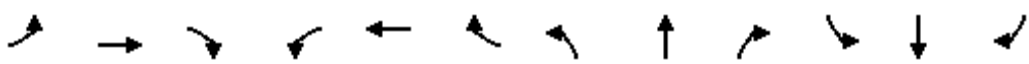
Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (with Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗↗
Traffic Volume (vph)	0	699	149	641	990	0	0	0	0	299	4	515
Future Volume (vph)	0	699	149	641	990	0	0	0	0	299	4	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		400
Storage Lanes	0		1	1		0	0		0	0		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.88
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	2787
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	2787
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	777	166	712	1100	0	0	0	0	332	4	572
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	777	166	712	1100	0	0	0	0	0	336	572
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		34.0	34.0	55.0	89.0					31.0	31.0	31.0
Total Split (%)		28.3%	28.3%	45.8%	74.2%					25.8%	25.8%	25.8%
Maximum Green (s)		27.0	27.0	48.0	82.0					24.0	24.0	24.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		29.4	29.4	49.6	84.0						26.0	26.0
Actuated g/C Ratio		0.24	0.24	0.41	0.70						0.22	0.22
v/c Ratio		0.90	0.43	0.97	0.44						0.88	0.95
Control Delay		58.3	42.5	35.4	1.3						69.4	72.7
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		58.3	42.5	35.4	1.3						69.4	72.7

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (with Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		E	D	D	A						E	E
Approach Delay		55.5			14.7						71.4	
Approach LOS		E			B						E	
Queue Length 50th (ft)		308	109	391	0						253	250
Queue Length 95th (ft)		#422	179	m#694	m0						#417	#372
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								400
Base Capacity (vph)		866	387	737	2477						384	603
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.90	0.43	0.97	0.44						0.88	0.95

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 93 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 39.3

Intersection LOS: D

Intersection Capacity Utilization 84.1%

ICU Level of Service E

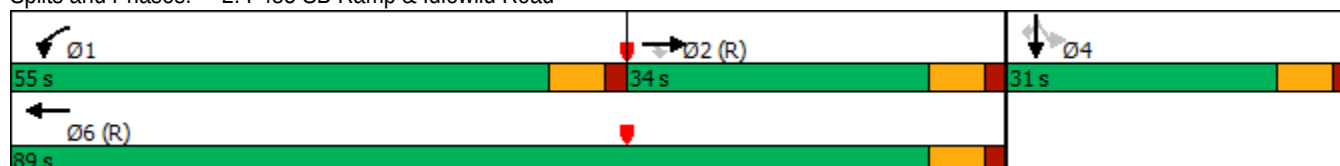
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

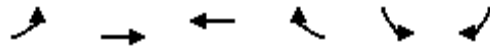
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Village at Idlewild
2: Idlewild Road & I-485 Southbound Off Ramp

2040 Full Build
Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø4
Lane Configurations			↑↑			↗		
Traffic Volume (vph)	0	0	1304	0	0	201		
Future Volume (vph)	0	0	1304	0	0	201		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00		
Frt						0.865		
Flt Protected								
Satd. Flow (prot)	0	0	3539	0	0	1611		
Flt Permitted								
Satd. Flow (perm)	0	0	3539	0	0	1611		
Right Turn on Red				No		No		
Satd. Flow (RTOR)								
Link Speed (mph)		45	45		50			
Link Distance (ft)		378	88		984			
Travel Time (s)		5.7	1.3		13.4			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90		
Adj. Flow (vph)	0	0	1449	0	0	223		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	1449	0	0	223		
Turn Type			NA			Prot		
Protected Phases			8			6	2	4
Permitted Phases								
Detector Phase			8			6		
Switch Phase								
Minimum Initial (s)			12.0			7.0	12.0	7.0
Minimum Split (s)			19.0			14.0	19.0	14.0
Total Split (s)			64.0			56.0	56.0	64.0
Total Split (%)			53.3%			46.7%	47%	53%
Maximum Green (s)			57.0			49.0	49.0	57.0
Yellow Time (s)			5.0			5.0	5.0	5.0
All-Red Time (s)			2.0			2.0	2.0	2.0
Lost Time Adjust (s)			-2.0			-2.0		
Total Lost Time (s)			5.0			5.0		
Lead/Lag								
Lead-Lag Optimize?								
Vehicle Extension (s)			3.0			3.0	3.0	3.0
Recall Mode			None			C-Min	C-Min	None
Act Effect Green (s)			58.4			51.6		
Actuated g/C Ratio			0.49			0.43		
v/c Ratio			0.84			0.32		
Control Delay			4.0			24.5		
Queue Delay			0.0			0.0		
Total Delay			4.0			24.5		
LOS			A			C		
Approach Delay			4.0		24.5			
Approach LOS			A		C			
Queue Length 50th (ft)			13			113		
Queue Length 95th (ft)			13			176		
Internal Link Dist (ft)		298	8		904			

Village at Idlewild
2: Idlewild Road & I-485 Southbound Off Ramp

2040 Full Build
Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø4
Turn Bay Length (ft)								
Base Capacity (vph)			1740			692		
Starvation Cap Reductn			0			0		
Spillback Cap Reductn			0			0		
Storage Cap Reductn			0			0		
Reduced v/c Ratio			0.83			0.32		

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 12 (10%), Referenced to phase 2:EBT and 6:, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 6.7

Intersection LOS: A

Intersection Capacity Utilization 74.5%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Idlewild Road & I-485 Southbound Off Ramp

#22 #222 → Ø2 (R) 56 s	#222 ↘ Ø4 64 s
#2 ↙ Ø6 (R) 56 s	#2 #22 ← Ø8 64 s

Village at Idlewild
22: Idlewild Road

2040 Full Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑				
Traffic Volume (vph)	0	1089	0	0	0	0	0	1304	0	0	0	0
Future Volume (vph)	0	1089	0	0	0	0	0	1304	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Fr t												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	3539	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	3539	0	0	0	0
Right Turn on Red	No		No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		93			171			223			88	
Travel Time (s)		1.4			2.6			3.4			1.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1210	0	0	0	0	0	1449	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1210	0	0	0	0	0	1449	0	0	0	0
Turn Type		NA						NA				
Protected Phases		2						8				
Permitted Phases												
Detector Phase		2						8				
Switch Phase												
Minimum Initial (s)		12.0						12.0				
Minimum Split (s)		19.0						19.0				
Total Split (s)		56.0						64.0				
Total Split (%)		46.7%						53.3%				
Maximum Green (s)		49.0						57.0				
Yellow Time (s)		5.0						5.0				
All-Red Time (s)		2.0						2.0				
Lost Time Adjust (s)		-2.0						-2.0				
Total Lost Time (s)		5.0						5.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0						3.0				
Recall Mode		C-Min						None				
Act Effct Green (s)		51.6						58.4				
Actuated g/C Ratio		0.43						0.49				
v/c Ratio		0.80						0.84				
Control Delay		34.6						12.9				
Queue Delay		0.0						0.0				
Total Delay		34.6						12.9				
LOS		C						B				
Approach Delay		34.6						12.9				
Approach LOS		C						B				
Queue Length 50th (ft)		423						92				
Queue Length 95th (ft)		515						176				
Internal Link Dist (ft)		13			91			143			8	

Lane Group	Ø4	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	4	6
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	7.0	7.0
Minimum Split (s)	14.0	14.0
Total Split (s)	64.0	56.0
Total Split (%)	53%	47%
Maximum Green (s)	57.0	49.0
Yellow Time (s)	5.0	5.0
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	C-Min
Act Effect Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		

Village at Idlewild
22: Idlewild Road

2040 Full Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)	1520						1740					
Starvation Cap Reductn	0						0					
Spillback Cap Reductn	0						0					
Storage Cap Reductn	0						0					
Reduced v/c Ratio	0.80						0.83					

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 12 (10%), Referenced to phase 2:EBT and 6:, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 22.8

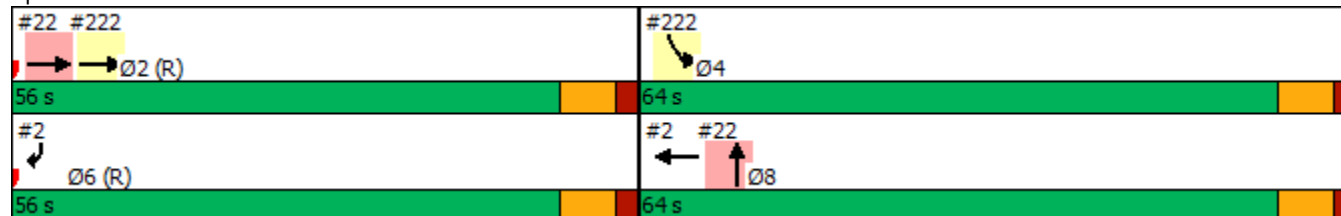
Intersection LOS: C

Intersection Capacity Utilization 74.5%

ICU Level of Service D

Analysis Period (min) 15

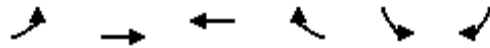
Splits and Phases: 22: Idlewild Road



Lane Group	Ø4	Ø6
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Village at Idlewild
222: Idlewild Road & I-485 Southbound Off Ramp

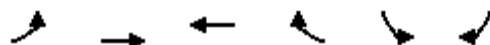
2040 Full Build
Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations		↑↑			↓↓			
Traffic Volume (vph)	0	1089	0	0	631	0		
Future Volume (vph)	0	1089	0	0	631	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	0			0	500	0		
Storage Lanes	0			0	1	0		
Taper Length (ft)	100				100			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3433	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3433	0		
Right Turn on Red				No	No	No		
Satd. Flow (RTOR)								
Link Speed (mph)		45	45		50			
Link Distance (ft)		171	572		853			
Travel Time (s)		2.6	8.7		11.6			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90		
Adj. Flow (vph)	0	1210	0	0	701	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1210	0	0	701	0		
Turn Type		NA			Prot			
Protected Phases		2			4		6	8
Permitted Phases								
Detector Phase		2			4			
Switch Phase								
Minimum Initial (s)		12.0			7.0		7.0	12.0
Minimum Split (s)		19.0			14.0		14.0	19.0
Total Split (s)		56.0			64.0		56.0	64.0
Total Split (%)		46.7%			53.3%		47%	53%
Maximum Green (s)		49.0			57.0		49.0	57.0
Yellow Time (s)		5.0			5.0		5.0	5.0
All-Red Time (s)		2.0			2.0		2.0	2.0
Lost Time Adjust (s)		-2.0			-2.0			
Total Lost Time (s)		5.0			5.0			
Lead/Lag								
Lead-Lag Optimize?								
Vehicle Extension (s)		3.0			3.0		3.0	3.0
Recall Mode		C-Min			None		C-Min	None
Act Effct Green (s)		51.6			58.4			
Actuated g/C Ratio		0.43			0.49			
v/c Ratio		0.80			0.42			
Control Delay		4.1			20.7			
Queue Delay		0.0			0.0			
Total Delay		4.1			20.7			
LOS		A			C			
Approach Delay		4.1			20.7			
Approach LOS		A			C			

Village at Idlewild
222: Idlewild Road & I-485 Southbound Off Ramp

2040 Full Build
Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Queue Length 50th (ft)		11			173			
Queue Length 95th (ft)		13			221			
Internal Link Dist (ft)		91	492		773			
Turn Bay Length (ft)					500			
Base Capacity (vph)		1520			1687			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			
Reduced v/c Ratio		0.80			0.42			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 12 (10%), Referenced to phase 2:EBT and 6:, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 10.2

Intersection LOS: B

Intersection Capacity Utilization 56.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 222: Idlewild Road & I-485 Southbound Off Ramp

#22 #222 → Ø2 (R) 56 s	#222 ↘ Ø4 64 s
#2 ↙ Ø6 (R) 56 s	#2 #22 ← Ø8 64 s

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2019 Existing
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗
Traffic Volume (vph)	0	861	132	272	663	0	0	0	0	272	4	308
Future Volume (vph)	0	861	132	272	663	0	0	0	0	272	4	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.178							0.953	
Satd. Flow (perm)	0	3539	1583	332	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	957	147	302	737	0	0	0	0	302	4	342
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	957	147	302	737	0	0	0	0	0	306	342
Turn Type		NA	Perm	pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2	6						4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		18.0	18.0	13.0	18.0					13.0	13.0	13.0
Total Split (s)		48.0	48.0	29.0	77.0					43.0	43.0	43.0
Total Split (%)		40.0%	40.0%	24.2%	64.2%					35.8%	35.8%	35.8%
Maximum Green (s)		42.3	42.3	23.7	71.3					37.2	37.2	37.2
Yellow Time (s)		4.5	4.5	3.0	4.5					3.8	3.8	3.8
All-Red Time (s)		1.2	1.2	2.3	1.2					2.0	2.0	2.0
Lost Time Adjust (s)		-0.7	-0.7	-0.3	-0.7						-0.8	-0.8
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		56.5	56.5	79.2	79.2						30.8	30.8
Actuated g/C Ratio		0.47	0.47	0.66	0.66						0.26	0.26
v/c Ratio		0.57	0.20	0.70	0.32						0.67	0.84
Control Delay		27.0	22.6	35.4	10.3						47.0	60.5
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		27.0	22.6	35.4	10.3						47.0	60.5

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2019 Existing
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		C	C	D	B						D	E
Approach Delay		26.4			17.6						54.1	
Approach LOS		C			B						D	
Queue Length 50th (ft)		276	65	122	126						212	251
Queue Length 95th (ft)		421	133	250	151						289	340
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		1666	745	506	2336						562	501
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.57	0.20	0.60	0.32						0.54	0.68

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 29.6

Intersection LOS: C

Intersection Capacity Utilization 66.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2022 No-Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗
Traffic Volume (vph)	0	991	142	337	766	0	0	0	0	331	4	332
Future Volume (vph)	0	991	142	337	766	0	0	0	0	331	4	332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1101	158	374	851	0	0	0	0	368	4	369
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1101	158	374	851	0	0	0	0	0	372	369
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		47.0	47.0	35.0	82.0					38.0	38.0	38.0
Total Split (%)		39.2%	39.2%	29.2%	68.3%					31.7%	31.7%	31.7%
Maximum Green (s)		40.0	40.0	28.0	75.0					31.0	31.0	31.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		45.3	45.3	28.5	78.8						31.2	31.2
Actuated g/C Ratio		0.38	0.38	0.24	0.66						0.26	0.26
v/c Ratio		0.83	0.26	0.89	0.37						0.81	0.90
Control Delay		41.0	28.7	51.1	5.8						55.8	68.0
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		41.0	28.7	51.1	5.8						55.8	68.0

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2022 No-Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D	C	D	A						E	E
Approach Delay		39.5			19.6						61.8	
Approach LOS		D			B						E	
Queue Length 50th (ft)		420	88	294	179						265	271
Queue Length 95th (ft)		#528	144	#424	14						#385	#436
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		1334	597	442	2323						488	435
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.83	0.26	0.85	0.37						0.76	0.85

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 85 (71%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 37.1

Intersection LOS: D

Intersection Capacity Utilization 77.1%

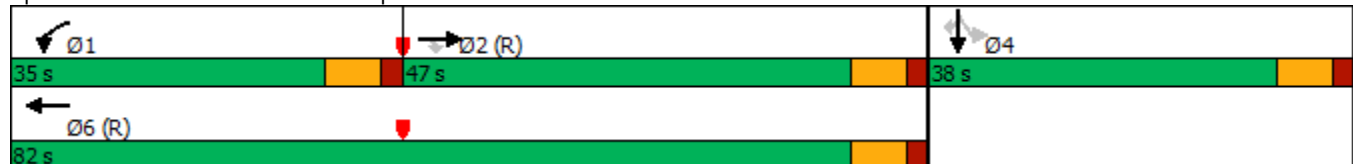
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2022 Build Phase 1 (without Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑	↑
Traffic Volume (vph)	0	1005	142	349	778	0	0	0	0	341	4	332
Future Volume (vph)	0	1005	142	349	778	0	0	0	0	341	4	332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1117	158	388	864	0	0	0	0	379	4	369
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1117	158	388	864	0	0	0	0	0	383	369
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		48.0	48.0	35.0	83.0					37.0	37.0	37.0
Total Split (%)		40.0%	40.0%	29.2%	69.2%					30.8%	30.8%	30.8%
Maximum Green (s)		41.0	41.0	28.0	76.0					30.0	30.0	30.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		45.1	45.1	29.0	79.2						30.8	30.8
Actuated g/C Ratio		0.38	0.38	0.24	0.66						0.26	0.26
v/c Ratio		0.84	0.27	0.91	0.37						0.84	0.91
Control Delay		41.7	28.4	54.9	6.9						59.4	70.1
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		41.7	28.4	54.9	6.9						59.4	70.1

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2022 Build Phase 1 (without Gas Station)
Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D	C	D	A						E	E
Approach Delay		40.1			21.7						64.7	
Approach LOS		D			C						E	
Queue Length 50th (ft)		424	87	286	204						278	274
Queue Length 95th (ft)		#523	142	#465	188						#429	#446
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		1330	595	442	2334						473	422
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.84	0.27	0.88	0.37						0.81	0.87

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 93 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 38.7

Intersection LOS: D

Intersection Capacity Utilization 78.7%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2022 Build Phase 1 (with Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑	↑
Traffic Volume (vph)	0	1036	142	380	810	0	0	0	0	364	4	332
Future Volume (vph)	0	1036	142	380	810	0	0	0	0	364	4	332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1151	158	422	900	0	0	0	0	404	4	369
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1151	158	422	900	0	0	0	0	0	408	369
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		28.0	28.0	44.0	72.0					48.0	48.0	48.0
Total Split (%)		23.3%	23.3%	36.7%	60.0%					40.0%	40.0%	40.0%
Maximum Green (s)		21.0	21.0	37.0	65.0					41.0	41.0	41.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		36.5	36.5	33.9	75.3						34.7	34.7
Actuated g/C Ratio		0.30	0.30	0.28	0.63						0.29	0.29
v/c Ratio		1.07	0.33	0.85	0.41						0.80	0.81
Control Delay		88.8	38.9	43.7	6.4						50.8	53.1
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		88.8	38.9	43.7	6.4						50.8	53.1

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2022 Build Phase 1 (with Gas Station)
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		F	D	D	A						D	D
Approach Delay		82.8			18.3						51.9	
Approach LOS		F			B						D	
Queue Length 50th (ft)		~544	97	299	200						289	262
Queue Length 95th (ft)		#824	182	441	266						374	348
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		1076	481	575	2221						636	567
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		1.07	0.33	0.73	0.41						0.64	0.65

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 108 (90%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 50.7

Intersection LOS: D

Intersection Capacity Utilization 82.6%

ICU Level of Service E

Analysis Period (min) 15

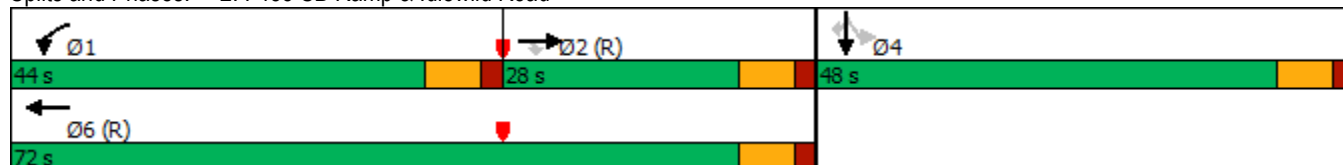
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

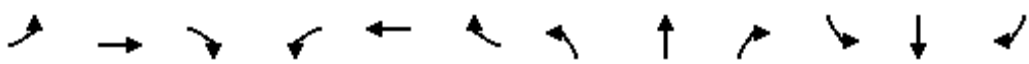
Queue shown is maximum after two cycles.

Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



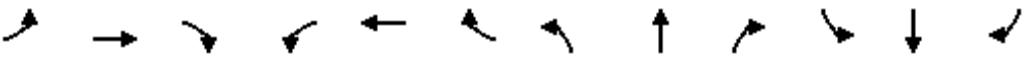
Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 No-Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗
Traffic Volume (vph)	0	1014	146	344	784	0	0	0	0	338	4	340
Future Volume (vph)	0	1014	146	344	784	0	0	0	0	338	4	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1127	162	382	871	0	0	0	0	376	4	378
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1127	162	382	871	0	0	0	0	0	380	378
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		29.0	29.0	43.0	72.0					48.0	48.0	48.0
Total Split (%)		24.2%	24.2%	35.8%	60.0%					40.0%	40.0%	40.0%
Maximum Green (s)		22.0	22.0	36.0	65.0					41.0	41.0	41.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		38.3	38.3	31.6	74.9						35.1	35.1
Actuated g/C Ratio		0.32	0.32	0.26	0.62						0.29	0.29
v/c Ratio		1.00	0.32	0.82	0.39						0.73	0.82
Control Delay		68.5	37.5	41.5	4.9						46.3	53.5
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		68.5	37.5	41.5	4.9						46.3	53.5

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 No-Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		E	D	D	A						D	D
Approach Delay		64.6			16.1						49.9	
Approach LOS		E			B						D	
Queue Length 50th (ft)		~500	97	305	147						261	268
Queue Length 95th (ft)		#790	185	388	218						343	359
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		1128	504	560	2208						636	567
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		1.00	0.32	0.68	0.39						0.60	0.67

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 77 (64%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 42.8

Intersection LOS: D

Intersection Capacity Utilization 78.5%

ICU Level of Service D

Analysis Period (min) 15

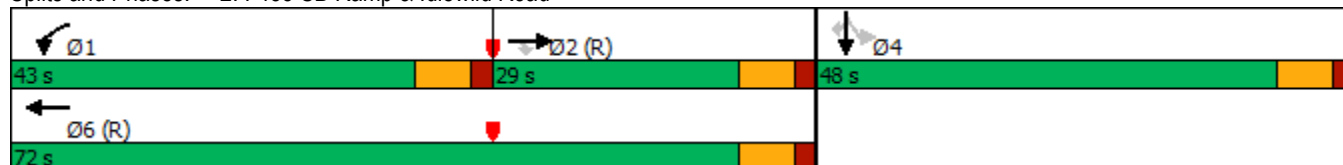
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (without Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑	↑
Traffic Volume (vph)	0	1086	146	401	842	0	0	0	0	392	4	340
Future Volume (vph)	0	1086	146	401	842	0	0	0	0	392	4	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1207	162	446	936	0	0	0	0	436	4	378
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1207	162	446	936	0	0	0	0	0	440	378
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		48.0	48.0	35.0	83.0					37.0	37.0	37.0
Total Split (%)		40.0%	40.0%	29.2%	69.2%					30.8%	30.8%	30.8%
Maximum Green (s)		41.0	41.0	28.0	76.0					30.0	30.0	30.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		43.0	43.0	30.5	78.5						31.5	31.5
Actuated g/C Ratio		0.36	0.36	0.25	0.65						0.26	0.26
v/c Ratio		0.95	0.29	0.99	0.40						0.94	0.91
Control Delay		54.0	29.3	70.2	8.4						73.6	69.8
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		54.0	29.3	70.2	8.4						73.6	69.8

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (without Gas Station)
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D	C	E	A						E	E
Approach Delay		51.1			28.4						71.8	
Approach LOS		D			C						E	
Queue Length 50th (ft)		475	89	~349	229						334	283
Queue Length 95th (ft)		#622	146	m#555	228						#531	#463
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		1268	567	449	2314						473	422
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.95	0.29	0.99	0.40						0.93	0.90

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 91 (76%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 47.0

Intersection LOS: D

Intersection Capacity Utilization 86.7%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

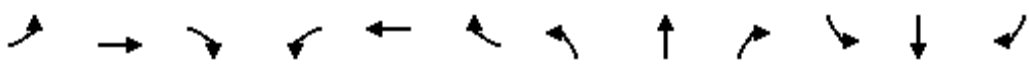
Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (without Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗↗
Traffic Volume (vph)	0	1086	146	401	842	0	0	0	0	392	4	340
Future Volume (vph)	0	1086	146	401	842	0	0	0	0	392	4	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		400
Storage Lanes	0		1	1		0	0		0	0		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.88
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	2787
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	2787
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1207	162	446	936	0	0	0	0	436	4	378
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1207	162	446	936	0	0	0	0	0	440	378
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		49.0	49.0	36.0	85.0					35.0	35.0	35.0
Total Split (%)		40.8%	40.8%	30.0%	70.8%					29.2%	29.2%	29.2%
Maximum Green (s)		42.0	42.0	29.0	78.0					28.0	28.0	28.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		44.0	44.0	31.0	80.0						30.0	30.0
Actuated g/C Ratio		0.37	0.37	0.26	0.67						0.25	0.25
v/c Ratio		0.93	0.28	0.98	0.40						0.99	0.54
Control Delay		50.1	28.5	59.1	6.8						86.5	42.5
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		50.1	28.5	59.1	6.8						86.5	42.5

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (without Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D	C	E	A						F	D
Approach Delay		47.5			23.7						66.2	
Approach LOS		D			C						E	
Queue Length 50th (ft)		468	88	326	177						341	144
Queue Length 95th (ft)		#610	144	#543	161						#555	201
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								400
Base Capacity (vph)		1297	580	457	2359						443	696
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		0.93	0.28	0.98	0.40						0.99	0.54

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 76 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 42.5

Intersection LOS: D

Intersection Capacity Utilization 86.7%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

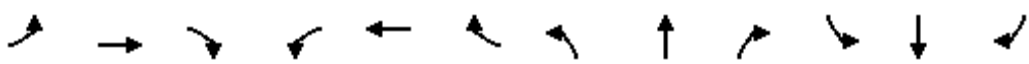
Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (with Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗
Traffic Volume (vph)	0	1121	146	436	876	0	0	0	0	418	4	340
Future Volume (vph)	0	1121	146	436	876	0	0	0	0	418	4	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		375
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1246	162	484	973	0	0	0	0	464	4	378
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1246	162	484	973	0	0	0	0	0	468	378
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		28.0	28.0	44.0	72.0					48.0	48.0	48.0
Total Split (%)		23.3%	23.3%	36.7%	60.0%					40.0%	40.0%	40.0%
Maximum Green (s)		21.0	21.0	37.0	65.0					41.0	41.0	41.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		30.8	30.8	36.8	72.6						37.4	37.4
Actuated g/C Ratio		0.26	0.26	0.31	0.60						0.31	0.31
v/c Ratio		1.37	0.40	0.89	0.45						0.85	0.77
Control Delay		209.7	43.7	43.6	6.1						53.0	47.8
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		209.7	43.7	43.6	6.1						53.0	47.8

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (with Gas Station)
Timing Plan: PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
LOS		F	D	D	A						D	D
Approach Delay		190.6			18.6						50.7	
Approach LOS		F			B						D	
Queue Length 50th (ft)		~726	110	338	216						332	259
Queue Length 95th (ft)		#906	187	m#501	m238						444	359
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								375
Base Capacity (vph)		908	406	578	2141						636	567
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		1.37	0.40	0.84	0.45						0.74	0.67

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 104 (87%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.37

Intersection Signal Delay: 91.2

Intersection LOS: F

Intersection Capacity Utilization 91.0%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

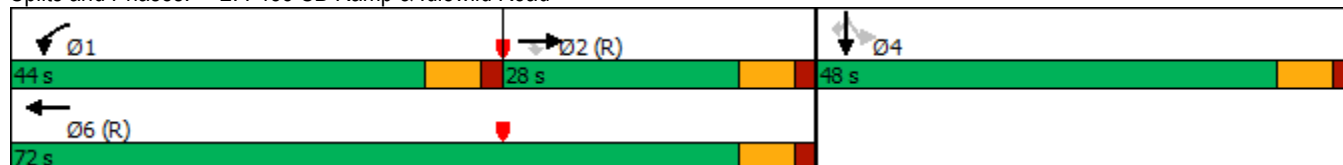
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

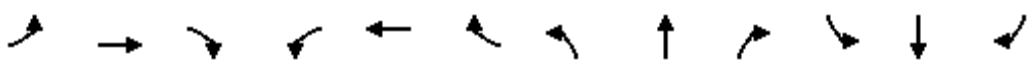
Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (with Gas Station) with Improvements

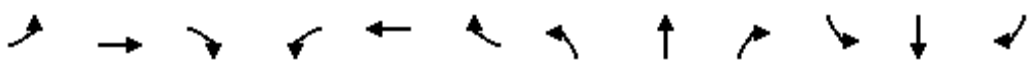
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↖	↗↗
Traffic Volume (vph)	0	1121	146	436	876	0	0	0	0	418	4	340
Future Volume (vph)	0	1121	146	436	876	0	0	0	0	418	4	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	275		0	0		0	0		400
Storage Lanes	0		1	1		0	0		0	0		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.88
Frt			0.850									0.850
Flt Protected				0.950							0.953	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	1775	2787
Flt Permitted				0.950							0.953	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	1775	2787
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		800			888			1578			1654	
Travel Time (s)		12.1			13.5			21.5			22.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1246	162	484	973	0	0	0	0	464	4	378
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1246	162	484	973	0	0	0	0	0	468	378
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Detector Phase		2	2	1	6					4	4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0	7.0	12.0					7.0	7.0	7.0
Minimum Split (s)		19.0	19.0	14.0	19.0					14.0	14.0	14.0
Total Split (s)		47.0	47.0	37.0	84.0					36.0	36.0	36.0
Total Split (%)		39.2%	39.2%	30.8%	70.0%					30.0%	30.0%	30.0%
Maximum Green (s)		40.0	40.0	30.0	77.0					29.0	29.0	29.0
Yellow Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0	-2.0	-2.0						-2.0	-2.0
Total Lost Time (s)		5.0	5.0	5.0	5.0						5.0	5.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		6.0	6.0	2.0	6.0					2.0	2.0	2.0
Minimum Gap (s)		3.0	3.0	0.2	3.0					0.2	0.2	0.2
Time Before Reduce (s)		15.0	15.0	0.0	15.0					0.0	0.0	0.0
Time To Reduce (s)		30.0	30.0	0.0	2.0					0.0	0.0	0.0
Recall Mode		C-Min	C-Min	None	C-Min					None	None	None
Act Effect Green (s)		42.0	42.0	32.0	79.0						31.0	31.0
Actuated g/C Ratio		0.35	0.35	0.27	0.66						0.26	0.26
v/c Ratio		1.01	0.29	1.03	0.42						1.02	0.53
Control Delay		66.3	30.1	67.8	5.8						91.9	41.3
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		66.3	30.1	67.8	5.8						91.9	41.3

Stinson Village
2: I-485 SB Ramp & Idlewild Road

2023 Full Build (with Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		E	C	E	A						F	D
Approach Delay		62.1			26.4						69.3	
Approach LOS		E			C						E	
Queue Length 50th (ft)		~511	90	~396	169						~385	143
Queue Length 95th (ft)		#668	148	m#562	174						#593	198
Internal Link Dist (ft)		720			808			1498			1574	
Turn Bay Length (ft)			100	275								400
Base Capacity (vph)		1238	554	472	2329						458	719
Starvation Cap Reductn		0	0	0	0						0	0
Spillback Cap Reductn		0	0	0	0						0	0
Storage Cap Reductn		0	0	0	0						0	0
Reduced v/c Ratio		1.01	0.29	1.03	0.42						1.02	0.53

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 87 (73%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 49.7

Intersection LOS: D

Intersection Capacity Utilization 91.0%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

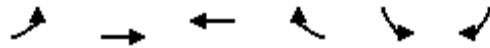
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-485 SB Ramp & Idlewild Road



Village at Idlewild
2: Idlewild Road & I-485 Southbound Off Ramp

2040 Full Build
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø4
Lane Configurations			↑↑			↗		
Traffic Volume (vph)	0	0	1042	0	0	160		
Future Volume (vph)	0	0	1042	0	0	160		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00		
Frt						0.865		
Flt Protected								
Satd. Flow (prot)	0	0	3539	0	0	1611		
Flt Permitted								
Satd. Flow (perm)	0	0	3539	0	0	1611		
Right Turn on Red				No		No		
Satd. Flow (RTOR)								
Link Speed (mph)		45	45		50			
Link Distance (ft)		378	88		984			
Travel Time (s)		5.7	1.3		13.4			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90		
Adj. Flow (vph)	0	0	1158	0	0	178		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	1158	0	0	178		
Turn Type			NA			Prot		
Protected Phases			8			6	2	4
Permitted Phases								
Detector Phase			8			6		
Switch Phase								
Minimum Initial (s)			12.0			7.0	12.0	7.0
Minimum Split (s)			19.0			14.0	19.0	14.0
Total Split (s)			54.0			66.0	66.0	54.0
Total Split (%)			45.0%			55.0%	55%	45%
Maximum Green (s)			47.0			59.0	59.0	47.0
Yellow Time (s)			5.0			5.0	5.0	5.0
All-Red Time (s)			2.0			2.0	2.0	2.0
Lost Time Adjust (s)			-2.0			-2.0		
Total Lost Time (s)			5.0			5.0		
Lead/Lag								
Lead-Lag Optimize?								
Vehicle Extension (s)			3.0			3.0	3.0	3.0
Recall Mode			None			C-Min	C-Min	None
Act Effect Green (s)			48.0			62.0		
Actuated g/C Ratio			0.40			0.52		
v/c Ratio			0.82			0.21		
Control Delay			4.8			16.9		
Queue Delay			0.0			0.0		
Total Delay			4.8			16.9		
LOS			A			B		
Approach Delay			4.8		16.9			
Approach LOS			A		B			
Queue Length 50th (ft)			12			74		
Queue Length 95th (ft)			13			118		
Internal Link Dist (ft)		298	8		904			

Village at Idlewild
2: Idlewild Road & I-485 Southbound Off Ramp

2040 Full Build
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø4
Turn Bay Length (ft)								
Base Capacity (vph)			1445			832		
Starvation Cap Reductn			0			0		
Spillback Cap Reductn			0			0		
Storage Cap Reductn			0			0		
Reduced v/c Ratio			0.80			0.21		

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 29 (24%), Referenced to phase 2:EBT and 6:, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 6.4

Intersection LOS: A

Intersection Capacity Utilization 74.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Idlewild Road & I-485 Southbound Off Ramp

#22 #222 Ø2 (R) 66 s	#222 Ø4 54 s
#2 Ø6 (R) 66 s	#2 #22 Ø8 54 s

Village at Idlewild
22: Idlewild Road

2040 Full Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑				
Traffic Volume (vph)	0	1336	0	0	0	0	0	1042	0	0	0	0
Future Volume (vph)	0	1336	0	0	0	0	0	1042	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Fr t												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	3539	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	3539	0	0	0	0
Right Turn on Red	No		No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		93			171			223			88	
Travel Time (s)		1.4			2.6			3.4			1.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1484	0	0	0	0	0	1158	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1484	0	0	0	0	0	1158	0	0	0	0
Turn Type		NA						NA				
Protected Phases		2						8				
Permitted Phases												
Detector Phase		2						8				
Switch Phase												
Minimum Initial (s)		12.0						12.0				
Minimum Split (s)		19.0						19.0				
Total Split (s)		66.0						54.0				
Total Split (%)		55.0%						45.0%				
Maximum Green (s)		59.0						47.0				
Yellow Time (s)		5.0						5.0				
All-Red Time (s)		2.0						2.0				
Lost Time Adjust (s)		-2.0						-2.0				
Total Lost Time (s)		5.0						5.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0						3.0				
Recall Mode		C-Min						None				
Act Effect Green (s)		62.0						48.0				
Actuated g/C Ratio		0.52						0.40				
v/c Ratio		0.81						0.82				
Control Delay		28.9						15.0				
Queue Delay		0.0						0.0				
Total Delay		28.9						15.0				
LOS		C						B				
Approach Delay		28.9						15.0				
Approach LOS		C						B				
Queue Length 50th (ft)		495						53				
Queue Length 95th (ft)		597						140				
Internal Link Dist (ft)		13			91			143			8	

Lane Group	Ø4	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	4	6
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	7.0	7.0
Minimum Split (s)	14.0	14.0
Total Split (s)	54.0	66.0
Total Split (%)	45%	55%
Maximum Green (s)	47.0	59.0
Yellow Time (s)	5.0	5.0
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	C-Min
Act Effect Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		

Village at Idlewild
22: Idlewild Road

2040 Full Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)	1829						1445					
Starvation Cap Reductn	0						0					
Spillback Cap Reductn	0						0					
Storage Cap Reductn	0						0					
Reduced v/c Ratio	0.81						0.80					

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 29 (24%), Referenced to phase 2:EBT and 6:, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 22.8

Intersection LOS: C

Intersection Capacity Utilization 74.1%

ICU Level of Service D

Analysis Period (min) 15

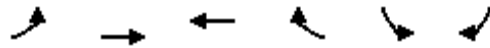
Splits and Phases: 22: Idlewild Road

#22 #222   Ø2 (R)	#222  Ø4
66 s	54 s
#2  Ø6 (R)	#2 #22   Ø8
66 s	54 s

Lane Group	Ø4	Ø6
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Village at Idlewild
222: Idlewild Road & I-485 Southbound Off Ramp

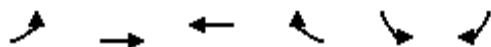
2040 Full Build
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations		↑↑			↑↑			
Traffic Volume (vph)	0	1336	0	0	634	0		
Future Volume (vph)	0	1336	0	0	634	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	0			0	500	0		
Storage Lanes	0			0	1	0		
Taper Length (ft)	100				100			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3433	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3433	0		
Right Turn on Red				No	No	No		
Satd. Flow (RTOR)								
Link Speed (mph)		45	45		50			
Link Distance (ft)		171	572		853			
Travel Time (s)		2.6	8.7		11.6			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90		
Adj. Flow (vph)	0	1484	0	0	704	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1484	0	0	704	0		
Turn Type		NA			Prot			
Protected Phases		2			4		6	8
Permitted Phases								
Detector Phase		2			4			
Switch Phase								
Minimum Initial (s)		12.0			7.0		7.0	12.0
Minimum Split (s)		19.0			14.0		14.0	19.0
Total Split (s)		66.0			54.0		66.0	54.0
Total Split (%)		55.0%			45.0%		55%	45%
Maximum Green (s)		59.0			47.0		59.0	47.0
Yellow Time (s)		5.0			5.0		5.0	5.0
All-Red Time (s)		2.0			2.0		2.0	2.0
Lost Time Adjust (s)		-2.0			-2.0			
Total Lost Time (s)		5.0			5.0			
Lead/Lag								
Lead-Lag Optimize?								
Vehicle Extension (s)		3.0			3.0		3.0	3.0
Recall Mode		C-Min			None		C-Min	None
Act Effct Green (s)		62.0			48.0			
Actuated g/C Ratio		0.52			0.40			
v/c Ratio		0.81			0.51			
Control Delay		3.6			28.6			
Queue Delay		0.0			0.0			
Total Delay		3.6			28.6			
LOS		A			C			
Approach Delay		3.6			28.6			
Approach LOS		A			C			

Village at Idlewild
222: Idlewild Road & I-485 Southbound Off Ramp

2040 Full Build
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Queue Length 50th (ft)		14			206			
Queue Length 95th (ft)		15			262			
Internal Link Dist (ft)		91	492		773			
Turn Bay Length (ft)					500			
Base Capacity (vph)		1829			1401			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			
Reduced v/c Ratio		0.81			0.50			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 29 (24%), Referenced to phase 2:EBT and 6:, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 11.6

Intersection LOS: B

Intersection Capacity Utilization 63.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 222: Idlewild Road & I-485 Southbound Off Ramp

#22 #222 Ø2 (R) 66 s	#222 Ø4 54 s
#2 Ø6 (R) 66 s	#2 #22 Ø8 54 s

APPENDIX H

IDLEWILD ROAD AND I-485 NORTHBOUND RAMPS

SYNCHRO REPORTS

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2019 Existing
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	235	402	0	0	1006	345	132	4	172	0	0	0
Future Volume (vph)	235	402	0	0	1006	345	132	4	172	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.954				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1777	2787	0	0	0
Flt Permitted	0.197							0.954				
Satd. Flow (perm)	367	3539	0	0	3539	1583	0	1777	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	261	447	0	0	1118	383	147	4	191	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	261	447	0	0	1118	383	0	151	191	0	0	0
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases	2					6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	13.0	18.0			18.0	18.0	13.0	13.0	13.0			
Total Split (s)	29.0	93.0			64.0	64.0	27.0	27.0	27.0			
Total Split (%)	24.2%	77.5%			53.3%	53.3%	22.5%	22.5%	22.5%			
Maximum Green (s)	23.6	87.3			58.3	58.3	21.7	21.7	21.7			
Yellow Time (s)	3.0	4.5			4.5	4.5	3.7	3.7	3.7			
All-Red Time (s)	2.4	1.2			1.2	1.2	1.6	1.6	1.6			
Lost Time Adjust (s)	-0.4	-0.7			-0.7	-0.7		-0.3	-0.3			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	96.1	96.1			80.2	80.2		13.9	13.9			
Actuated g/C Ratio	0.80	0.80			0.67	0.67		0.12	0.12			
v/c Ratio	0.62	0.16			0.47	0.36		0.74	0.59			
Control Delay	19.7	8.7			9.2	8.5		71.2	57.2			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	19.7	8.7			9.2	8.5		71.2	57.2			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2019 Existing
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	A			A	A		E	E			
Approach Delay		12.8			9.0			63.4				
Approach LOS		B			A			E				
Queue Length 50th (ft)	145	103			133	75		115	81			
Queue Length 95th (ft)	284	211			303	m176		178	117			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	574	2833			2366	1058		325	510			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.45	0.16			0.47	0.36		0.46	0.37			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 115 (96%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 17.4

Intersection LOS: B

Intersection Capacity Utilization 60.9%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	253	529	0	0	1199	411	142	4	235	0	0	0
Future Volume (vph)	253	529	0	0	1199	411	142	4	235	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.954				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1777	2787	0	0	0
Flt Permitted	0.950							0.954				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1777	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	281	588	0	0	1332	457	158	4	261	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	281	588	0	0	1332	457	0	162	261	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	34.0	96.0			62.0	62.0	24.0	24.0	24.0			
Total Split (%)	28.3%	80.0%			51.7%	51.7%	20.0%	20.0%	20.0%			
Maximum Green (s)	27.0	89.0			55.0	55.0	17.0	17.0	17.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	23.8	93.8			65.0	65.0		16.2	16.2			
Actuated g/C Ratio	0.20	0.78			0.54	0.54		0.14	0.14			
v/c Ratio	0.80	0.21			0.69	0.53		0.68	0.70			
Control Delay	46.9	0.5			19.5	17.6		63.6	59.4			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	46.9	0.5			19.5	17.6		63.6	59.4			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			B	B		E	E			
Approach Delay		15.5			19.0			61.0				
Approach LOS		B			B			E				
Queue Length 50th (ft)	69	0			360	202		121	110			
Queue Length 95th (ft)	m135	m0			m384	m220		191	157			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	427	2766			1918	857		281	441			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.66	0.21			0.69	0.53		0.58	0.59			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 11 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 23.8

Intersection LOS: C

Intersection Capacity Utilization 67.9%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (without Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				  			
Traffic Volume (vph)	253	559	0	0	1231	423	142	4	252	0	0	0
Future Volume (vph)	253	559	0	0	1231	423	142	4	252	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.954				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1777	2787	0	0	0
Flt Permitted	0.950							0.954				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1777	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	281	621	0	0	1368	470	158	4	280	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	281	621	0	0	1368	470	0	162	280	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	33.0	97.0			64.0	64.0	23.0	23.0	23.0			
Total Split (%)	27.5%	80.8%			53.3%	53.3%	19.2%	19.2%	19.2%			
Maximum Green (s)	26.0	90.0			57.0	57.0	16.0	16.0	16.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	23.6	93.8			65.2	65.2		16.2	16.2			
Actuated g/C Ratio	0.20	0.78			0.54	0.54		0.14	0.14			
v/c Ratio	0.81	0.22			0.71	0.55		0.68	0.74			
Control Delay	44.3	1.5			10.5	9.4		63.6	62.3			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	44.3	1.5			10.5	9.4		63.6	62.3			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (without Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			B	A		E	E			
Approach Delay		14.8			10.2			62.7				
Approach LOS		B			B			E				
Queue Length 50th (ft)	134	0			132	68		120	118			
Queue Length 95th (ft)	m163	m0			m115	m66		193	171			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	413	2765			1922	859		266	418			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.68	0.22			0.71	0.55		0.61	0.67			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 26 (22%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 18.8

Intersection LOS: B

Intersection Capacity Utilization 70.0%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village

2022 Build Phase 1 (without Gas Station) with Improvements

3: Idlewild Road & I-485 NB Ramp

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	253	559	0	0	1231	423	142	4	252	0	0	0
Future Volume (vph)	253	559	0	0	1231	423	142	4	252	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		300	325		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.954				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1777	2787	0	0	0
Flt Permitted	0.950							0.954				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1777	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	281	621	0	0	1368	470	158	4	280	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	281	621	0	0	1368	470	0	162	280	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	33.0	97.0			64.0	64.0	23.0	23.0	23.0			
Total Split (%)	27.5%	80.8%			53.3%	53.3%	19.2%	19.2%	19.2%			
Maximum Green (s)	26.0	90.0			57.0	57.0	16.0	16.0	16.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effect Green (s)	23.6	93.8			65.2	65.2		16.2	16.2			
Actuated g/C Ratio	0.20	0.78			0.54	0.54		0.14	0.14			
v/c Ratio	0.81	0.22			0.71	0.55		0.68	0.74			
Control Delay	41.6	2.9			13.2	11.5		63.6	62.3			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	41.6	2.9			13.2	11.5		63.6	62.3			

Stinson Village 2022 Build Phase 1 (without Gas Station) with Improvements
 3: Idlewild Road & I-485 NB Ramp Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			B	B		E	E			
Approach Delay		15.0			12.8			62.7				
Approach LOS		B			B			E				
Queue Length 50th (ft)	166	55			143	68		120	118			
Queue Length 95th (ft)	m214	m86			303	m166		193	171			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					300			850			
Base Capacity (vph)	413	2765			1922	859		266	418			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.68	0.22			0.71	0.55		0.61	0.67			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 26 (22%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 20.3

Intersection LOS: C

Intersection Capacity Utilization 70.0%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (with Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	253	632	0	0	1315	454	142	4	294	0	0	0
Future Volume (vph)	253	632	0	0	1315	454	142	4	294	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.954				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1777	2787	0	0	0
Flt Permitted	0.950							0.954				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1777	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	281	702	0	0	1461	504	158	4	327	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	281	702	0	0	1461	504	0	162	327	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	33.0	97.0			64.0	64.0	23.0	23.0	23.0			
Total Split (%)	27.5%	80.8%			53.3%	53.3%	19.2%	19.2%	19.2%			
Maximum Green (s)	26.0	90.0			57.0	57.0	16.0	16.0	16.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	23.6	92.8			64.2	64.2		17.2	17.2			
Actuated g/C Ratio	0.20	0.77			0.54	0.54		0.14	0.14			
v/c Ratio	0.81	0.26			0.77	0.60		0.64	0.82			
Control Delay	43.1	0.1			12.2	10.5		60.4	67.0			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	43.1	0.1			12.2	10.5		60.4	67.0			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (with Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			B	B		E	E			
Approach Delay		12.4			11.8			64.8				
Approach LOS		B			B			E				
Queue Length 50th (ft)	68	0			214	99		119	140			
Queue Length 95th (ft)	m80	m0			m128	m76		193	#212			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	413	2737			1894	847		266	418			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.68	0.26			0.77	0.60		0.61	0.78			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 26 (22%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 19.5

Intersection LOS: B

Intersection Capacity Utilization 75.2%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (with Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	253	632	0	0	1315	454	142	4	294	0	0	0
Future Volume (vph)	253	632	0	0	1315	454	142	4	294	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		300	325		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.954				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1777	2787	0	0	0
Flt Permitted	0.950							0.954				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1777	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	281	702	0	0	1461	504	158	4	327	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	281	702	0	0	1461	504	0	162	327	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	31.0	96.0			65.0	65.0	24.0	24.0	24.0			
Total Split (%)	25.8%	80.0%			54.2%	54.2%	20.0%	20.0%	20.0%			
Maximum Green (s)	24.0	89.0			58.0	58.0	17.0	17.0	17.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effect Green (s)	23.0	92.3			64.3	64.3		17.7	17.7			
Actuated g/C Ratio	0.19	0.77			0.54	0.54		0.15	0.15			
v/c Ratio	0.83	0.26			0.77	0.60		0.62	0.80			
Control Delay	45.7	0.3			11.9	10.6		58.6	64.1			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	45.7	0.3			11.9	10.6		58.6	64.1			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (with Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			B	B		E	E			
Approach Delay		13.3			11.6			62.3				
Approach LOS		B			B			E				
Queue Length 50th (ft)	85	0			184	84		118	138			
Queue Length 95th (ft)	m106	m0			m235	m107		191	196			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					300			850			
Base Capacity (vph)	383	2721			1895	847		281	441			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.73	0.26			0.77	0.60		0.58	0.74			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 27 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 19.3

Intersection LOS: B

Intersection Capacity Utilization 75.2%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	259	540	0	0	1226	420	146	4	240	0	0	0
Future Volume (vph)	259	540	0	0	1226	420	146	4	240	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	288	600	0	0	1362	467	162	4	267	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	288	600	0	0	1362	467	0	166	267	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	34.0	96.0			62.0	62.0	24.0	24.0	24.0			
Total Split (%)	28.3%	80.0%			51.7%	51.7%	20.0%	20.0%	20.0%			
Maximum Green (s)	27.0	89.0			55.0	55.0	17.0	17.0	17.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	24.2	93.6			64.5	64.5		16.4	16.4			
Actuated g/C Ratio	0.20	0.78			0.54	0.54		0.14	0.14			
v/c Ratio	0.81	0.22			0.72	0.55		0.69	0.70			
Control Delay	45.4	0.5			19.8	17.8		64.0	59.7			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	45.4	0.5			19.8	17.8		64.0	59.7			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			B	B		E	E			
Approach Delay		15.1			19.3			61.3				
Approach LOS		B			B			E				
Queue Length 50th (ft)	80	0			381	212		124	113			
Queue Length 95th (ft)	m139	m0			m385	m221		196	161			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	427	2761			1901	850		281	441			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.67	0.22			0.72	0.55		0.59	0.61			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 12 (10%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 23.9

Intersection LOS: C

Intersection Capacity Utilization 69.1%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (without Gas Station)

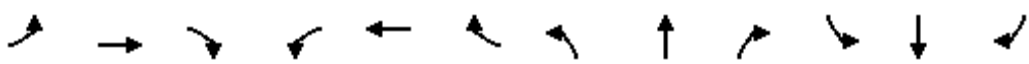
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	259	665	0	0	1403	486	146	4	311	0	0	0
Future Volume (vph)	259	665	0	0	1403	486	146	4	311	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	288	739	0	0	1559	540	162	4	346	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	288	739	0	0	1559	540	0	166	346	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	33.0	97.0			64.0	64.0	23.0	23.0	23.0			
Total Split (%)	27.5%	80.8%			53.3%	53.3%	19.2%	19.2%	19.2%			
Maximum Green (s)	26.0	90.0			57.0	57.0	16.0	16.0	16.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	23.9	92.5			63.6	63.6		17.5	17.5			
Actuated g/C Ratio	0.20	0.77			0.53	0.53		0.15	0.15			
v/c Ratio	0.82	0.27			0.83	0.64		0.64	0.85			
Control Delay	39.6	0.4			13.6	11.2		60.5	70.1			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	39.6	0.4			13.6	11.2		60.5	70.1			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (without Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			B	B		E	E			
Approach Delay		11.4			13.0			67.0				
Approach LOS		B			B			E				
Queue Length 50th (ft)	93	0			295	133		122	150			
Queue Length 95th (ft)	m97	m0			m144	m86		198	#232			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	413	2729			1876	839		266	418			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.70	0.27			0.83	0.64		0.62	0.83			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 26 (22%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 20.2

Intersection LOS: C

Intersection Capacity Utilization 79.0%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (without Gas Station) with Improvements

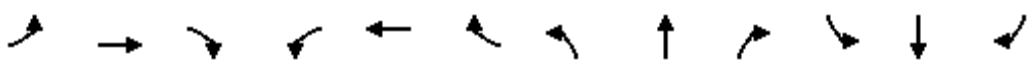
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	259	665	0	0	1403	486	146	4	311	0	0	0
Future Volume (vph)	259	665	0	0	1403	486	146	4	311	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		300	325		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	288	739	0	0	1559	540	162	4	346	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	288	739	0	0	1559	540	0	166	346	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	30.0	96.0			66.0	66.0	24.0	24.0	24.0			
Total Split (%)	25.0%	80.0%			55.0%	55.0%	20.0%	20.0%	20.0%			
Maximum Green (s)	23.0	89.0			59.0	59.0	17.0	17.0	17.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effect Green (s)	23.0	91.9			63.9	63.9		18.1	18.1			
Actuated g/C Ratio	0.19	0.77			0.53	0.53		0.15	0.15			
v/c Ratio	0.85	0.27			0.83	0.64		0.62	0.82			
Control Delay	43.4	0.5			12.9	10.8		58.4	66.2			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	43.4	0.5			12.9	10.8		58.4	66.2			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (without Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			B	B		E	E			
Approach Delay		12.5			12.4			63.7				
Approach LOS		B			B			E				
Queue Length 50th (ft)	106	0			286	124		121	148			
Queue Length 95th (ft)	m167	0			m305	m142		196	#222			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					300			850			
Base Capacity (vph)	368	2710			1885	843		281	441			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.78	0.27			0.83	0.64		0.59	0.78			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 24 (20%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 19.7

Intersection LOS: B

Intersection Capacity Utilization 79.0%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (with Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	259	738	0	0	1485	518	146	4	353	0	0	0
Future Volume (vph)	259	738	0	0	1485	518	146	4	353	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	288	820	0	0	1650	576	162	4	392	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	288	820	0	0	1650	576	0	166	392	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	33.0	97.0			64.0	64.0	23.0	23.0	23.0			
Total Split (%)	27.5%	80.8%			53.3%	53.3%	19.2%	19.2%	19.2%			
Maximum Green (s)	26.0	90.0			57.0	57.0	16.0	16.0	16.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	23.9	92.0			63.1	63.1		18.0	18.0			
Actuated g/C Ratio	0.20	0.77			0.53	0.53		0.15	0.15			
v/c Ratio	0.82	0.30			0.89	0.69		0.62	0.94			
Control Delay	33.9	1.8			15.2	12.2		59.1	81.7			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	33.9	1.8			15.2	12.2		59.1	81.7			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (with Gas Station)
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	A			B	B		E	F			
Approach Delay		10.1			14.4			75.0				
Approach LOS		B			B			E				
Queue Length 50th (ft)	130	0			386	172		122	172			
Queue Length 95th (ft)	m121	m0			m161	m98		198	#278			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	413	2713			1861	832		266	418			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.70	0.30			0.89	0.69		0.62	0.94			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 26 (22%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 21.9

Intersection LOS: C

Intersection Capacity Utilization 84.1%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

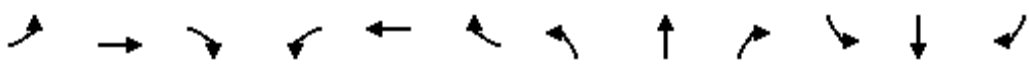
Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (with Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	259	738	0	0	1485	518	146	4	353	0	0	0
Future Volume (vph)	259	738	0	0	1485	518	146	4	353	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		300	325		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	288	820	0	0	1650	576	162	4	392	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	288	820	0	0	1650	576	0	166	392	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	29.0	95.0			66.0	66.0	25.0	25.0	25.0			
Total Split (%)	24.2%	79.2%			55.0%	55.0%	20.8%	20.8%	20.8%			
Maximum Green (s)	22.0	88.0			59.0	59.0	18.0	18.0	18.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effect Green (s)	22.5	90.6			63.1	63.1		19.4	19.4			
Actuated g/C Ratio	0.19	0.76			0.53	0.53		0.16	0.16			
v/c Ratio	0.87	0.31			0.89	0.69		0.58	0.87			
Control Delay	43.2	1.1			16.2	12.5		55.2	69.4			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	43.2	1.1			16.2	12.5		55.2	69.4			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (with Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			B	B		E	E			
Approach Delay		12.1			15.2			65.2				
Approach LOS		B			B			E				
Queue Length 50th (ft)	133	0			343	141		120	169			
Queue Length 95th (ft)	m158	m0			m403	m176		193	#257			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					300			850			
Base Capacity (vph)	354	2672			1861	832		295	464			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.81	0.31			0.89	0.69		0.56	0.84			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 20 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 21.5

Intersection LOS: C

Intersection Capacity Utilization 84.1%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

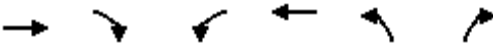
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Village at Idlewild
3: I-485 Northbound Off ramp

2040 Full Build
Timing Plan: AM Peak Hour

								
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4
Lane Configurations				↑↑↑	↑			
Traffic Volume (vph)	0	0	0	2155	145	0		
Future Volume (vph)	0	0	0	2155	145	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	0		500	0		
Storage Lanes		0	0		0	0		
Taper Length (ft)			100		100			
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	0	0	5085	1770	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	0	0	5085	1770	0		
Right Turn on Red		No			No	No		
Satd. Flow (RTOR)								
Link Speed (mph)	45			45	50			
Link Distance (ft)	484			219	539			
Travel Time (s)	7.3			3.3	7.4			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90		
Adj. Flow (vph)	0	0	0	2394	161	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	0	2394	161	0		
Turn Type				NA	Prot			
Protected Phases				6	8		2	4
Permitted Phases								
Detector Phase				6	8			
Switch Phase								
Minimum Initial (s)				12.0	7.0		7.0	12.0
Minimum Split (s)				19.0	14.0		14.0	19.0
Total Split (s)				69.0	51.0		69.0	51.0
Total Split (%)				57.5%	42.5%		58%	43%
Maximum Green (s)				62.0	44.0		62.0	44.0
Yellow Time (s)				5.0	5.0		5.0	5.0
All-Red Time (s)				2.0	2.0		2.0	2.0
Lost Time Adjust (s)				-2.0	-2.0			
Total Lost Time (s)				5.0	5.0			
Lead/Lag								
Lead-Lag Optimize?								
Vehicle Extension (s)				3.0	3.0		3.0	3.0
Recall Mode				C-Min	None		C-Min	None
Act Effect Green (s)				64.0	46.0			
Actuated g/C Ratio				0.53	0.38			
v/c Ratio				0.88	0.24			
Control Delay				3.7	26.3			
Queue Delay				0.0	0.0			
Total Delay				3.7	26.3			
LOS				A	C			
Approach Delay				3.7	26.3			
Approach LOS				A	C			

Village at Idlewild
3: I-485 Northbound Off ramp

2040 Full Build
Timing Plan: AM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4
Queue Length 50th (ft)				17	84			
Queue Length 95th (ft)				39	136			
Internal Link Dist (ft)	404			139	459			
Turn Bay Length (ft)					500			
Base Capacity (vph)				2712	678			
Starvation Cap Reductn				0	0			
Spillback Cap Reductn				0	0			
Storage Cap Reductn				0	0			
Reduced v/c Ratio				0.88	0.24			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 62 (52%), Referenced to phase 2:NBR and 6:, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 5.1

Intersection LOS: A

Intersection Capacity Utilization 58.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: I-485 Northbound Off ramp

#333 Ø2 (R) 69 s	#33 #333 Ø4 51 s
#3 #33 Ø6 (R) 69 s	#3 Ø8 51 s

Village at Idlewild
33: Idlewild Road

2040 Full Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑						↑↑↑	
Traffic Volume (vph)	0	0	0	0	2155	0	0	0	0	0	1560	0
Future Volume (vph)	0	0	0	0	2155	0	0	0	0	0	1560	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frnt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			No	No		No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		219			108			112			188	
Travel Time (s)		3.3			1.6			1.7			2.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	2394	0	0	0	0	0	1733	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2394	0	0	0	0	0	1733	0
Turn Type					NA						NA	
Protected Phases					6						4	
Permitted Phases												
Detector Phase					6						4	
Switch Phase												
Minimum Initial (s)					12.0						12.0	
Minimum Split (s)					19.0						19.0	
Total Split (s)					69.0						51.0	
Total Split (%)					57.5%						42.5%	
Maximum Green (s)					62.0						44.0	
Yellow Time (s)					5.0						5.0	
All-Red Time (s)					2.0						2.0	
Lost Time Adjust (s)					-2.0						-2.0	
Total Lost Time (s)					5.0						5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					3.0						3.0	
Recall Mode					C-Min						None	
Act Effect Green (s)					64.0						46.0	
Actuated g/C Ratio					0.53						0.38	
v/c Ratio					0.88						0.89	
Control Delay					15.2						35.0	
Queue Delay					0.0						0.0	
Total Delay					15.2						35.1	
LOS					B						D	
Approach Delay					15.2						35.1	
Approach LOS					B						D	
Queue Length 50th (ft)					417						282	
Queue Length 95th (ft)					496						453	
Internal Link Dist (ft)		139			28			32			108	

Lane Group	Ø2	Ø8
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	8
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	7.0	7.0
Minimum Split (s)	14.0	14.0
Total Split (s)	69.0	51.0
Total Split (%)	58%	43%
Maximum Green (s)	62.0	44.0
Yellow Time (s)	5.0	5.0
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	C-Min	None
Act Effect Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		

Village at Idlewild
33: Idlewild Road

2040 Full Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)	2712						1949					
Starvation Cap Reductn	0						0					
Spillback Cap Reductn	0						1					
Storage Cap Reductn	0						0					
Reduced v/c Ratio	0.88						0.89					

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 62 (52%), Referenced to phase 2:NBR and 6:, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 23.5

Intersection LOS: C

Intersection Capacity Utilization 80.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 33: Idlewild Road

#333  Ø2 (R)				#33 #333  Ø4			
69 s				51 s			
#3 #33  Ø6 (R)				#3  Ø8			
69 s				51 s			

Lane Group	Ø2	Ø8
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Village at Idlewild
333: I-485 Northbound Off Ramp & Idlewild Road

2040 Full Build
Timing Plan: AM Peak Hour

							Ø6	Ø8
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑					↓↓↓		
Traffic Volume (vph)	1560	0	0	0	0	806		
Future Volume (vph)	1560	0	0	0	0	806		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.91	1.00	1.00	1.00	1.00	0.76		
Frt						0.850		
Flt Protected								
Satd. Flow (prot)	5085	0	0	0	0	3610		
Flt Permitted								
Satd. Flow (perm)	5085	0	0	0	0	3610		
Right Turn on Red		No				No		
Satd. Flow (RTOR)								
Link Speed (mph)	45			45	50			
Link Distance (ft)	112			150	434			
Travel Time (s)	1.7			2.3	5.9			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90		
Adj. Flow (vph)	1733	0	0	0	0	896		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	1733	0	0	0	0	896		
Turn Type	NA					Prot		
Protected Phases	4					2	6	8
Permitted Phases								
Detector Phase	4					2		
Switch Phase								
Minimum Initial (s)	12.0					7.0	12.0	7.0
Minimum Split (s)	19.0					14.0	19.0	14.0
Total Split (s)	51.0					69.0	69.0	51.0
Total Split (%)	42.5%					57.5%	58%	43%
Maximum Green (s)	44.0					62.0	62.0	44.0
Yellow Time (s)	5.0					5.0	5.0	5.0
All-Red Time (s)	2.0					2.0	2.0	2.0
Lost Time Adjust (s)	-2.0					-2.0		
Total Lost Time (s)	5.0					5.0		
Lead/Lag								
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0					3.0	3.0	3.0
Recall Mode	None					C-Min	C-Min	None
Act Effct Green (s)	46.0					64.0		
Actuated g/C Ratio	0.38					0.53		
v/c Ratio	0.89					0.47		
Control Delay	5.4					18.4		
Queue Delay	0.3					0.0		
Total Delay	5.8					18.4		
LOS	A					B		
Approach Delay	5.8				18.4			
Approach LOS	A				B			
Queue Length 50th (ft)	13					181		
Queue Length 95th (ft)	21					225		
Internal Link Dist (ft)	32			70	354			

Village at Idlewild
333: I-485 Northbound Off Ramp & Idlewild Road

2040 Full Build
Timing Plan: AM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø8
Turn Bay Length (ft)								
Base Capacity (vph)	1949				1925			
Starvation Cap Reductn	0				0			
Spillback Cap Reductn	28				0			
Storage Cap Reductn	0				0			
Reduced v/c Ratio	0.90				0.47			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 62 (52%), Referenced to phase 2:NBR and 6:, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 10.1

Intersection LOS: B

Intersection Capacity Utilization 80.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 333: I-485 Northbound Off Ramp & Idlewild Road

#333 Ø2 (R) 69 s		#33 #333 Ø4 51 s	
#3 #33 Ø6 (R) 69 s		#3 Ø8 51 s	

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2019 Existing
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	244	889	0	0	666	289	269	4	492	0	0	0
Future Volume (vph)	244	889	0	0	666	289	269	4	492	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.293							0.953				
Satd. Flow (perm)	546	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	271	988	0	0	740	321	299	4	547	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	271	988	0	0	740	321	0	303	547	0	0	0
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases	2					6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	13.0	18.0			18.0	18.0	13.0	13.0	13.0			
Total Split (s)	27.0	78.0			51.0	51.0	42.0	42.0	42.0			
Total Split (%)	22.5%	65.0%			42.5%	42.5%	35.0%	35.0%	35.0%			
Maximum Green (s)	21.6	72.3			45.3	45.3	36.7	36.7	36.7			
Yellow Time (s)	3.0	4.5			4.5	4.5	3.7	3.7	3.7			
All-Red Time (s)	2.4	1.2			1.2	1.2	1.6	1.6	1.6			
Lost Time Adjust (s)	-0.4	-0.7			-0.7	-0.7		-0.3	-0.3			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	82.3	82.3			66.0	66.0		27.7	27.7			
Actuated g/C Ratio	0.69	0.69			0.55	0.55		0.23	0.23			
v/c Ratio	0.55	0.41			0.38	0.37		0.74	0.85			
Control Delay	20.2	9.3			18.2	19.2		53.6	56.9			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	20.2	9.3			18.2	19.2		53.6	56.9			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2019 Existing
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	A			B	B		D	E			
Approach Delay		11.6			18.5			55.7				
Approach LOS		B			B			E				
Queue Length 50th (ft)	64	141			178	146		219	231			
Queue Length 95th (ft)	205	226			m237	m221		296	281			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	598	2426			1947	871		547	859			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.45	0.41			0.38	0.37		0.55	0.64			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 25.7

Intersection LOS: C

Intersection Capacity Utilization 66.6%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 No-Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	263	1059	0	0	813	344	290	4	581	0	0	0
Future Volume (vph)	263	1059	0	0	813	344	290	4	581	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	292	1177	0	0	903	382	322	4	646	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	292	1177	0	0	903	382	0	326	646	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	33.0	79.0			46.0	46.0	41.0	41.0	41.0			
Total Split (%)	27.5%	65.8%			38.3%	38.3%	34.2%	34.2%	34.2%			
Maximum Green (s)	26.0	72.0			39.0	39.0	34.0	34.0	34.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	24.1	77.7			48.6	48.6		32.3	32.3			
Actuated g/C Ratio	0.20	0.65			0.40	0.40		0.27	0.27			
v/c Ratio	0.82	0.51			0.63	0.60		0.68	0.86			
Control Delay	42.2	10.0			27.1	28.5		46.7	54.0			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	42.2	10.0			27.1	28.5		46.7	54.0			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 No-Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			C	C		D	D			
Approach Delay		16.4			27.5			51.5				
Approach LOS		B			C			D				
Queue Length 50th (ft)	184	377			290	227		224	267			
Queue Length 95th (ft)	m253	440			m385	m314		317	338			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	413	2291			1434	641		532	836			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.71	0.51			0.63	0.60		0.61	0.77			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 30 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 29.4

Intersection LOS: C

Intersection Capacity Utilization 77.1%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (without Gas Station)

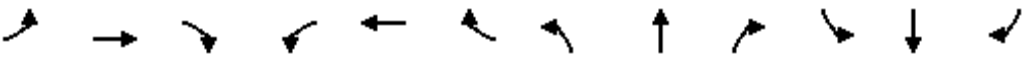
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	263	1083	0	0	837	353	290	4	595	0	0	0
Future Volume (vph)	263	1083	0	0	837	353	290	4	595	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	292	1203	0	0	930	392	322	4	661	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	292	1203	0	0	930	392	0	326	661	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	33.0	97.0			64.0	64.0	23.0	23.0	23.0			
Total Split (%)	27.5%	80.8%			53.3%	53.3%	19.2%	19.2%	19.2%			
Maximum Green (s)	26.0	90.0			57.0	57.0	16.0	16.0	16.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	24.1	78.1			49.0	49.0		31.9	31.9			
Actuated g/C Ratio	0.20	0.65			0.41	0.41		0.27	0.27			
v/c Ratio	0.82	0.52			0.64	0.61		0.69	0.89			
Control Delay	40.7	8.0			20.1	19.8		50.5	59.1			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	40.7	8.0			20.1	19.8		50.5	59.1			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (without Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			C	B		D	E			
Approach Delay		14.4			20.0			56.3				
Approach LOS		B			B			E				
Queue Length 50th (ft)	160	296			221	171		229	281			
Queue Length 95th (ft)	m204	295			m183	m147		#462	#515			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	413	2713			1740	778		472	741			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.71	0.44			0.53	0.50		0.69	0.89			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 31 (26%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 27.2

Intersection LOS: C

Intersection Capacity Utilization 78.7%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village

2022 Build Phase 1 (without Gas Station) with Improvements

3: Idlewild Road & I-485 NB Ramp

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	263	1083	0	0	837	353	290	4	595	0	0	0
Future Volume (vph)	263	1083	0	0	837	353	290	4	595	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		300	325		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	292	1203	0	0	930	392	322	4	661	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	292	1203	0	0	930	392	0	326	661	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	33.0	79.0			46.0	46.0	41.0	41.0	41.0			
Total Split (%)	27.5%	65.8%			38.3%	38.3%	34.2%	34.2%	34.2%			
Maximum Green (s)	26.0	72.0			39.0	39.0	34.0	34.0	34.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effect Green (s)	24.1	77.3			48.2	48.2		32.7	32.7			
Actuated g/C Ratio	0.20	0.64			0.40	0.40		0.27	0.27			
v/c Ratio	0.82	0.53			0.65	0.62		0.67	0.87			
Control Delay	41.5	5.5			19.1	20.7		46.1	54.5			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	41.5	5.5			19.1	20.7		46.1	54.5			

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			B	C		D	D			
Approach Delay		12.5			19.6			51.8				
Approach LOS		B			B			D				
Queue Length 50th (ft)	155	242			128	94		222	273			
Queue Length 95th (ft)	m204	346			286	280		317	347			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					300			850			
Base Capacity (vph)	413	2279			1422	636		532	836			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.71	0.53			0.65	0.62		0.61	0.79			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 23 (19%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 25.2

Intersection LOS: C

Intersection Capacity Utilization 78.7%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (with Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	263	1137	0	0	900	376	290	4	626	0	0	0
Future Volume (vph)	263	1137	0	0	900	376	290	4	626	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	292	1263	0	0	1000	418	322	4	696	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	292	1263	0	0	1000	418	0	326	696	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	33.0	97.0			64.0	64.0	23.0	23.0	23.0			
Total Split (%)	27.5%	80.8%			53.3%	53.3%	19.2%	19.2%	19.2%			
Maximum Green (s)	26.0	90.0			57.0	57.0	16.0	16.0	16.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	24.1	80.7			51.6	51.6		29.3	29.3			
Actuated g/C Ratio	0.20	0.67			0.43	0.43		0.24	0.24			
v/c Ratio	0.82	0.53			0.66	0.61		0.75	1.02			
Control Delay	32.9	8.4			20.2	19.8		56.0	85.5			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	32.9	8.4			20.2	19.8		56.0	85.5			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (with Gas Station)

Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	A			C	B		E	F			
Approach Delay		13.0			20.1			76.1				
Approach LOS		B			C			E				
Queue Length 50th (ft)	140	410			235	180		236	~330			
Queue Length 95th (ft)	m66	m108			m167	m131		#492	#576			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	413	2713			1740	778		433	681			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.71	0.47			0.57	0.54		0.75	1.02			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 31.7

Intersection LOS: C

Intersection Capacity Utilization 82.6%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

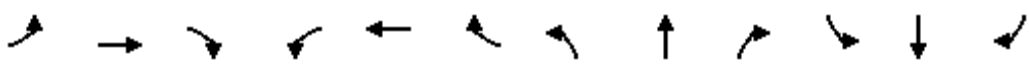
Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (with Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	263	1137	0	0	900	376	290	4	626	0	0	0
Future Volume (vph)	263	1137	0	0	900	376	290	4	626	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		300	325		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	292	1263	0	0	1000	418	322	4	696	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	292	1263	0	0	1000	418	0	326	696	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	31.0	79.0			48.0	48.0	41.0	41.0	41.0			
Total Split (%)	25.8%	65.8%			40.0%	40.0%	34.2%	34.2%	34.2%			
Maximum Green (s)	24.0	72.0			41.0	41.0	34.0	34.0	34.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effect Green (s)	23.5	76.3			47.8	47.8		33.7	33.7			
Actuated g/C Ratio	0.20	0.64			0.40	0.40		0.28	0.28			
v/c Ratio	0.84	0.56			0.71	0.66		0.65	0.89			
Control Delay	44.3	4.9			20.2	22.1		44.6	55.7			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	44.3	4.9			20.2	22.1		44.6	55.7			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2022 Build Phase 1 (with Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			C	C		D	E			
Approach Delay		12.3			20.8			52.1				
Approach LOS		B			C			D				
Queue Length 50th (ft)	156	292			144	105		217	286			
Queue Length 95th (ft)	m202	m355			317	m242		317	#373			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					300			850			
Base Capacity (vph)	383	2249			1408	630		532	836			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.76	0.56			0.71	0.66		0.61	0.83			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 23 (19%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 25.5

Intersection LOS: C

Intersection Capacity Utilization 82.6%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 No-Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	269	1083	0	0	831	352	297	4	594	0	0	0
Future Volume (vph)	269	1083	0	0	831	352	297	4	594	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	299	1203	0	0	923	391	330	4	660	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	299	1203	0	0	923	391	0	334	660	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	34.0	96.0			62.0	62.0	24.0	24.0	24.0			
Total Split (%)	28.3%	80.0%			51.7%	51.7%	20.0%	20.0%	20.0%			
Maximum Green (s)	27.0	89.0			55.0	55.0	17.0	17.0	17.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	24.7	78.5			48.8	48.8		31.5	31.5			
Actuated g/C Ratio	0.21	0.65			0.41	0.41		0.26	0.26			
v/c Ratio	0.82	0.52			0.64	0.61		0.72	0.90			
Control Delay	36.6	10.8			28.6	28.8		52.1	60.7			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	36.6	10.8			28.6	28.8		52.1	60.7			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 No-Build
Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	B			C	C		D	E			
Approach Delay		16.0			28.7			57.8				
Approach LOS		B			C			E				
Queue Length 50th (ft)	177	395			332	262		236	282			
Queue Length 95th (ft)	m90	m409			m293	m259		#482	#518			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	427	2683			1681	751		465	731			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.70	0.45			0.55	0.52		0.72	0.90			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 6 (5%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 31.3

Intersection LOS: C

Intersection Capacity Utilization 78.5%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (without Gas Station)

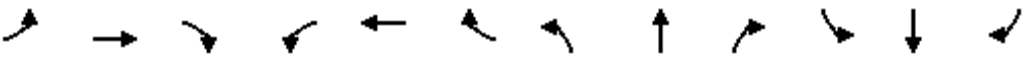
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	269	1209	0	0	946	395	297	4	666	0	0	0
Future Volume (vph)	269	1209	0	0	946	395	297	4	666	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	299	1343	0	0	1051	439	330	4	740	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	299	1343	0	0	1051	439	0	334	740	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	33.0	97.0			64.0	64.0	23.0	23.0	23.0			
Total Split (%)	27.5%	80.8%			53.3%	53.3%	19.2%	19.2%	19.2%			
Maximum Green (s)	26.0	90.0			57.0	57.0	16.0	16.0	16.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	24.4	82.6			53.2	53.2		27.4	27.4			
Actuated g/C Ratio	0.20	0.69			0.44	0.44		0.23	0.23			
v/c Ratio	0.83	0.55			0.67	0.63		0.82	1.16			
Control Delay	40.6	5.1			19.6	19.3		63.4	131.7			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	40.6	5.1			19.6	19.3		63.4	131.7			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (without Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			B	B		E	F			
Approach Delay		11.5			19.5			110.5				
Approach LOS		B			B			F				
Queue Length 50th (ft)	169	206			251	190		250	~394			
Queue Length 95th (ft)	m174	m213			m168	m131		#509	#621			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	413	2713			1740	778		405	636			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.72	0.50			0.60	0.56		0.82	1.16			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 27 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 39.6

Intersection LOS: D

Intersection Capacity Utilization 86.7%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (without Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	269	1209	0	0	946	395	297	4	666	0	0	0
Future Volume (vph)	269	1209	0	0	946	395	297	4	666	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		300	325		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	299	1343	0	0	1051	439	330	4	740	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	299	1343	0	0	1051	439	0	334	740	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	30.0	78.0			48.0	48.0	42.0	42.0	42.0			
Total Split (%)	25.0%	65.0%			40.0%	40.0%	35.0%	35.0%	35.0%			
Maximum Green (s)	23.0	71.0			41.0	41.0	35.0	35.0	35.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effect Green (s)	23.3	74.8			46.5	46.5		35.2	35.2			
Actuated g/C Ratio	0.19	0.62			0.39	0.39		0.29	0.29			
v/c Ratio	0.87	0.61			0.77	0.72		0.64	0.91			
Control Delay	45.1	7.1			25.0	26.9		43.0	56.4			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	45.1	7.1			25.0	26.9		43.0	56.4			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (without Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			C	C		D	E			
Approach Delay		14.0			25.6			52.3				
Approach LOS		B			C			D				
Queue Length 50th (ft)	175	422			224	164		220	306			
Queue Length 95th (ft)	m198	m455			m322	m244		322	#418			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					300			850			
Base Capacity (vph)	368	2206			1372	613		547	859			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.81	0.61			0.77	0.72		0.61	0.86			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 14 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 27.9

Intersection LOS: C

Intersection Capacity Utilization 86.7%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (with Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 				 			
Traffic Volume (vph)	269	1270	0	0	1015	421	297	4	700	0	0	0
Future Volume (vph)	269	1270	0	0	1015	421	297	4	700	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		125	200		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	299	1411	0	0	1128	468	330	4	778	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	299	1411	0	0	1128	468	0	334	778	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	33.0	97.0			64.0	64.0	23.0	23.0	23.0			
Total Split (%)	27.5%	80.8%			53.3%	53.3%	19.2%	19.2%	19.2%			
Maximum Green (s)	26.0	90.0			57.0	57.0	16.0	16.0	16.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effct Green (s)	24.4	84.6			55.2	55.2		25.4	25.4			
Actuated g/C Ratio	0.20	0.70			0.46	0.46		0.21	0.21			
v/c Ratio	0.83	0.57			0.69	0.64		0.89	1.32			
Control Delay	28.3	8.0			19.6	19.2		73.6	194.4			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	28.3	8.0			19.6	19.2		73.6	194.4			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (with Gas Station)
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	A			B	B		E	F			
Approach Delay		11.5			19.5			158.1				
Approach LOS		B			B			F				
Queue Length 50th (ft)	105	455			261	195		257	~456			
Queue Length 95th (ft)	m61	m80			m163	m127		#509	#656			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					125			850			
Base Capacity (vph)	413	2713			1740	778		375	589			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.72	0.52			0.65	0.60		0.89	1.32			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 30 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.32

Intersection Signal Delay: 51.3

Intersection LOS: D

Intersection Capacity Utilization 91.0%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

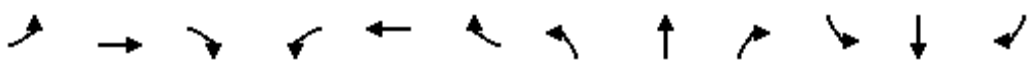
Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (with Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	269	1270	0	0	1015	421	297	4	700	0	0	0
Future Volume (vph)	269	1270	0	0	1015	421	297	4	700	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	0		300	325		850	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950							0.953				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Flt Permitted	0.950							0.953				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	1775	2787	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		888			595			1516			1596	
Travel Time (s)		13.5			9.0			20.7			21.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	299	1411	0	0	1128	468	330	4	778	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	299	1411	0	0	1128	468	0	334	778	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	5	2			6			4				
Permitted Phases						6	4		4			
Detector Phase	5	2			6	6	4	4	4			
Switch Phase												
Minimum Initial (s)	7.0	12.0			12.0	12.0	7.0	7.0	7.0			
Minimum Split (s)	14.0	19.0			19.0	19.0	14.0	14.0	14.0			
Total Split (s)	29.0	78.0			49.0	49.0	42.0	42.0	42.0			
Total Split (%)	24.2%	65.0%			40.8%	40.8%	35.0%	35.0%	35.0%			
Maximum Green (s)	22.0	71.0			42.0	42.0	35.0	35.0	35.0			
Yellow Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0			
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Vehicle Extension (s)	1.0	6.0			6.0	6.0	1.0	1.0	1.0			
Minimum Gap (s)	0.2	3.0			3.0	3.0	0.2	0.2	0.2			
Time Before Reduce (s)	0.0	15.0			15.0	15.0	0.0	0.0	0.0			
Time To Reduce (s)	0.0	30.0			30.0	30.0	0.0	0.0	0.0			
Recall Mode	None	C-Min			C-Min	C-Min	None	None	None			
Act Effect Green (s)	22.9	74.0			46.1	46.1		36.0	36.0			
Actuated g/C Ratio	0.19	0.62			0.38	0.38		0.30	0.30			
v/c Ratio	0.88	0.65			0.83	0.77		0.63	0.93			
Control Delay	38.3	8.1			26.2	28.3		42.0	59.1			
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0			
Total Delay	38.3	8.1			26.2	28.3		42.0	59.1			

Stinson Village
3: Idlewild Road & I-485 NB Ramp

2023 Full Build (with Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	A			C	C		D	E			
Approach Delay		13.4			26.9			54.0				
Approach LOS		B			C			D				
Queue Length 50th (ft)	185	451			226	157		220	327			
Queue Length 95th (ft)	m183	m446			m369	m282		322	#454			
Internal Link Dist (ft)		808			515			1436			1516	
Turn Bay Length (ft)	275					300			850			
Base Capacity (vph)	354	2180			1358	607		547	859			
Starvation Cap Reductn	0	0			0	0		0	0			
Spillback Cap Reductn	0	0			0	0		0	0			
Storage Cap Reductn	0	0			0	0		0	0			
Reduced v/c Ratio	0.84	0.65			0.83	0.77		0.61	0.91			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 24 (20%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 28.5

Intersection LOS: C

Intersection Capacity Utilization 91.0%

ICU Level of Service F

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Idlewild Road & I-485 NB Ramp



Village at Idlewild
3: I-485 Northbound Off ramp

2040 Full Build
Timing Plan: PM Peak Hour

	→	↘	↙	←	↖	↗		
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4
Lane Configurations				↑↑↑	↖			
Traffic Volume (vph)	0	0	0	1678	143	0		
Future Volume (vph)	0	0	0	1678	143	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	0		500	0		
Storage Lanes		0	0		0	0		
Taper Length (ft)			100		100			
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	0	0	5085	1770	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	0	0	5085	1770	0		
Right Turn on Red		No			No	No		
Satd. Flow (RTOR)								
Link Speed (mph)	45			45	50			
Link Distance (ft)	484			219	539			
Travel Time (s)	7.3			3.3	7.4			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90		
Adj. Flow (vph)	0	0	0	1864	159	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	0	1864	159	0		
Turn Type				NA	Prot			
Protected Phases				6	8		2	4
Permitted Phases								
Detector Phase				6	8			
Switch Phase								
Minimum Initial (s)				12.0	7.0		7.0	12.0
Minimum Split (s)				19.0	14.0		14.0	19.0
Total Split (s)				59.0	61.0		59.0	61.0
Total Split (%)				49.2%	50.8%		49%	51%
Maximum Green (s)				52.0	54.0		52.0	54.0
Yellow Time (s)				5.0	5.0		5.0	5.0
All-Red Time (s)				2.0	2.0		2.0	2.0
Lost Time Adjust (s)				-2.0	-2.0			
Total Lost Time (s)				5.0	5.0			
Lead/Lag								
Lead-Lag Optimize?								
Vehicle Extension (s)				3.0	3.0		3.0	3.0
Recall Mode				C-Min	None		C-Min	None
Act Effect Green (s)				54.0	56.0			
Actuated g/C Ratio				0.45	0.47			
v/c Ratio				0.81	0.19			
Control Delay				2.7	19.6			
Queue Delay				0.0	0.0			
Total Delay				2.7	19.6			
LOS				A	B			
Approach Delay				2.7	19.6			
Approach LOS				A	B			

Village at Idlewild
3: I-485 Northbound Off ramp

2040 Full Build
Timing Plan: PM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4
Queue Length 50th (ft)				10	70			
Queue Length 95th (ft)				5	115			
Internal Link Dist (ft)	404			139	459			
Turn Bay Length (ft)					500			
Base Capacity (vph)				2288	826			
Starvation Cap Reductn				0	0			
Spillback Cap Reductn				0	0			
Storage Cap Reductn				0	0			
Reduced v/c Ratio				0.81	0.19			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 88 (73%), Referenced to phase 2:NBR and 6:, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 4.0

Intersection LOS: A

Intersection Capacity Utilization 48.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: I-485 Northbound Off ramp

#333 Ø2 (R)	#33 #333 Ø4
59 s	61 s
#3 #33 Ø6 (R)	#3 Ø8
59 s	61 s

Village at Idlewild
33: Idlewild Road

2040 Full Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑						↑↑↑	
Traffic Volume (vph)	0	0	0	0	1678	0	0	0	0	0	1769	0
Future Volume (vph)	0	0	0	0	1678	0	0	0	0	0	1769	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frnt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			No	No		No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		219			108			112			188	
Travel Time (s)		3.3			1.6			1.7			2.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	1864	0	0	0	0	0	1966	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1864	0	0	0	0	0	1966	0
Turn Type					NA						NA	
Protected Phases					6						4	
Permitted Phases												
Detector Phase					6						4	
Switch Phase												
Minimum Initial (s)					12.0						12.0	
Minimum Split (s)					19.0						19.0	
Total Split (s)					59.0						61.0	
Total Split (%)					49.2%						50.8%	
Maximum Green (s)					52.0						54.0	
Yellow Time (s)					5.0						5.0	
All-Red Time (s)					2.0						2.0	
Lost Time Adjust (s)					-2.0						-2.0	
Total Lost Time (s)					5.0						5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					3.0						3.0	
Recall Mode					C-Min						None	
Act Effect Green (s)					54.0						56.0	
Actuated g/C Ratio					0.45						0.47	
v/c Ratio					0.81						0.83	
Control Delay					23.7						25.7	
Queue Delay					0.0						0.0	
Total Delay					23.7						25.7	
LOS					C						C	
Approach Delay					23.7						25.7	
Approach LOS					C						C	
Queue Length 50th (ft)					391						276	
Queue Length 95th (ft)					543						446	
Internal Link Dist (ft)		139			28			32			108	

Lane Group	Ø2	Ø8
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	8
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	7.0	7.0
Minimum Split (s)	14.0	14.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Maximum Green (s)	52.0	54.0
Yellow Time (s)	5.0	5.0
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	C-Min	None
Act Effect Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		

Village at Idlewild
33: Idlewild Road

2040 Full Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)	2288					2373						
Starvation Cap Reductn	0					0						
Spillback Cap Reductn	0					0						
Storage Cap Reductn	0					0						
Reduced v/c Ratio	0.81					0.83						
Intersection Summary												
Area Type:	Other											
Cycle Length: 120												
Actuated Cycle Length: 120												
Offset: 88 (73%), Referenced to phase 2:NBR and 6:, Start of Green												
Natural Cycle: 60												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.83												
Intersection Signal Delay: 24.7					Intersection LOS: C							
Intersection Capacity Utilization 74.9%					ICU Level of Service D							
Analysis Period (min) 15												

Splits and Phases: 33: Idlewild Road

#333  Ø2 (R)	#33 #333  Ø4
59 s	61 s
#3 #33  Ø6 (R)	#3  Ø8
59 s	61 s

Lane Group	Ø2	Ø8
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Village at Idlewild
333: I-485 Northbound Off Ramp & Idlewild Road

2040 Full Build
Timing Plan: PM Peak Hour

							Ø6	Ø8
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑					↓↓↓		
Traffic Volume (vph)	1769	0	0	0	0	972		
Future Volume (vph)	1769	0	0	0	0	972		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.91	1.00	1.00	1.00	1.00	0.76		
Frt						0.850		
Flt Protected								
Satd. Flow (prot)	5085	0	0	0	0	3610		
Flt Permitted								
Satd. Flow (perm)	5085	0	0	0	0	3610		
Right Turn on Red		No				No		
Satd. Flow (RTOR)								
Link Speed (mph)	45			45	50			
Link Distance (ft)	112			150	434			
Travel Time (s)	1.7			2.3	5.9			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90		
Adj. Flow (vph)	1966	0	0	0	0	1080		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	1966	0	0	0	0	1080		
Turn Type	NA					Prot		
Protected Phases	4					2	6	8
Permitted Phases								
Detector Phase	4					2		
Switch Phase								
Minimum Initial (s)	12.0					7.0	12.0	7.0
Minimum Split (s)	19.0					14.0	19.0	14.0
Total Split (s)	61.0					59.0	59.0	61.0
Total Split (%)	50.8%					49.2%	49%	51%
Maximum Green (s)	54.0					52.0	52.0	54.0
Yellow Time (s)	5.0					5.0	5.0	5.0
All-Red Time (s)	2.0					2.0	2.0	2.0
Lost Time Adjust (s)	-2.0					-2.0		
Total Lost Time (s)	5.0					5.0		
Lead/Lag								
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0					3.0	3.0	3.0
Recall Mode	None					C-Min	C-Min	None
Act Effct Green (s)	56.0					54.0		
Actuated g/C Ratio	0.47					0.45		
v/c Ratio	0.83					0.67		
Control Delay	3.0					28.4		
Queue Delay	0.1					0.0		
Total Delay	3.1					28.4		
LOS	A					C		
Approach Delay	3.1				28.4			
Approach LOS	A				C			
Queue Length 50th (ft)	13					281		
Queue Length 95th (ft)	12					344		
Internal Link Dist (ft)	32			70	354			

Village at Idlewild
333: I-485 Northbound Off Ramp & Idlewild Road

2040 Full Build
Timing Plan: PM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø6	Ø8
Turn Bay Length (ft)								
Base Capacity (vph)	2373				1624			
Starvation Cap Reductn	0				0			
Spillback Cap Reductn	25				0			
Storage Cap Reductn	0				0			
Reduced v/c Ratio	0.84				0.67			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 88 (73%), Referenced to phase 2:NBR and 6:, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 12.0

Intersection LOS: B

Intersection Capacity Utilization 74.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 333: I-485 Northbound Off Ramp & Idlewild Road

#333 Ø2 (R) 59 s		#33 #333 Ø4 61 s	
#3 #33 Ø6 (R) 59 s		#3 Ø8 61 s	

APPENDIX I

IDLEWILD ROAD AND MARSHAL HOOKS ROAD

SYNCHRO REPORTS

Stinson Village
4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

2019 Existing
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	570	4	4	1350	4	4	4	4	4	4	4
Future Vol, veh/h	4	570	4	4	1350	4	4	4	4	4	4	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	633	4	4	1500	4	4	4	4	4	4	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1504	0	0	637	0	0	1403	2155	319	1837	2155	752
Stage 1	-	-	-	-	-	-	643	643	-	1510	1510	-
Stage 2	-	-	-	-	-	-	760	1512	-	327	645	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	441	-	-	943	-	-	100	47	677	47	47	353
Stage 1	-	-	-	-	-	-	428	467	-	126	181	-
Stage 2	-	-	-	-	-	-	364	181	-	660	466	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	441	-	-	943	-	-	91	46	677	43	46	353
Mov Cap-2 Maneuver	-	-	-	-	-	-	91	46	-	43	46	-
Stage 1	-	-	-	-	-	-	424	463	-	125	180	-
Stage 2	-	-	-	-	-	-	349	180	-	643	462	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0			53.1			76.9		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	88	441	-	-	943	-	-	63
HCM Lane V/C Ratio	0.152	0.01	-	-	0.005	-	-	0.212
HCM Control Delay (s)	53.1	13.2	-	-	8.8	-	-	76.9
HCM Lane LOS	F	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.7

Stinson Village
4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

2022 No-Build
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	639	125	75	1610	4	0	0	39	0	0	4
Future Vol, veh/h	4	639	125	75	1610	4	0	0	39	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	710	139	83	1789	4	0	0	43	0	0	4
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1793	0	0	849	0	0	-	-	355	-	-	897
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	341	-	-	785	-	-	0	0	641	0	0	283
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	341	-	-	785	-	-	-	-	641	-	-	283
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			11			17.9		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	641	341	-	-	785	-	-	283				
HCM Lane V/C Ratio	0.068	0.013	-	-	0.106	-	-	0.016				
HCM Control Delay (s)	11	15.7	-	-	10.1	-	-	17.9				
HCM Lane LOS	B	C	-	-	B	-	-	C				
HCM 95th %tile Q(veh)	0.2	0	-	-	0.4	-	-	0				

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	678	125	75	1646	4	0	0	39	0	0	8
Future Vol, veh/h	8	678	125	75	1646	4	0	0	39	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	753	139	83	1829	4	0	0	43	0	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1833	0	0	892	0	0	-	-	377	-	-	917
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	329	-	-	756	-	-	0	0	621	0	0	274
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	329	-	-	756	-	-	-	-	621	-	-	274
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.5			11.2			18.6		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	621	329	-	-	756	-	-	274
HCM Lane V/C Ratio	0.07	0.027	-	-	0.11	-	-	0.032
HCM Control Delay (s)	11.2	16.2	-	-	10.4	-	-	18.6
HCM Lane LOS	B	C	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.4	-	-	0.1

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	678	125	75	1646	4	0	0	39	0	0	8
Future Vol, veh/h	8	678	125	75	1646	4	0	0	39	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	753	139	83	1829	4	0	0	43	0	0	9

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	1833	0	0	892	0	0	-	-	377	-	-	917
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	329	-	-	756	-	-	0	0	621	0	0	274
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	329	-	-	756	-	-	-	-	621	-	-	274
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB
HCM Control Delay, s	0.2		0.5		11.2		18.6
HCM LOS					B		C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	621	329	-	-	756	-	-	274
HCM Lane V/C Ratio	0.07	0.027	-	-	0.11	-	-	0.032
HCM Control Delay (s)	11.2	16.2	-	-	10.4	-	-	18.6
HCM Lane LOS	B	C	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.4	-	-	0.1

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	772	125	75	1740	4	0	0	39	0	0	29
Future Vol, veh/h	29	772	125	75	1740	4	0	0	39	0	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	858	139	83	1933	4	0	0	43	0	0	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1937	0	0	997	0	0	-	-	429	-	-	969
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	300	-	-	690	-	-	0	0	574	0	0	253
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	300	-	-	690	-	-	-	-	574	-	-	253
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.5			11.8			21.3		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	574	300	-	-	690	-	-	253
HCM Lane V/C Ratio	0.075	0.107	-	-	0.121	-	-	0.127
HCM Control Delay (s)	11.8	18.4	-	-	10.9	-	-	21.3
HCM Lane LOS	B	C	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0.2	0.4	-	-	0.4	-	-	0.4

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	772	125	75	1740	4	0	0	39	0	0	29
Future Vol, veh/h	29	772	125	75	1740	4	0	0	39	0	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	858	139	83	1933	4	0	0	43	0	0	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1937	0	0	997	0	0	-	-	429	-	-	969
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	300	-	-	690	-	-	0	0	574	0	0	253
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-				-	-	
Mov Cap-1 Maneuver	300	-	-	690	-	-	-	-	574	-	-	253
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.5			11.8			21.3		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	574	300	-	-	690	-	-	253
HCM Lane V/C Ratio	0.075	0.107	-	-	0.121	-	-	0.127
HCM Control Delay (s)	11.8	18.4	-	-	10.9	-	-	21.3
HCM Lane LOS	B	C	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0.2	0.4	-	-	0.4	-	-	0.4

Stinson Village
4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

2023 No-Build
Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	654	125	75	1646	4	0	0	39	0	0	4
Future Vol, veh/h	4	654	125	75	1646	4	0	0	39	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	727	139	83	1829	4	0	0	43	0	0	4
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1833	0	0	866	0	0	-	-	364	-	-	917
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	329	-	-	773	-	-	0	0	633	0	0	274
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	329	-	-	773	-	-	-	-	633	-	-	274
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			11.1			18.4		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	633	329	-	-	773	-	-	274				
HCM Lane V/C Ratio	0.068	0.014	-	-	0.108	-	-	0.016				
HCM Control Delay (s)	11.1	16.1	-	-	10.2	-	-	18.4				
HCM Lane LOS	B	C	-	-	B	-	-	C				
HCM 95th %tile Q(veh)	0.2	0	-	-	0.4	-	-	0				

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	815	125	75	1845	4	0	0	39	0	0	44
Future Vol, veh/h	35	815	125	75	1845	4	0	0	39	0	0	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	906	139	83	2050	4	0	0	43	0	0	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2054	0	0	1045	0	0	-	-	453	-	-	1027
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	269	-	-	661	-	-	0	0	554	0	0	232
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	269	-	-	661	-	-	-	-	554	-	-	232
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.7			0.4			12			24.6		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	554	269	-	-	661	-	-	232
HCM Lane V/C Ratio	0.078	0.145	-	-	0.126	-	-	0.211
HCM Control Delay (s)	12	20.6	-	-	11.2	-	-	24.6
HCM Lane LOS	B	C	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0.3	0.5	-	-	0.4	-	-	0.8

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	815	125	75	1845	4	0	0	39	0	0	44
Future Vol, veh/h	35	815	125	75	1845	4	0	0	39	0	0	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	906	139	83	2050	4	0	0	43	0	0	49

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	2054	0	0	1045	0	0	-	-	453	-	-	1027
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	269	-	-	661	-	-	0	0	554	0	0	232
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	269	-	-	661	-	-	-	-	554	-	-	232
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB
HCM Control Delay, s	0.7		0.4		12		24.6
HCM LOS					B		C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	554	269	-	-	661	-	-	232
HCM Lane V/C Ratio	0.078	0.145	-	-	0.126	-	-	0.211
HCM Control Delay (s)	12	20.6	-	-	11.2	-	-	24.6
HCM Lane LOS	B	C	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0.3	0.5	-	-	0.4	-	-	0.8

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	908	125	75	1938	4	0	0	39	0	0	65
Future Vol, veh/h	57	908	125	75	1938	4	0	0	39	0	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	1009	139	83	2153	4	0	0	43	0	0	72

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2157	0	0	1148	0	0	-	-	505	-	-	1079
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	245	-	-	604	-	-	0	0	512	0	0	214
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	245	-	-	604	-	-	-	-	512	-	-	214
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			0.4			12.7			30.2		
HCM LOS							B			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	512	245	-	-	604	-	-	214
HCM Lane V/C Ratio	0.085	0.259	-	-	0.138	-	-	0.337
HCM Control Delay (s)	12.7	24.7	-	-	11.9	-	-	30.2
HCM Lane LOS	B	C	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.3	1	-	-	0.5	-	-	1.4

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	908	125	75	1938	4	0	0	39	0	0	65
Future Vol, veh/h	57	908	125	75	1938	4	0	0	39	0	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	1009	139	83	2153	4	0	0	43	0	0	72

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	2157	0	0	1148	0	0	-	-	505	-	-	1079
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	245	-	-	604	-	-	0	0	512	0	0	214
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	245	-	-	604	-	-	-	-	512	-	-	214
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.4	12.7	30.2
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	512	245	-	-	604	-	-	214
HCM Lane V/C Ratio	0.085	0.259	-	-	0.138	-	-	0.337
HCM Control Delay (s)	12.7	24.7	-	-	11.9	-	-	30.2
HCM Lane LOS	B	C	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.3	1	-	-	0.5	-	-	1.4

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	2189	125	75	2758	4	0	0	39	0	0	65
Future Volume (vph)	57	2189	125	75	2758	4	0	0	39	0	0	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		0	300		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992							0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	5045	0	1770	5085	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	5045	0	1770	5085	0	0	0	1611	0	0	1611
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		452			587			443			286	
Travel Time (s)		6.8			8.9			8.6			5.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	63	2432	139	83	3064	4	0	0	43	0	0	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	2571	0	83	3068	0	0	0	43	0	0	72
Turn Type	Prot	NA		Prot	NA				Over			Over
Protected Phases	5	2		1	6				1			5
Permitted Phases												
Detector Phase	5	2		1	6				1			5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0				7.0			7.0
Minimum Split (s)	14.0	19.0		14.0	19.0				14.0			14.0
Total Split (s)	18.0	101.0		19.0	102.0				19.0			18.0
Total Split (%)	15.0%	84.2%		15.8%	85.0%				15.8%			15.0%
Maximum Green (s)	11.0	94.0		12.0	95.0				12.0			11.0
Yellow Time (s)	5.0	5.0		5.0	5.0				5.0			5.0
All-Red Time (s)	2.0	2.0		2.0	2.0				2.0			2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0				-2.0			-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0				5.0			5.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0			3.0
Recall Mode	None	C-Min		None	C-Min				None			None
Act Effect Green (s)	11.7	101.6		12.2	102.1				12.2			11.7
Actuated g/C Ratio	0.10	0.85		0.10	0.85				0.10			0.10
v/c Ratio	0.37	0.60		0.46	0.71				0.26			0.46
Control Delay	67.4	1.6		50.0	1.8				53.1			60.5
Queue Delay	0.0	0.3		0.0	0.0				0.0			0.0
Total Delay	67.4	1.9		50.0	1.8				53.1			60.5
LOS	E	A		D	A				D			E
Approach Delay		3.4			3.1			53.1			60.5	
Approach LOS		A			A			D			E	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	50	45		65	61				31			53
Queue Length 95th (ft)	m71	50		m80	67				68			102
Internal Link Dist (ft)		372			507			363			206	
Turn Bay Length (ft)	350			300								
Base Capacity (vph)	191	4270		206	4325				187			174
Starvation Cap Reductn	0	874		0	35				0			0
Spillback Cap Reductn	0	0		0	0				0			0
Storage Cap Reductn	0	0		0	0				0			0
Reduced v/c Ratio	0.33	0.76		0.40	0.72				0.23			0.41

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 18 (15%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 67.5%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road



Stinson Village
4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

2019 Existing
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1380	4	4	953	4	4	4	4	4	4	4
Future Vol, veh/h	4	1380	4	4	953	4	4	4	4	4	4	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	1533	4	4	1059	4	4	4	4	4	4	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1063	0	0	1537	0	0	2083	2614	769	1846	2614	532
Stage 1	-	-	-	-	-	-	1543	1543	-	1069	1069	-
Stage 2	-	-	-	-	-	-	540	1071	-	777	1545	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	651	-	-	429	-	-	31	24	344	46	24	492
Stage 1	-	-	-	-	-	-	120	175	-	236	296	-
Stage 2	-	-	-	-	-	-	494	295	-	356	174	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	651	-	-	429	-	-	26	24	344	39	24	492
Mov Cap-2 Maneuver	-	-	-	-	-	-	26	24	-	39	24	-
Stage 1	-	-	-	-	-	-	119	174	-	235	293	-
Stage 2	-	-	-	-	-	-	478	292	-	340	173	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	155	122.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	36	651	-	-	429	-	-	43
HCM Lane V/C Ratio	0.37	0.007	-	-	0.01	-	-	0.31
HCM Control Delay (s)	155	10.6	-	-	13.5	-	-	122.6
HCM Lane LOS	F	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	1.2	0	-	-	0	-	-	1.1

Stinson Village
4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

2022 No-Build
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1490	149	92	1156	4	0	0	55	0	0	4
Future Vol, veh/h	4	1490	149	92	1156	4	0	0	55	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	1656	166	102	1284	4	0	0	61	0	0	4
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1288	0	0	1822	0	0	-	-	828	-	-	644
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	534	-	-	332	-	-	0	0	314	0	0	416
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	534	-	-	332	-	-	-	-	314	-	-	416
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			1.5			19.2			13.7		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	314	534	-	-	332	-	-	416				
HCM Lane V/C Ratio	0.195	0.008	-	-	0.308	-	-	0.011				
HCM Control Delay (s)	19.2	11.8	-	-	20.6	-	-	13.7				
HCM Lane LOS	C	B	-	-	C	-	-	B				
HCM 95th %tile Q(veh)	0.7	0	-	-	1.3	-	-	0				

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	1521	149	92	1183	4	0	0	55	0	0	7
Future Vol, veh/h	8	1521	149	92	1183	4	0	0	55	0	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	1690	166	102	1314	4	0	0	61	0	0	8
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1318	0	0	1856	0	0	-	-	845	-	-	659
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	520	-	-	322	-	-	0	0	306	0	0	406
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	520	-	-	322	-	-	-	-	306	-	-	406
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			1.5			19.7			14		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	306	520	-	-	322	-	-	406				
HCM Lane V/C Ratio	0.2	0.017	-	-	0.317	-	-	0.019				
HCM Control Delay (s)	19.7	12	-	-	21.3	-	-	14				
HCM Lane LOS	C	B	-	-	C	-	-	B				
HCM 95th %tile Q(veh)	0.7	0.1	-	-	1.3	-	-	0.1				

Intersection

Int Delay, s/veh 1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	1521	149	92	1183	4	0	0	55	0	0	7
Future Vol, veh/h	8	1521	149	92	1183	4	0	0	55	0	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	1690	166	102	1314	4	0	0	61	0	0	8

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	1318	0	0	1856	0	-	-	845	-	-	659	
Stage 1	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	4.14	-	-	4.14	-	-	-	6.94	-	-	6.94	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	3.32	-	-	3.32	
Pot Cap-1 Maneuver	520	-	-	322	-	-	0	0	306	0	0	406
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	520	-	-	322	-	-	-	306	-	-	406	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	-	-	

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.5	19.7	14
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	306	520	-	-	322	-	-	406
HCM Lane V/C Ratio	0.2	0.017	-	-	0.317	-	-	0.019
HCM Control Delay (s)	19.7	12	-	-	21.3	-	-	14
HCM Lane LOS	C	B	-	-	C	-	-	B
HCM 95th %tile Q(veh)	0.7	0.1	-	-	1.3	-	-	0.1

Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	1591	149	92	1254	3	0	0	55	0	0	22
Future Vol, veh/h	23	1591	149	92	1254	3	0	0	55	0	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	1768	166	102	1393	3	0	0	61	0	0	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1396	0	0	1934	0	0	-	-	884	-	-	698
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	486	-	-	300	-	-	0	0	288	0	0	383
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	486	-	-	300	-	-	-	-	288	-	-	383
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			1.6			20.8			15		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	288	486	-	-	300	-	-	383
HCM Lane V/C Ratio	0.212	0.053	-	-	0.341	-	-	0.064
HCM Control Delay (s)	20.8	12.8	-	-	23.1	-	-	15
HCM Lane LOS	C	B	-	-	C	-	-	C
HCM 95th %tile Q(veh)	0.8	0.2	-	-	1.5	-	-	0.2

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	1591	149	92	1254	4	0	0	55	0	0	22
Future Vol, veh/h	23	1591	149	92	1254	4	0	0	55	0	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	1768	166	102	1393	4	0	0	61	0	0	24

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	1397	0	0	1934	0	0	-	-	884	-	-	699
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	485	-	-	300	-	-	0	0	288	0	0	382
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	485	-	-	300	-	-	-	-	288	-	-	382
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB
HCM Control Delay, s	0.2		1.6		20.8		15.1
HCM LOS					C		C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	288	485	-	-	300	-	-	382
HCM Lane V/C Ratio	0.212	0.053	-	-	0.341	-	-	0.064
HCM Control Delay (s)	20.8	12.8	-	-	23.1	-	-	15.1
HCM Lane LOS	C	B	-	-	C	-	-	C
HCM 95th %tile Q(veh)	0.8	0.2	-	-	1.5	-	-	0.2

Stinson Village
4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

2023 No-Build
Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1527	149	92	1182	4	0	0	55	0	0	4
Future Vol, veh/h	4	1527	149	92	1182	4	0	0	55	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	1697	166	102	1313	4	0	0	61	0	0	4
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1317	0	0	1863	0	0	-	-	849	-	-	659
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	521	-	-	320	-	-	0	0	304	0	0	406
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	521	-	-	320	-	-	-	-	304	-	-	406
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			1.5			19.8			14		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	304	521	-	-	320	-	-	406				
HCM Lane V/C Ratio	0.201	0.009	-	-	0.319	-	-	0.011				
HCM Control Delay (s)	19.8	12	-	-	21.4	-	-	14				
HCM Lane LOS	C	B	-	-	C	-	-	B				
HCM 95th %tile Q(veh)	0.7	0	-	-	1.3	-	-	0				

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	1689	149	92	1311	4	0	0	55	0	0	30
Future Vol, veh/h	37	1689	149	92	1311	4	0	0	55	0	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	1877	166	102	1457	4	0	0	61	0	0	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1461	0	0	2043	0	0	-	-	939	-	-	731
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	458	-	-	272	-	-	0	0	265	0	0	364
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	458	-	-	272	-	-	-	-	265	-	-	364
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			1.7			22.6			15.9		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	265	458	-	-	272	-	-	364
HCM Lane V/C Ratio	0.231	0.09	-	-	0.376	-	-	0.092
HCM Control Delay (s)	22.6	13.6	-	-	26	-	-	15.9
HCM Lane LOS	C	B	-	-	D	-	-	C
HCM 95th %tile Q(veh)	0.9	0.3	-	-	1.7	-	-	0.3

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	1689	149	92	1311	4	0	0	55	0	0	30
Future Vol, veh/h	37	1689	149	92	1311	4	0	0	55	0	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	1877	166	102	1457	4	0	0	61	0	0	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1461	0	0	2043	0	0	-	-	939	-	-	731
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	458	-	-	272	-	-	0	0	265	0	0	364
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	458	-	-	272	-	-	-	-	265	-	-	364
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			1.7			22.6			15.9		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	265	458	-	-	272	-	-	364
HCM Lane V/C Ratio	0.231	0.09	-	-	0.376	-	-	0.092
HCM Control Delay (s)	22.6	13.6	-	-	26	-	-	15.9
HCM Lane LOS	C	B	-	-	D	-	-	C
HCM 95th %tile Q(veh)	0.9	0.3	-	-	1.7	-	-	0.3

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	1767	149	92	1389	4	0	0	55	0	0	47
Future Vol, veh/h	54	1767	149	92	1389	4	0	0	55	0	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	60	1963	166	102	1543	4	0	0	61	0	0	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1547	0	0	2129	0	0	-	-	982	-	-	774
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	425	-	-	252	-	-	0	0	248	0	0	341
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	425	-	-	252	-	-	-	-	248	-	-	341
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			1.8			24.2			17.5		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	248	425	-	-	252	-	-	341
HCM Lane V/C Ratio	0.246	0.141	-	-	0.406	-	-	0.153
HCM Control Delay (s)	24.2	14.9	-	-	28.7	-	-	17.5
HCM Lane LOS	C	B	-	-	D	-	-	C
HCM 95th %tile Q(veh)	0.9	0.5	-	-	1.9	-	-	0.5

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	1767	149	92	1389	4	0	0	55	0	0	47
Future Vol, veh/h	54	1767	149	92	1389	4	0	0	55	0	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	100	125	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	60	1963	166	102	1543	4	0	0	61	0	0	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1547	0	0	2129	0	0	-	-	982	-	-	774
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	425	-	-	252	-	-	0	0	248	0	0	341
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	425	-	-	252	-	-	-	-	248	-	-	341
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			1.8			24.2			17.5		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	248	425	-	-	252	-	-	341
HCM Lane V/C Ratio	0.246	0.141	-	-	0.406	-	-	0.153
HCM Control Delay (s)	24.2	14.9	-	-	28.7	-	-	17.5
HCM Lane LOS	C	B	-	-	D	-	-	C
HCM 95th %tile Q(veh)	0.9	0.5	-	-	1.9	-	-	0.5

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	2554	149	92	2254	4	0	0	55	0	0	46
Future Volume (vph)	53	2554	149	92	2254	4	0	0	55	0	0	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		0	300		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992							0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	5045	0	1770	5085	0	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	5045	0	1770	5085	0	0	0	1611	0	0	1611
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		452			587			443			286	
Travel Time (s)		6.8			8.9			8.6			5.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	59	2838	166	102	2504	4	0	0	61	0	0	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	3004	0	102	2508	0	0	0	61	0	0	51
Turn Type	Prot	NA		Prot	NA				Over			Over
Protected Phases	5	2		1	6				1			5
Permitted Phases												
Detector Phase	5	2		1	6				1			5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0				7.0			7.0
Minimum Split (s)	14.0	19.0		14.0	19.0				14.0			14.0
Total Split (s)	15.0	100.0		20.0	105.0				20.0			15.0
Total Split (%)	12.5%	83.3%		16.7%	87.5%				16.7%			12.5%
Maximum Green (s)	8.0	93.0		13.0	98.0				13.0			8.0
Yellow Time (s)	5.0	5.0		5.0	5.0				5.0			5.0
All-Red Time (s)	2.0	2.0		2.0	2.0				2.0			2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0				-2.0			-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0				5.0			5.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0			3.0
Recall Mode	None	C-Min		None	C-Min				None			None
Act Effct Green (s)	9.8	96.8		13.2	104.0				13.2			9.8
Actuated g/C Ratio	0.08	0.81		0.11	0.87				0.11			0.08
v/c Ratio	0.41	0.74		0.53	0.57				0.34			0.39
Control Delay	58.7	3.5		51.6	1.2				54.3			61.4
Queue Delay	0.0	0.5		0.0	0.0				0.0			0.0
Total Delay	58.7	4.1		51.6	1.2				54.3			61.4
LOS	E	A		D	A				D			E
Approach Delay		5.1			3.2			54.3			61.4	
Approach LOS		A			A			D			E	

Village at Idlewild
4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

2040 Full Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	47	80		0	48				44			38
Queue Length 95th (ft)	m60	138		m111	51				87			80
Internal Link Dist (ft)		372			507			363			206	
Turn Bay Length (ft)	350			300								
Base Capacity (vph)	147	4069		221	4407				201			134
Starvation Cap Reductn	0	563		0	0				0			0
Spillback Cap Reductn	0	0		0	0				0			0
Storage Cap Reductn	0	0		0	0				0			0
Reduced v/c Ratio	0.40	0.86		0.46	0.57				0.30			0.38

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 28 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 5.3

Intersection LOS: A

Intersection Capacity Utilization 66.8%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road



APPENDIX J

IDLEWILD ROAD AND RITE AID DRIVEWAY / ACCESS B

SYNCHRO REPORTS

Stinson Village
5: Rite Aid Driveway & Idlewild Road

2019 Existing
Timing Plan: AM Peak Hour

	→	↘	↶	↙	←	↖	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↘	↑	↘	
Traffic Volume (vph)	492	8	1	72	1250	50	16
Future Volume (vph)	492	8	1	72	1250	50	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		150		0	0
Storage Lanes		1		1		1	0
Taper Length (ft)				100		100	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.967	
Flt Protected				0.950		0.964	
Satd. Flow (prot)	1863	1583	0	1770	1863	1736	0
Flt Permitted				0.400		0.964	
Satd. Flow (perm)	1863	1583	0	745	1863	1736	0
Right Turn on Red		No					No
Satd. Flow (RTOR)							
Link Speed (mph)	45				45	35	
Link Distance (ft)	558				2122	2088	
Travel Time (s)	8.5				32.2	40.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	547	9	1	80	1389	56	18
Shared Lane Traffic (%)							
Lane Group Flow (vph)	547	9	0	81	1389	74	0
Turn Type	NA	Perm	pm+pt	pm+pt	NA	Prot	
Protected Phases	2		1	1	6	4	
Permitted Phases		2	6	6			
Detector Phase	2	2	1	1	6	4	
Switch Phase							
Minimum Initial (s)	12.0	12.0	7.0	7.0	12.0	7.0	
Minimum Split (s)	19.0	19.0	13.0	13.0	19.0	12.0	
Total Split (s)	95.0	95.0	13.0	13.0	108.0	12.0	
Total Split (%)	79.2%	79.2%	10.8%	10.8%	90.0%	10.0%	
Maximum Green (s)	88.8	88.8	7.7	7.7	101.8	7.1	
Yellow Time (s)	4.9	4.9	3.0	3.0	4.9	3.0	
All-Red Time (s)	1.3	1.3	2.3	2.3	1.3	1.9	
Lost Time Adjust (s)	-1.2	-1.2		-0.3	-1.2	0.1	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Vehicle Extension (s)	6.0	6.0	1.0	1.0	6.0	1.0	
Minimum Gap (s)	3.0	3.0	0.2	0.2	3.0	0.2	
Time Before Reduce (s)	15.0	15.0	0.0	0.0	15.0	0.0	
Time To Reduce (s)	30.0	30.0	0.0	0.0	30.0	0.0	
Recall Mode	C-Min	C-Min	None	None	C-Min	None	
Act Effect Green (s)	92.7	92.7		102.5	102.5	7.5	
Actuated g/C Ratio	0.77	0.77		0.85	0.85	0.06	
v/c Ratio	0.38	0.01		0.12	0.87	0.69	
Control Delay	3.9	0.4		1.6	11.1	85.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	
Total Delay	3.9	0.4		1.6	11.1	85.9	

Stinson Village
5: Rite Aid Driveway & Idlewild Road

2019 Existing
Timing Plan: AM Peak Hour



Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
LOS	A	A		A	B	F	
Approach Delay	3.9				10.6	85.9	
Approach LOS	A				B	F	
Queue Length 50th (ft)	83	0		5	853	56	
Queue Length 95th (ft)	127	m0		m9	m765	#139	
Internal Link Dist (ft)	478				2042	2008	
Turn Bay Length (ft)				150			
Base Capacity (vph)	1443	1226		704	1599	108	
Starvation Cap Reductn	0	0		0	0	0	
Spillback Cap Reductn	0	0		0	0	0	
Storage Cap Reductn	0	0		0	0	0	
Reduced v/c Ratio	0.38	0.01		0.12	0.87	0.69	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 61 (51%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 11.5

Intersection LOS: B

Intersection Capacity Utilization 80.0%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway & Idlewild Road



Stinson Village
5: Rite Aid Driveway & Idlewild Road

2022 No-Build
Timing Plan: AM Peak Hour

	→	↘	↶	↙	←	↖	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↘	↑	↖	↗
Traffic Volume (vph)	569	34	1	103	1418	210	82
Future Volume (vph)	569	34	1	103	1418	210	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		150		0	500
Storage Lanes		1		1		1	1
Taper Length (ft)				100		100	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850					0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	1863	1583	0	1770	1863	1770	1583
Flt Permitted				0.950		0.950	
Satd. Flow (perm)	1863	1583	0	1770	1863	1770	1583
Right Turn on Red		No					No
Satd. Flow (RTOR)							
Link Speed (mph)	45				45	35	
Link Distance (ft)	558				460	2088	
Travel Time (s)	8.5				7.0	40.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	632	38	1	114	1576	233	91
Shared Lane Traffic (%)							
Lane Group Flow (vph)	632	38	0	115	1576	233	91
Turn Type	NA	pm+ov	Prot	Prot	NA	Prot	Perm
Protected Phases	2	4	1	1	6	4	
Permitted Phases		2					4
Detector Phase	2	4	1	1	6	4	4
Switch Phase							
Minimum Initial (s)	12.0	7.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	19.0	14.0	14.0	14.0	19.0	14.0	14.0
Total Split (s)	80.0	20.0	20.0	20.0	100.0	20.0	20.0
Total Split (%)	66.7%	16.7%	16.7%	16.7%	83.3%	16.7%	16.7%
Maximum Green (s)	73.0	13.0	13.0	13.0	93.0	13.0	13.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	6.0	1.0	1.0	1.0	6.0	1.0	1.0
Minimum Gap (s)	3.0	0.2	0.2	0.2	3.0	0.2	0.2
Time Before Reduce (s)	15.0	0.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	30.0	0.0	0.0	0.0	30.0	0.0	0.0
Recall Mode	C-Min	None	None	None	C-Min	None	None
Act Effect Green (s)	77.3	97.3		12.7	95.0	15.0	15.0
Actuated g/C Ratio	0.64	0.81		0.11	0.79	0.12	0.12
v/c Ratio	0.53	0.03		0.62	1.07	1.05	0.46
Control Delay	4.9	0.2		49.9	46.9	126.0	57.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	4.9	0.2		49.9	46.9	126.0	57.1

Stinson Village
5: Rite Aid Driveway & Idlewild Road

2022 No-Build
Timing Plan: AM Peak Hour

	→	↘	↶	↙	←	↖	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
LOS	A	A		D	D	F	E
Approach Delay	4.6				47.1	106.7	
Approach LOS	A				D	F	
Queue Length 50th (ft)	24	0		89	~1349	~197	66
Queue Length 95th (ft)	35	m1		m79	m660	#360	122
Internal Link Dist (ft)	478				380	2008	
Turn Bay Length (ft)				150			500
Base Capacity (vph)	1200	1284		221	1474	221	197
Starvation Cap Reductn	0	0		0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0
Reduced v/c Ratio	0.53	0.03		0.52	1.07	1.05	0.46

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 97 (81%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 43.7

Intersection LOS: D

Intersection Capacity Utilization 94.6%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway & Idlewild Road



Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2022 Build Phase 1 (without Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	52	556	34	1	103	1407	45	210	4	82	54	4
Future Volume (vph)	52	556	34	1	103	1407	45	210	4	82	54	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0		150		0	0		500	0	
Storage Lanes	1		1		1		0	1		1	1	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.995			0.856			0.861
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1770	1863	1583	0	1770	1853	0	1770	1595	0	1770	1604
Flt Permitted	0.950				0.950			0.950			0.950	
Satd. Flow (perm)	1770	1863	1583	0	1770	1853	0	1770	1595	0	1770	1604
Right Turn on Red			No				No			No		
Satd. Flow (RTOR)												
Link Speed (mph)		45				45			35			15
Link Distance (ft)		440				695			2088			460
Travel Time (s)		6.7				10.5			40.7			20.9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	58	618	38	1	114	1563	50	233	4	91	60	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	58	618	38	0	115	1613	0	233	95	0	60	57
Turn Type	Prot	NA	pm+ov	Prot	Prot	NA		Prot	NA		Prot	NA
Protected Phases	5	2	3	1	1	6		3	8		7	4
Permitted Phases			2									
Detector Phase	5	2	3	1	1	6		3	8		7	4
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	7.0	12.0		7.0	7.0		7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	14.0	19.0		14.0	25.0		14.0	14.0
Total Split (s)	14.0	61.0	25.0	20.0	20.0	67.0		25.0	25.0		14.0	14.0
Total Split (%)	11.7%	50.8%	20.8%	16.7%	16.7%	55.8%		20.8%	20.8%		11.7%	11.7%
Maximum Green (s)	7.0	54.0	18.0	13.0	13.0	60.0		18.0	18.0		7.0	7.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	6.0	3.0	1.0	1.0	6.0		3.0	3.0		3.0	1.0
Minimum Gap (s)	3.0	3.0	3.0	0.2	0.2	3.0		3.0	3.0		3.0	0.2
Time Before Reduce (s)	0.0	15.0	0.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	30.0	0.0	0.0	0.0	30.0		0.0	0.0		0.0	0.0
Recall Mode	None	C-Min	None	None	None	C-Min		None	None		None	None
Act Effect Green (s)	9.0	61.8	86.1		12.7	68.3		19.3	19.3		9.0	9.0
Actuated g/C Ratio	0.08	0.52	0.72		0.11	0.57		0.16	0.16		0.08	0.08
v/c Ratio	0.44	0.64	0.03		0.62	1.53		0.82	0.37		0.45	0.47
Control Delay	89.6	10.9	1.4		46.9	265.0		71.4	49.3		64.7	66.9
Queue Delay	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	89.6	10.9	1.4		46.9	265.0		71.4	49.3		64.7	66.9

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2022 Build Phase 1 (without Gas Station)

Timing Plan: AM Peak Hour

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	48
Future Volume (vph)	48
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	53
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Minimum Gap (s)	
Time Before Reduce (s)	
Time To Reduce (s)	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2022 Build Phase 1 (without Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS	F	B	A		D	F		E	D		E	E
Approach Delay		16.8				250.5			65.0			65.8
Approach LOS		B				F			E			E
Queue Length 50th (ft)	48	184	2		85	~1840		175	66		45	43
Queue Length 95th (ft)	m87	535	m5		m75	m#1536		#301	120		91	89
Internal Link Dist (ft)		360				615			2008			380
Turn Bay Length (ft)	75				150							
Base Capacity (vph)	132	959	1145		221	1054		295	265		132	120
Starvation Cap Reductn	0	0	0		0	0		0	0		0	0
Spillback Cap Reductn	0	0	0		0	0		0	0		0	0
Storage Cap Reductn	0	0	0		0	0		0	0		0	0
Reduced v/c Ratio	0.44	0.64	0.03		0.52	1.53		0.79	0.36		0.45	0.47

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.53

Intersection Signal Delay: 164.1

Intersection LOS: F

Intersection Capacity Utilization 113.1%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

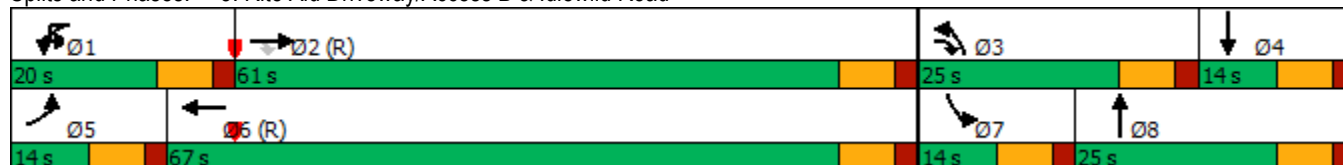
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road





Lane Group	SBR
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Stinson Village

2022 Build Phase 1 (without Gas Station) with Improvements

5: Rite Aid Driveway/Access B & Idlewild Road

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	52	556	34	1	103	1407	45	210	4	82	54	4
Future Volume (vph)	52	556	34	1	103	1407	45	210	4	82	54	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0		300		350	0		500	0	
Storage Lanes	1		0		1		1	1		1	1	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt		0.991				0.995			0.856			0.861
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1770	3507	0	0	1770	3522	0	1770	1595	0	1770	1604
Flt Permitted	0.950				0.950			0.950			0.950	
Satd. Flow (perm)	1770	3507	0	0	1770	3522	0	1770	1595	0	1770	1604
Right Turn on Red			No				No			No		
Satd. Flow (RTOR)												
Link Speed (mph)		45				45			35			15
Link Distance (ft)		440				695			2088			460
Travel Time (s)		6.7				10.5			40.7			20.9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	58	618	38	1	114	1563	50	233	4	91	60	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	58	656	0	0	115	1613	0	233	95	0	60	57
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA		Prot	NA
Protected Phases	5	2		1	1	6		3	8		7	4
Permitted Phases												
Detector Phase	5	2		1	1	6		3	8		7	4
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	7.0	12.0		7.0	7.0		7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	14.0	19.0		14.0	25.0		14.0	14.0
Total Split (s)	14.0	61.0		20.0	20.0	67.0		25.0	25.0		14.0	14.0
Total Split (%)	11.7%	50.8%		16.7%	16.7%	55.8%		20.8%	20.8%		11.7%	11.7%
Maximum Green (s)	7.0	54.0		13.0	13.0	60.0		18.0	18.0		7.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	6.0		1.0	1.0	6.0		3.0	3.0		3.0	1.0
Minimum Gap (s)	3.0	3.0		0.2	0.2	3.0		3.0	3.0		3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	0.0	15.0		0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	30.0		0.0	0.0	30.0		0.0	0.0		0.0	0.0
Recall Mode	None	C-Min		None	None	C-Min		None	None		None	None
Act Effect Green (s)	9.0	61.8			12.7	68.3		19.3	19.3		9.0	9.0
Actuated g/C Ratio	0.08	0.52			0.11	0.57		0.16	0.16		0.08	0.08
v/c Ratio	0.44	0.36			0.62	0.81		0.82	0.37		0.45	0.47
Control Delay	90.1	5.6			50.4	25.7		71.4	49.3		64.7	66.9
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	90.1	5.6			50.4	25.7		71.4	49.3		64.7	66.9

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	48
Future Volume (vph)	48
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	53
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Minimum Gap (s)	
Time Before Reduce (s)	
Time To Reduce (s)	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS	F	A			D	C		E	D		E	E
Approach Delay		12.4				27.4			65.0			65.8
Approach LOS		B				C			E			E
Queue Length 50th (ft)	48	62			90	533		175	66		45	43
Queue Length 95th (ft)	m87	78			m78	m457		#301	120		91	89
Internal Link Dist (ft)		360				615			2008			380
Turn Bay Length (ft)	175				300							
Base Capacity (vph)	132	1806			221	2003		295	265		132	120
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.44	0.36			0.52	0.81		0.79	0.36		0.45	0.47

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 29.5

Intersection LOS: C

Intersection Capacity Utilization 77.0%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road



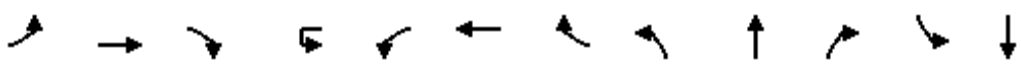


Lane Group	SBR
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2022 Build Phase 1 (with Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	126	576	34	1	103	1448	87	210	15	82	137	13
Future Volume (vph)	126	576	34	1	103	1448	87	210	15	82	137	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0		150		0	0		500	0	
Storage Lanes	1		1		1		0	1		1	1	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.991			0.874			0.867
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1770	1863	1583	0	1770	1846	0	1770	1628	0	1770	1615
Flt Permitted	0.950				0.950			0.950			0.950	
Satd. Flow (perm)	1770	1863	1583	0	1770	1846	0	1770	1628	0	1770	1615
Right Turn on Red			No				No			No		
Satd. Flow (RTOR)												
Link Speed (mph)		45				45			35			15
Link Distance (ft)		440				695			2088			460
Travel Time (s)		6.7				10.5			40.7			20.9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	140	640	38	1	114	1609	97	233	17	91	152	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	640	38	0	115	1706	0	233	108	0	152	125
Turn Type	Prot	NA	pm+ov	Prot	Prot	NA		Prot	NA		Prot	NA
Protected Phases	5	2	3	1	1	6		3	8		7	4
Permitted Phases			2									
Detector Phase	5	2	3	1	1	6		3	8		7	4
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	7.0	12.0		7.0	7.0		7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	14.0	19.0		14.0	25.0		14.0	14.0
Total Split (s)	14.0	61.0	25.0	20.0	20.0	67.0		25.0	25.0		14.0	14.0
Total Split (%)	11.7%	50.8%	20.8%	16.7%	16.7%	55.8%		20.8%	20.8%		11.7%	11.7%
Maximum Green (s)	7.0	54.0	18.0	13.0	13.0	60.0		18.0	18.0		7.0	7.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	6.0	3.0	1.0	1.0	6.0		3.0	3.0		3.0	1.0
Minimum Gap (s)	3.0	3.0	3.0	0.2	0.2	3.0		3.0	3.0		3.0	0.2
Time Before Reduce (s)	0.0	15.0	0.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	30.0	0.0	0.0	0.0	30.0		0.0	0.0		0.0	0.0
Recall Mode	None	C-Min	None	None	None	C-Min		None	None		None	None
Act Effect Green (s)	9.0	58.3	82.7		12.7	62.0		19.3	20.0		9.0	9.7
Actuated g/C Ratio	0.08	0.49	0.69		0.11	0.52		0.16	0.17		0.08	0.08
v/c Ratio	1.06	0.71	0.03		0.62	1.79		0.82	0.40		1.15	0.96
Control Delay	163.0	13.9	1.4		49.9	380.1		71.4	49.7		173.7	125.0
Queue Delay	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	163.0	13.9	1.4		49.9	380.1		71.4	49.7		173.7	125.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	100
Future Volume (vph)	100
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	111
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Minimum Gap (s)	
Time Before Reduce (s)	
Time To Reduce (s)	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2022 Build Phase 1 (with Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS	F	B	A		D	F		E	D		F	F
Approach Delay		38.9				359.3			64.5			151.7
Approach LOS		D				F			E			F
Queue Length 50th (ft)	~123	199	2		84	~2003		175	76		~138	~104
Queue Length 95th (ft)	m#238	579	m5		m70	m#1564		#301	134		#275	#230
Internal Link Dist (ft)		360				615			2008			380
Turn Bay Length (ft)	75				150							
Base Capacity (vph)	132	905	1099		221	953		295	271		132	130
Starvation Cap Reductn	0	0	0		0	0		0	0		0	0
Spillback Cap Reductn	0	0	0		0	0		0	0		0	0
Storage Cap Reductn	0	0	0		0	0		0	0		0	0
Reduced v/c Ratio	1.06	0.71	0.03		0.52	1.79		0.79	0.40		1.15	0.96

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.79

Intersection Signal Delay: 230.3

Intersection LOS: F

Intersection Capacity Utilization 119.3%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road





Lane Group	SBR
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Stinson Village

2022 Build Phase 1 (with Gas Station) with Improvements

5: Rite Aid Driveway/Access B & Idlewild Road

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	126	576	34	1	103	1448	87	210	15	82	137	13
Future Volume (vph)	126	576	34	1	103	1448	87	210	15	82	137	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		0		300		350	0		500	0	
Storage Lanes	1		0		1		1	1		1	1	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt		0.992				0.991			0.874			0.867
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1770	3511	0	0	1770	3507	0	1770	1628	0	1770	1615
Flt Permitted	0.950				0.950			0.950			0.950	
Satd. Flow (perm)	1770	3511	0	0	1770	3507	0	1770	1628	0	1770	1615
Right Turn on Red			No				No			No		
Satd. Flow (RTOR)												
Link Speed (mph)		45				45			35			15
Link Distance (ft)		440				695			2088			460
Travel Time (s)		6.7				10.5			40.7			20.9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	140	640	38	1	114	1609	97	233	17	91	152	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	678	0	0	115	1706	0	233	108	0	152	125
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA		Prot	NA
Protected Phases	5	2		1	1	6		3	8		7	4
Permitted Phases												
Detector Phase	5	2		1	1	6		3	8		7	4
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	7.0	12.0		7.0	7.0		7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	14.0	19.0		14.0	25.0		14.0	14.0
Total Split (s)	15.0	59.0		20.0	20.0	64.0		21.0	25.0		16.0	20.0
Total Split (%)	12.5%	49.2%		16.7%	16.7%	53.3%		17.5%	20.8%		13.3%	16.7%
Maximum Green (s)	8.0	52.0		13.0	13.0	57.0		14.0	18.0		9.0	13.0
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	6.0		1.0	1.0	6.0		3.0	3.0		3.0	1.0
Minimum Gap (s)	3.0	3.0		0.2	0.2	3.0		3.0	3.0		3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	0.0	15.0		0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	30.0		0.0	0.0	30.0		0.0	0.0		0.0	0.0
Recall Mode	None	C-Min		None	None	C-Min		None	None		None	None
Act Effect Green (s)	11.6	58.1			12.7	59.2		16.0	18.2		11.0	13.2
Actuated g/C Ratio	0.10	0.48			0.11	0.49		0.13	0.15		0.09	0.11
v/c Ratio	0.82	0.40			0.62	0.99		0.99	0.44		0.94	0.71
Control Delay	106.0	7.4			49.9	35.4		107.8	51.6		110.6	72.4
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	106.0	7.4			49.9	35.4		107.8	51.6		110.6	72.4

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	100
Future Volume (vph)	100
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	111
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Minimum Gap (s)	
Time Before Reduce (s)	
Time To Reduce (s)	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS	F	A			D	D		F	D		F	E
Approach Delay		24.2				36.3			90.0			93.4
Approach LOS		C				D			F			F
Queue Length 50th (ft)	113	82			84	660		183	76		119	93
Queue Length 95th (ft)	m#226	130			m70	m508		#348	134		#251	#161
Internal Link Dist (ft)		360				615			2008			380
Turn Bay Length (ft)	325				300							
Base Capacity (vph)	170	1700			221	1730		236	271		162	201
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.82	0.40			0.52	0.99		0.99	0.40		0.94	0.62

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 8 (7%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 43.8

Intersection LOS: D

Intersection Capacity Utilization 80.6%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road





Lane Group	SBR
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Stinson Village
5: Rite Aid Driveway & Idlewild Road

2023 No-Build
Timing Plan: AM Peak Hour

	→	↘	↶	↙	←	↖	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↘	↑	↖	↗
Traffic Volume (vph)	582	34	1	104	1452	211	83
Future Volume (vph)	582	34	1	104	1452	211	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		150		0	500
Storage Lanes		1		1		1	1
Taper Length (ft)				100		100	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850					0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	1863	1583	0	1770	1863	1770	1583
Flt Permitted				0.950		0.950	
Satd. Flow (perm)	1863	1583	0	1770	1863	1770	1583
Right Turn on Red		No					No
Satd. Flow (RTOR)							
Link Speed (mph)	45				45	35	
Link Distance (ft)	558				460	2088	
Travel Time (s)	8.5				7.0	40.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	647	38	1	116	1613	234	92
Shared Lane Traffic (%)							
Lane Group Flow (vph)	647	38	0	117	1613	234	92
Turn Type	NA	pm+ov	Prot	Prot	NA	Prot	Perm
Protected Phases	2	4	1	1	6	4	
Permitted Phases		2					4
Detector Phase	2	4	1	1	6	4	4
Switch Phase							
Minimum Initial (s)	12.0	7.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	19.0	14.0	14.0	14.0	19.0	14.0	14.0
Total Split (s)	80.0	20.0	20.0	20.0	100.0	20.0	20.0
Total Split (%)	66.7%	16.7%	16.7%	16.7%	83.3%	16.7%	16.7%
Maximum Green (s)	73.0	13.0	13.0	13.0	93.0	13.0	13.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	6.0	1.0	1.0	1.0	6.0	1.0	1.0
Minimum Gap (s)	3.0	0.2	0.2	0.2	3.0	0.2	0.2
Time Before Reduce (s)	15.0	0.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	30.0	0.0	0.0	0.0	30.0	0.0	0.0
Recall Mode	C-Min	None	None	None	C-Min	None	None
Act Effect Green (s)	77.3	97.3		12.7	95.0	15.0	15.0
Actuated g/C Ratio	0.64	0.81		0.11	0.79	0.12	0.12
v/c Ratio	0.54	0.03		0.63	1.09	1.06	0.47
Control Delay	4.5	0.2		49.5	58.7	127.2	57.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	4.5	0.2		49.5	58.7	127.2	57.3

Stinson Village
5: Rite Aid Driveway & Idlewild Road

2023 No-Build
Timing Plan: AM Peak Hour

	→	↘	↶	↙	←	↵	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
LOS	A	A		D	E	F	E
Approach Delay	4.3				58.1	107.4	
Approach LOS	A				E	F	
Queue Length 50th (ft)	26	0		90	~1409	~199	67
Queue Length 95th (ft)	42	m1		m77	m680	#362	122
Internal Link Dist (ft)	478				380	2008	
Turn Bay Length (ft)				150			500
Base Capacity (vph)	1200	1283		221	1474	221	197
Starvation Cap Reductn	0	0		0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0
Reduced v/c Ratio	0.54	0.03		0.53	1.09	1.06	0.47

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 96 (80%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 50.5

Intersection LOS: D

Intersection Capacity Utilization 96.4%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

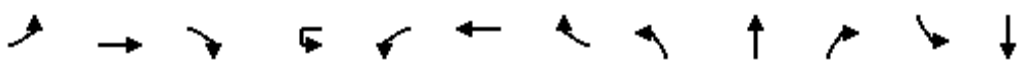
Splits and Phases: 5: Rite Aid Driveway & Idlewild Road



Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2023 Full Build (without Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	147	596	34	1	104	1504	99	211	18	83	199	23
Future Volume (vph)	147	596	34	1	104	1504	99	211	18	83	199	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0		150		0	0		500	0	
Storage Lanes	1		1		1		0	1		1	1	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.991			0.877			0.872
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1770	1863	1583	0	1770	1846	0	1770	1634	0	1770	1624
Flt Permitted	0.950				0.950			0.950			0.950	
Satd. Flow (perm)	1770	1863	1583	0	1770	1846	0	1770	1634	0	1770	1624
Right Turn on Red			No				No			No		
Satd. Flow (RTOR)												
Link Speed (mph)		45				45			35			15
Link Distance (ft)		440				695			2088			460
Travel Time (s)		6.7				10.5			40.7			20.9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	163	662	38	1	116	1671	110	234	20	92	221	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	163	662	38	0	117	1781	0	234	112	0	221	180
Turn Type	Prot	NA	pm+ov	Prot	Prot	NA		Prot	NA		Prot	NA
Protected Phases	5	2	3	1	1	6		3	8		7	4
Permitted Phases			2									
Detector Phase	5	2	3	1	1	6		3	8		7	4
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	7.0	12.0		7.0	7.0		7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	14.0	19.0		14.0	25.0		14.0	14.0
Total Split (s)	14.0	61.0	25.0	20.0	20.0	67.0		25.0	25.0		14.0	14.0
Total Split (%)	11.7%	50.8%	20.8%	16.7%	16.7%	55.8%		20.8%	20.8%		11.7%	11.7%
Maximum Green (s)	7.0	54.0	18.0	13.0	13.0	60.0		18.0	18.0		7.0	7.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	6.0	3.0	1.0	1.0	6.0		3.0	3.0		3.0	1.0
Minimum Gap (s)	3.0	3.0	3.0	0.2	0.2	3.0		3.0	3.0		3.0	0.2
Time Before Reduce (s)	0.0	15.0	0.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	30.0	0.0	0.0	0.0	30.0		0.0	0.0		0.0	0.0
Recall Mode	None	C-Min	None	None	None	C-Min		None	None		None	None
Act Effect Green (s)	9.0	58.3	82.6		12.7	62.0		19.3	20.0		9.0	9.7
Actuated g/C Ratio	0.08	0.49	0.69		0.11	0.52		0.16	0.17		0.08	0.08
v/c Ratio	1.23	0.73	0.03		0.63	1.87		0.82	0.41		1.67	1.38
Control Delay	211.4	14.4	1.3		52.0	414.9		71.8	50.0		368.4	253.6
Queue Delay	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	211.4	14.4	1.3		52.0	414.9		71.8	50.0		368.4	253.6

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2023 Full Build (without Gas Station)

Timing Plan: AM Peak Hour

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	139
Future Volume (vph)	139
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	154
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Minimum Gap (s)	
Time Before Reduce (s)	
Time To Reduce (s)	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2023 Full Build (without Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS	F	B	A		D	F		E	D		F	F
Approach Delay		51.0				392.5			64.7			316.8
Approach LOS		D				F			E			F
Queue Length 50th (ft)	~161	207	2		86	~2126		176	79		~249	~192
Queue Length 95th (ft)	m#280	m594	m5		m70	m#1590		#302	137		#409	#339
Internal Link Dist (ft)		360				615			2008			380
Turn Bay Length (ft)	75				150							
Base Capacity (vph)	132	905	1098		221	953		295	272		132	130
Starvation Cap Reductn	0	0	0		0	0		0	0		0	0
Spillback Cap Reductn	0	0	0		0	0		0	0		0	0
Storage Cap Reductn	0	0	0		0	0		0	0		0	0
Reduced v/c Ratio	1.23	0.73	0.03		0.53	1.87		0.79	0.41		1.67	1.38

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.87

Intersection Signal Delay: 267.5

Intersection LOS: F

Intersection Capacity Utilization 131.4%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

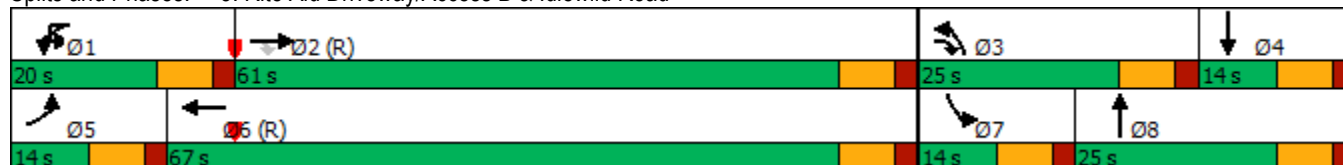
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road





Lane Group	SBR
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Stinson Village

2023 Full Build (without Gas Station) with Improvements

5: Rite Aid Driveway/Access B & Idlewild Road

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	147	596	34	1	104	1504	99	211	18	83	199	23
Future Volume (vph)	147	596	34	1	104	1504	99	211	18	83	199	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		0		300		0	0		500	250	
Storage Lanes	1		0		1		0	1		1	2	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	0.97	1.00
Frt		0.992				0.991			0.877			
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1770	3511	0	0	1770	3507	0	1770	1634	0	3433	1863
Flt Permitted	0.950				0.950			0.950			0.950	
Satd. Flow (perm)	1770	3511	0	0	1770	3507	0	1770	1634	0	3433	1863
Right Turn on Red			No				No			No		
Satd. Flow (RTOR)												
Link Speed (mph)		45				45			35			15
Link Distance (ft)		440				695			2088			460
Travel Time (s)		6.7				10.5			40.7			20.9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	163	662	38	1	116	1671	110	234	20	92	221	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	163	700	0	0	117	1781	0	234	112	0	221	26
Turn Type	Prot	NA		Prot	Prot	NA		Prot	NA		Prot	NA
Protected Phases	5	2		1	1	6		3	8		7	4
Permitted Phases												
Detector Phase	5	2		1	1	6		3	8		7	4
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	7.0	12.0		7.0	7.0		7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	14.0	19.0		14.0	25.0		14.0	14.0
Total Split (s)	16.0	61.0		20.0	20.0	65.0		25.0	25.0		14.0	14.0
Total Split (%)	13.3%	50.8%		16.7%	16.7%	54.2%		20.8%	20.8%		11.7%	11.7%
Maximum Green (s)	9.0	54.0		13.0	13.0	58.0		18.0	18.0		7.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	6.0		1.0	1.0	6.0		3.0	3.0		3.0	1.0
Minimum Gap (s)	3.0	3.0		0.2	0.2	3.0		3.0	3.0		3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	0.0	15.0		0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	30.0		0.0	0.0	30.0		0.0	0.0		0.0	0.0
Recall Mode	None	C-Min		None	None	C-Min		None	None		None	None
Act Effect Green (s)	13.9	61.6			12.7	60.4		22.3	16.7		9.0	9.0
Actuated g/C Ratio	0.12	0.51			0.11	0.50		0.19	0.14		0.08	0.08
v/c Ratio	0.80	0.39			0.63	1.01		0.71	0.49		0.86	0.19
Control Delay	98.4	7.8			72.7	43.9		59.7	54.4		84.5	55.6
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	98.4	7.8			72.7	43.9		59.7	54.4		84.5	55.6



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	139
Future Volume (vph)	139
Ideal Flow (vphpl)	1900
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	154
Shared Lane Traffic (%)	
Lane Group Flow (vph)	154
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Detector Phase	5
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	14.0
Total Split (s)	16.0
Total Split (%)	13.3%
Maximum Green (s)	9.0
Yellow Time (s)	5.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	-2.0
Total Lost Time (s)	5.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Act Effect Green (s)	22.3
Actuated g/C Ratio	0.19
v/c Ratio	0.53
Control Delay	50.5
Queue Delay	0.0
Total Delay	50.5

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS	F	A			E	D		E	D		F	E
Approach Delay		24.9				45.7			58.0			69.6
Approach LOS		C				D			E			E
Queue Length 50th (ft)	~135	87			90	~770		176	79		88	19
Queue Length 95th (ft)	m#259	133			m107	#916		#302	137		#158	49
Internal Link Dist (ft)		360				615			2008			380
Turn Bay Length (ft)	325				300						250	
Base Capacity (vph)	204	1802			221	1766		329	272		257	139
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.80	0.39			0.53	1.01		0.71	0.41		0.86	0.19

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 44.5

Intersection LOS: D

Intersection Capacity Utilization 83.7%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road





Lane Group	SBR
LOS	D
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	106
Queue Length 95th (ft)	174
Internal Link Dist (ft)	
Turn Bay Length (ft)	250
Base Capacity (vph)	293
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.53
Intersection Summary	

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2023 Full Build (with Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	220	617	34	1	104	1546	141	211	27	83	282	33
Future Volume (vph)	220	617	34	1	104	1546	141	211	27	83	282	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0		150		0	0		500	0	
Storage Lanes	1		1		1		0	1		1	1	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.987			0.887			0.872
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1770	1863	1583	0	1770	1839	0	1770	1652	0	1770	1624
Flt Permitted	0.950				0.950			0.950			0.950	
Satd. Flow (perm)	1770	1863	1583	0	1770	1839	0	1770	1652	0	1770	1624
Right Turn on Red			No				No			No		
Satd. Flow (RTOR)												
Link Speed (mph)		45				45			35			15
Link Distance (ft)		440				695			2088			460
Travel Time (s)		6.7				10.5			40.7			20.9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	244	686	38	1	116	1718	157	234	30	92	313	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	244	686	38	0	117	1875	0	234	122	0	313	249
Turn Type	Prot	NA	pm+ov	Prot	Prot	NA		Prot	NA		Prot	NA
Protected Phases	5	2	3	1	1	6		3	8		7	4
Permitted Phases			2									
Detector Phase	5	2	3	1	1	6		3	8		7	4
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	7.0	12.0		7.0	7.0		7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	14.0	19.0		14.0	25.0		14.0	14.0
Total Split (s)	14.0	61.0	25.0	20.0	20.0	67.0		25.0	25.0		14.0	14.0
Total Split (%)	11.7%	50.8%	20.8%	16.7%	16.7%	55.8%		20.8%	20.8%		11.7%	11.7%
Maximum Green (s)	7.0	54.0	18.0	13.0	13.0	60.0		18.0	18.0		7.0	7.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	6.0	3.0	1.0	1.0	6.0		3.0	3.0		3.0	1.0
Minimum Gap (s)	3.0	3.0	3.0	0.2	0.2	3.0		3.0	3.0		3.0	0.2
Time Before Reduce (s)	0.0	15.0	0.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	30.0	0.0	0.0	0.0	30.0		0.0	0.0		0.0	0.0
Recall Mode	None	C-Min	None	None	None	C-Min		None	None		None	None
Act Effect Green (s)	9.0	58.3	82.6		12.7	62.0		19.3	20.0		9.0	9.7
Actuated g/C Ratio	0.08	0.49	0.69		0.11	0.52		0.16	0.17		0.08	0.08
v/c Ratio	1.85	0.76	0.03		0.63	1.97		0.82	0.44		2.37	1.92
Control Delay	445.6	14.6	1.1		52.3	461.2		71.8	50.8		664.3	467.8
Queue Delay	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	445.6	14.6	1.1		52.3	461.2		71.8	50.8		664.3	467.8

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2023 Full Build (with Gas Station)
Timing Plan: AM Peak Hour

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	191
Future Volume (vph)	191
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	212
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Minimum Gap (s)	
Time Before Reduce (s)	
Time To Reduce (s)	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2023 Full Build (with Gas Station)
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS	F	B	A		D	F		E	D		F	F
Approach Delay		122.7				437.2			64.6			577.2
Approach LOS		F				F			E			F
Queue Length 50th (ft)	~296	215	0		86	~2283		176	86		~398	~303
Queue Length 95th (ft)	m#422	m599	m5		m68	m#1619		#302	149		#578	#469
Internal Link Dist (ft)		360				615			2008			380
Turn Bay Length (ft)	75				150							
Base Capacity (vph)	132	905	1098		221	950		295	275		132	130
Starvation Cap Reductn	0	0	0		0	0		0	0		0	0
Spillback Cap Reductn	0	0	0		0	0		0	0		0	0
Storage Cap Reductn	0	0	0		0	0		0	0		0	0
Reduced v/c Ratio	1.85	0.76	0.03		0.53	1.97		0.79	0.44		2.37	1.92

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.37

Intersection Signal Delay: 344.8

Intersection LOS: F

Intersection Capacity Utilization 144.0%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

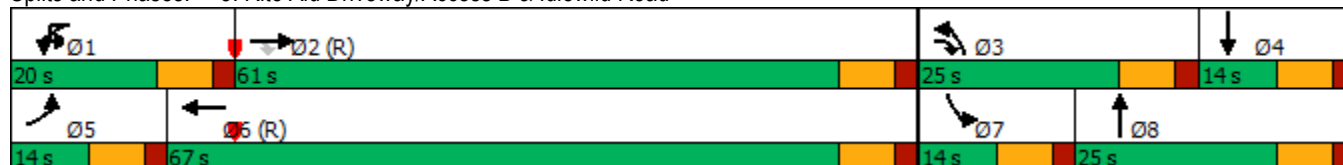
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road





Lane Group	SBR
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Stinson Village

2023 Full Build (with Gas Station) with Improvements

5: Rite Aid Driveway/Access B & Idlewild Road

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	 	 			 	 		 	 		 	
Traffic Volume (vph)	220	617	34	1	104	1546	141	211	27	83	282	33
Future Volume (vph)	220	617	34	1	104	1546	141	211	27	83	282	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		0		300		400	0		500	250	
Storage Lanes	2		0		1		1	1		1	2	
Taper Length (ft)	100				100			100			100	
Lane Util. Factor	0.97	0.95	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00
Frt		0.992					0.850		0.887			
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	3433	3511	0	0	1770	3539	1583	1770	1652	0	3433	1863
Flt Permitted	0.950				0.950			0.950			0.950	
Satd. Flow (perm)	3433	3511	0	0	1770	3539	1583	1770	1652	0	3433	1863
Right Turn on Red			No				No			No		
Satd. Flow (RTOR)												
Link Speed (mph)		45				45			35			15
Link Distance (ft)		440				695			2088			460
Travel Time (s)		6.7				10.5			40.7			20.9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	244	686	38	1	116	1718	157	234	30	92	313	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	244	724	0	0	117	1718	157	234	122	0	313	37
Turn Type	Prot	NA		Prot	Prot	NA	pm+ov	Prot	NA		Prot	NA
Protected Phases	5	2		1	1	6	7	3	8		7	4
Permitted Phases							6					
Detector Phase	5	2		1	1	6	7	3	8		7	4
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	7.0	12.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	14.0	19.0	14.0	14.0	25.0		14.0	14.0
Total Split (s)	14.0	58.0		20.0	20.0	64.0	17.0	26.0	25.0		17.0	16.0
Total Split (%)	11.7%	48.3%		16.7%	16.7%	53.3%	14.2%	21.7%	20.8%		14.2%	13.3%
Maximum Green (s)	7.0	51.0		13.0	13.0	57.0	10.0	19.0	18.0		10.0	9.0
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	6.0		1.0	1.0	6.0	3.0	3.0	3.0		3.0	1.0
Minimum Gap (s)	3.0	3.0		0.2	0.2	3.0	3.0	3.0	3.0		3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	0.0	15.0	0.0	0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	30.0		0.0	0.0	30.0	0.0	0.0	0.0		0.0	0.0
Recall Mode	None	C-Min		None	None	C-Min	None	None	None		None	None
Act Effect Green (s)	9.7	56.0			12.7	59.0	76.0	20.0	19.3		12.0	11.3
Actuated g/C Ratio	0.08	0.47			0.11	0.49	0.63	0.17	0.16		0.10	0.09
v/c Ratio	0.88	0.44			0.63	0.99	0.16	0.80	0.46		0.91	0.21
Control Delay	103.6	9.9			66.4	39.5	7.0	67.9	51.5		84.5	53.8
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	103.6	9.9			66.4	39.5	7.0	67.9	51.5		84.5	53.8



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	191
Future Volume (vph)	191
Ideal Flow (vphpl)	1900
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Adj. Flow (vph)	212
Shared Lane Traffic (%)	
Lane Group Flow (vph)	212
Turn Type	pt+ov
Protected Phases	4 5
Permitted Phases	
Detector Phase	4 5
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Minimum Gap (s)	
Time Before Reduce (s)	
Time To Reduce (s)	
Recall Mode	
Act Effect Green (s)	26.0
Actuated g/C Ratio	0.22
v/c Ratio	0.62
Control Delay	51.9
Queue Delay	0.0
Total Delay	51.9

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS	F	A			E	D	A	E	D		F	D
Approach Delay		33.5				38.5			62.3			70.2
Approach LOS		C				D			E			E
Queue Length 50th (ft)	100	130			81	690	38	174	86		125	27
Queue Length 95th (ft)	m#165	m167			m94	#867	m45	#290	149		#210	62
Internal Link Dist (ft)		360				615			2008			380
Turn Bay Length (ft)	325				300		400				250	
Base Capacity (vph)	276	1637			221	1740	1002	309	275		343	175
Starvation Cap Reductn	0	0			0	0	0	0	0		0	0
Spillback Cap Reductn	0	0			0	0	0	0	0		0	0
Storage Cap Reductn	0	0			0	0	0	0	0		0	0
Reduced v/c Ratio	0.88	0.44			0.53	0.99	0.16	0.76	0.44		0.91	0.21

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 44.0

Intersection LOS: D

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road



Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2023 Full Build (with Gas Station) with Improvements

Timing Plan: AM Peak Hour



Lane Group	SBR
LOS	D
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	151
Queue Length 95th (ft)	237
Internal Link Dist (ft)	
Turn Bay Length (ft)	250
Base Capacity (vph)	342
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.62
Intersection Summary	

Village at Idlewild
5: Rite Aid Driveway/Access B & Idlewild Road

2040 Full Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1994	25	25	2509	141	156	27	65	282	33	191
Future Volume (vph)	220	1994	25	25	2509	141	156	27	65	282	33	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		375	300		100	400		300	250		250
Storage Lanes	2		1	1		1	2		1	2		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	0.97	1.00	1.00	0.97	1.00	0.88
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	3433	1863	1583	3433	1863	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	1770	5085	1583	3433	1863	1583	3433	1863	2787
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		440			695			2088			460	
Travel Time (s)		6.7			10.5			40.7			9.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	244	2216	28	28	2788	157	173	30	72	313	37	212
Shared Lane Traffic (%)												
Lane Group Flow (vph)	244	2216	28	28	2788	157	173	30	72	313	37	212
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	14.0	75.0	16.0	14.0	75.0	17.0	16.0	14.0	14.0	17.0	15.0	14.0
Total Split (%)	11.7%	62.5%	13.3%	11.7%	62.5%	14.2%	13.3%	11.7%	11.7%	14.2%	12.5%	11.7%
Maximum Green (s)	7.0	68.0	9.0	7.0	68.0	10.0	9.0	7.0	7.0	10.0	8.0	7.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes			Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Min	None	None	C-Min	None	None	None	None	None	None	None
Act Effect Green (s)	11.4	78.0	95.4	9.4	73.2	90.2	11.4	9.0	17.8	12.0	9.6	20.4
Actuated g/C Ratio	0.10	0.65	0.80	0.08	0.61	0.75	0.10	0.08	0.15	0.10	0.08	0.17
v/c Ratio	0.75	0.67	0.02	0.20	0.90	0.13	0.53	0.22	0.31	0.91	0.25	0.45
Control Delay	76.2	7.1	1.3	53.5	15.0	2.3	58.4	56.3	46.9	84.5	56.1	47.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.2	7.1	1.3	53.5	15.0	2.3	58.4	56.3	46.9	84.5	56.1	47.0
LOS	E	A	A	D	B	A	E	E	D	F	E	D
Approach Delay		13.8			14.7			55.1			68.5	
Approach LOS		B			B			E			E	

Village at Idlewild
5: Rite Aid Driveway/Access B & Idlewild Road

2040 Full Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	104	106	1	22	249	18	67	22	48	125	27	81
Queue Length 95th (ft)	#187	132	m2	m28	328	m19	105	54	92	#210	63	123
Internal Link Dist (ft)		360			615			2008			380	
Turn Bay Length (ft)	325		375	300		100	400		300	250		250
Base Capacity (vph)	327	3305	1258	138	3100	1189	326	139	234	343	155	474
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.67	0.02	0.20	0.90	0.13	0.53	0.22	0.31	0.91	0.24	0.45

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 29 (24%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 20.9

Intersection LOS: C

Intersection Capacity Utilization 82.0%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road

 Ø1	 Ø2 (R)	 Ø3	 Ø4
14 s	75 s	16 s	15 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
14 s	75 s	17 s	14 s

Stinson Village
5: Rite Aid Driveway & Idlewild Road

2019 Existing
Timing Plan: PM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↔	↑	↔	
Traffic Volume (vph)	1012	28	88	873	119	206
Future Volume (vph)	1012	28	88	873	119	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	150		0	0
Storage Lanes		1	1		1	0
Taper Length (ft)			100		100	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.914	
Flt Protected			0.950		0.982	
Satd. Flow (prot)	1863	1583	1770	1863	1672	0
Flt Permitted			0.052		0.982	
Satd. Flow (perm)	1863	1583	97	1863	1672	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	558			2122	2088	
Travel Time (s)	8.5			32.2	40.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1124	31	98	970	132	229
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1124	31	98	970	361	0
Turn Type	NA	Perm	pm+pt	NA	Prot	
Protected Phases	2		1	6	4	
Permitted Phases		2	6			
Detector Phase	2	2	1	6	4	
Switch Phase						
Minimum Initial (s)	12.0	12.0	7.0	12.0	7.0	
Minimum Split (s)	19.0	19.0	13.0	19.0	12.0	
Total Split (s)	77.0	77.0	13.0	90.0	30.0	
Total Split (%)	64.2%	64.2%	10.8%	75.0%	25.0%	
Maximum Green (s)	70.8	70.8	7.7	83.8	25.1	
Yellow Time (s)	4.9	4.9	3.0	4.9	3.0	
All-Red Time (s)	1.3	1.3	2.3	1.3	1.9	
Lost Time Adjust (s)	-1.2	-1.2	-0.3	-1.2	0.1	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	6.0	6.0	1.0	6.0	1.0	
Minimum Gap (s)	3.0	3.0	0.2	3.0	0.2	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	30.0	30.0	0.0	30.0	0.0	
Recall Mode	C-Min	C-Min	None	C-Min	None	
Act Effect Green (s)	72.5	72.5	85.0	85.0	25.0	
Actuated g/C Ratio	0.60	0.60	0.71	0.71	0.21	
v/c Ratio	1.00	0.03	0.57	0.74	1.04	
Control Delay	52.0	13.2	26.7	13.0	104.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	52.0	13.2	26.7	13.0	104.8	

Stinson Village
5: Rite Aid Driveway & Idlewild Road

2019 Existing
Timing Plan: PM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	D	B	C	B	F	
Approach Delay	50.9			14.3	104.8	
Approach LOS	D			B	F	
Queue Length 50th (ft)	814	11	33	401	~301	
Queue Length 95th (ft)	#1205	m23	m50	m505	#491	
Internal Link Dist (ft)	478			2042	2008	
Turn Bay Length (ft)			150			
Base Capacity (vph)	1125	956	180	1319	348	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	1.00	0.03	0.54	0.74	1.04	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 43.3

Intersection LOS: D

Intersection Capacity Utilization 90.9%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway & Idlewild Road



Stinson Village
5: Rite Aid Driveway & Idlewild Road

2022 No-Build
Timing Plan: PM Peak Hour

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1123	56	121	1015	273	277
Future Volume (vph)	1123	56	121	1015	273	277
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	150		0	500
Storage Lanes		1	1		1	1
Taper Length (ft)			100		100	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1863	1583	1770	1863	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1863	1583	1770	1863	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	558			2122	2088	
Travel Time (s)	8.5			32.2	40.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1248	62	134	1128	303	308
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1248	62	134	1128	303	308
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	4	1	6	4	
Permitted Phases		2				4
Detector Phase	2	4	1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	19.0	14.0	14.0	19.0	14.0	14.0
Total Split (s)	79.0	27.0	14.0	93.0	27.0	27.0
Total Split (%)	65.8%	22.5%	11.7%	77.5%	22.5%	22.5%
Maximum Green (s)	72.0	20.0	7.0	86.0	20.0	20.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	6.0	1.0	1.0	6.0	1.0	1.0
Minimum Gap (s)	3.0	0.2	0.2	3.0	0.2	0.2
Time Before Reduce (s)	15.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	30.0	0.0	0.0	30.0	0.0	0.0
Recall Mode	C-Min	None	None	C-Min	None	None
Act Effect Green (s)	74.0	101.0	9.0	88.0	22.0	22.0
Actuated g/C Ratio	0.62	0.84	0.08	0.73	0.18	0.18
v/c Ratio	1.09	0.05	1.02	0.83	0.94	1.06
Control Delay	66.7	0.6	106.4	9.9	84.8	117.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.7	0.6	106.4	9.9	84.8	117.2

Stinson Village
5: Rite Aid Driveway & Idlewild Road

2022 No-Build
Timing Plan: PM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	E	A	F	A	F	F
Approach Delay	63.6			20.1	101.1	
Approach LOS	E			C	F	
Queue Length 50th (ft)	~1097	1	~105	380	234	~263
Queue Length 95th (ft)	#1329	m2	m#122	m395	#406	#441
Internal Link Dist (ft)	478			2042	2008	
Turn Bay Length (ft)			150			500
Base Capacity (vph)	1148	1332	132	1366	324	290
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.05	1.02	0.83	0.94	1.06

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 108 (90%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 53.5

Intersection LOS: D

Intersection Capacity Utilization 95.5%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway & Idlewild Road



Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2022 Build Phase 1 (without Gas Station)

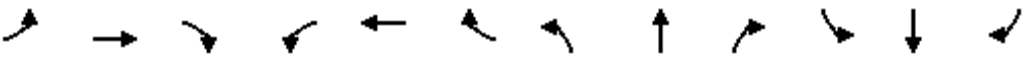
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	1093	56	121	1013	29	273	4	277	61	4	30
Future Volume (vph)	61	1093	56	121	1013	29	273	4	277	61	4	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	150		0	0		500	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.996			0.852			0.866	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1855	0	1770	1587	0	1770	1613	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	1770	1855	0	1770	1587	0	1770	1613	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			15	
Link Distance (ft)		440			695			2088			460	
Travel Time (s)		6.7			10.5			40.7			20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	68	1214	62	134	1126	32	303	4	308	68	4	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	1214	62	134	1158	0	303	312	0	68	37	0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2									
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0		14.0	25.0		14.0	14.0	
Total Split (s)	14.0	61.0	25.0	20.0	67.0		25.0	25.0		14.0	14.0	
Total Split (%)	11.7%	50.8%	20.8%	16.7%	55.8%		20.8%	20.8%		11.7%	11.7%	
Maximum Green (s)	7.0	54.0	18.0	13.0	60.0		18.0	18.0		7.0	7.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0	3.0	1.0	6.0		3.0	3.0		3.0	1.0	
Minimum Gap (s)	3.0	3.0	3.0	0.2	3.0		3.0	3.0		3.0	0.2	
Time Before Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	30.0	0.0	0.0	30.0		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Min	None	None	C-Min		None	None		None	None	
Act Effect Green (s)	9.0	57.8	88.4	13.2	64.8		25.6	22.8		9.0	9.0	
Actuated g/C Ratio	0.08	0.48	0.74	0.11	0.54		0.21	0.19		0.08	0.08	
v/c Ratio	0.52	1.35	0.05	0.69	1.16		0.80	1.04		0.52	0.31	
Control Delay	77.2	186.1	2.4	53.7	107.4		63.5	110.1		67.8	59.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	77.2	186.1	2.4	53.7	107.4		63.5	110.1		67.8	59.8	

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2022 Build Phase 1 (without Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	F	A	D	F		E	F		E	E	
Approach Delay		172.1			101.9			87.1			65.0	
Approach LOS		F			F			F			E	
Queue Length 50th (ft)	56	~1232	6	98	~1097		~251	~290		52	28	
Queue Length 95th (ft)	m92	m#1502	m7	m106	m#1189		#430	#470		101	64	
Internal Link Dist (ft)		360			615			2008			380	
Turn Bay Length (ft)	75			150								
Base Capacity (vph)	132	898	1166	221	1001		377	301		132	120	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.52	1.35	0.05	0.61	1.16		0.80	1.04		0.52	0.31	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 116 (97%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.35

Intersection Signal Delay: 126.1

Intersection LOS: F

Intersection Capacity Utilization 104.1%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

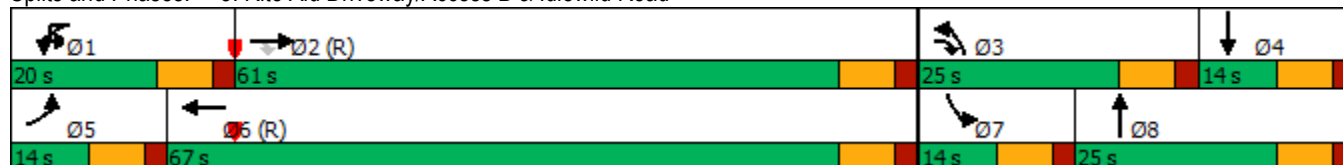
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road



Stinson Village

2022 Build Phase 1 (without Gas Station) with Improvements

5: Rite Aid Driveway/Access B & Idlewild Road

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	1093	56	121	1013	29	273	4	277	61	4	30
Future Volume (vph)	61	1093	56	121	1013	29	273	4	277	61	4	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	300		350	0		500	0		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.996			0.852			0.866	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3514	0	1770	3525	0	1770	1587	0	1770	1613	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3514	0	1770	3525	0	1770	1587	0	1770	1613	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			15	
Link Distance (ft)		440			695			2088			460	
Travel Time (s)		6.7			10.5			40.7			20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	68	1214	62	134	1126	32	303	4	308	68	4	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	1276	0	134	1158	0	303	312	0	68	37	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	25.0		14.0	14.0	
Total Split (s)	15.0	55.0		17.0	57.0		30.0	34.0		14.0	18.0	
Total Split (%)	12.5%	45.8%		14.2%	47.5%		25.0%	28.3%		11.7%	15.0%	
Maximum Green (s)	8.0	48.0		10.0	50.0		23.0	27.0		7.0	11.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0		1.0	6.0		3.0	3.0		3.0	1.0	
Minimum Gap (s)	3.0	3.0		0.2	3.0		3.0	3.0		3.0	0.2	
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	30.0		0.0	30.0		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effect Green (s)	9.9	54.6		11.7	59.3		27.8	27.4		9.0	11.4	
Actuated g/C Ratio	0.08	0.46		0.10	0.49		0.23	0.23		0.08	0.10	
v/c Ratio	0.47	0.80		0.77	0.67		0.74	0.86		0.52	0.24	
Control Delay	68.1	23.3		58.1	27.3		55.4	67.3		67.8	53.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	68.1	23.3		58.1	27.3		55.4	67.3		67.8	53.6	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C		E	C		E	E		E	D	
Approach Delay		25.6			30.5			61.4			62.8	
Approach LOS		C			C			E			E	
Queue Length 50th (ft)	48	304		99	425		226	229		52	27	
Queue Length 95th (ft)	m87	476		m107	m402		#370	#374		101	61	
Internal Link Dist (ft)		360			615			2008			380	
Turn Bay Length (ft)	175			300								
Base Capacity (vph)	148	1600		180	1741		418	383		132	174	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.46	0.80		0.74	0.67		0.72	0.81		0.52	0.21	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 116 (97%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 35.2

Intersection LOS: D

Intersection Capacity Utilization 78.6%

ICU Level of Service D

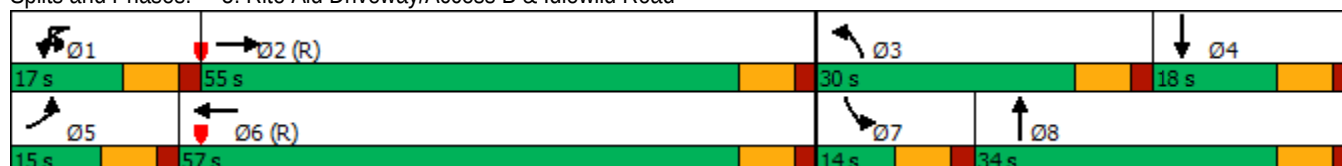
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road



Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2022 Build Phase 1 (with Gas Station)

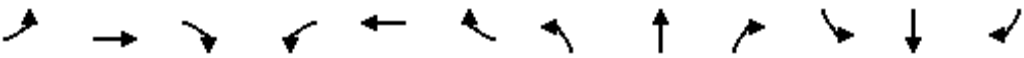
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	1098	56	121	1040	64	273	12	277	133	10	73
Future Volume (vph)	126	1098	56	121	1040	64	273	12	277	133	10	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	150		0	0		500	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.991			0.856			0.868	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1846	0	1770	1595	0	1770	1617	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	1770	1846	0	1770	1595	0	1770	1617	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			15	
Link Distance (ft)		440			695			2088			460	
Travel Time (s)		6.7			10.5			40.7			20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	140	1220	62	134	1156	71	303	13	308	148	11	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	1220	62	134	1227	0	303	321	0	148	92	0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2									
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0		14.0	25.0		14.0	14.0	
Total Split (s)	14.0	61.0	25.0	20.0	67.0		25.0	25.0		14.0	14.0	
Total Split (%)	11.7%	50.8%	20.8%	16.7%	55.8%		20.8%	20.8%		11.7%	11.7%	
Maximum Green (s)	7.0	54.0	18.0	13.0	60.0		18.0	18.0		7.0	7.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0	3.0	1.0	6.0		3.0	3.0		3.0	1.0	
Minimum Gap (s)	3.0	3.0	3.0	0.2	3.0		3.0	3.0		3.0	0.2	
Time Before Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	30.0	0.0	0.0	30.0		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Min	None	None	C-Min		None	None		None	None	
Act Effect Green (s)	9.0	57.8	82.8	13.2	62.0		20.0	20.0		9.0	9.0	
Actuated g/C Ratio	0.08	0.48	0.69	0.11	0.52		0.17	0.17		0.08	0.08	
v/c Ratio	1.06	1.36	0.06	0.69	1.29		1.03	1.21		1.12	0.76	
Control Delay	147.9	189.0	1.6	53.5	163.2		108.8	167.6		164.7	90.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	147.9	189.0	1.6	53.5	163.2		108.8	167.6		164.7	90.7	

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2022 Build Phase 1 (with Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F	A	D	F		F	F		F	F	
Approach Delay		176.7			152.4			139.1			136.3	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	~123	~1243	4	98	~1216		~251	~303		~132	71	
Queue Length 95th (ft)	m#212	m#1421	m4	m102	m#1246		#430	#485		#267	#160	
Internal Link Dist (ft)		360			615			2008			380	
Turn Bay Length (ft)	75			150								
Base Capacity (vph)	132	898	1092	221	953		295	265		132	121	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	1.06	1.36	0.06	0.61	1.29		1.03	1.21		1.12	0.76	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.36

Intersection Signal Delay: 158.5

Intersection LOS: F

Intersection Capacity Utilization 107.4%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

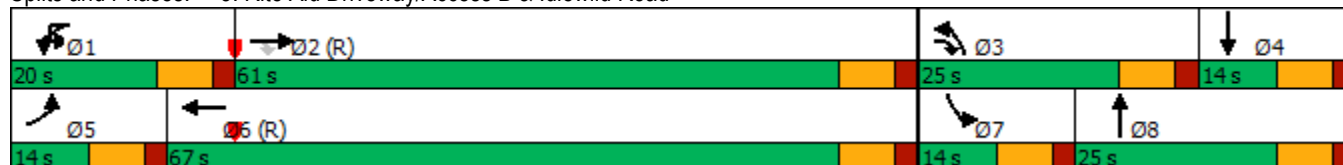
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road



Stinson Village

2022 Build Phase 1 (with Gas Station) with Improvements

5: Rite Aid Driveway/Access B & Idlewild Road

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	1098	56	121	1040	64	273	12	277	133	10	73
Future Volume (vph)	126	1098	56	121	1040	64	273	12	277	133	10	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		0	300		350	0		500	0		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.991			0.856			0.868	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3514	0	1770	3507	0	1770	1595	0	1770	1617	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3514	0	1770	3507	0	1770	1595	0	1770	1617	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			15	
Link Distance (ft)		440			695			2088			460	
Travel Time (s)		6.7			10.5			40.7			20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	140	1220	62	134	1156	71	303	13	308	148	11	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	1282	0	134	1227	0	303	321	0	148	92	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	25.0		14.0	14.0	
Total Split (s)	17.0	54.0		16.0	53.0		30.0	33.0		17.0	20.0	
Total Split (%)	14.2%	45.0%		13.3%	44.2%		25.0%	27.5%		14.2%	16.7%	
Maximum Green (s)	10.0	47.0		9.0	46.0		23.0	26.0		10.0	13.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0		1.0	6.0		3.0	3.0		3.0	1.0	
Minimum Gap (s)	3.0	3.0		0.2	3.0		3.0	3.0		3.0	0.2	
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	30.0		0.0	30.0		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effect Green (s)	12.0	49.8		10.9	48.6		24.1	27.1		12.2	15.3	
Actuated g/C Ratio	0.10	0.42		0.09	0.40		0.20	0.23		0.10	0.13	
v/c Ratio	0.79	0.88		0.84	0.86		0.86	0.89		0.82	0.45	
Control Delay	80.7	29.3		62.1	35.2		68.9	71.8		86.5	56.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	80.7	29.3		62.1	35.2		68.9	71.8		86.5	56.3	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	C		E	D		E	E		F	E	
Approach Delay		34.4			37.9			70.4			75.0	
Approach LOS		C			D			E			E	
Queue Length 50th (ft)	104	298		101	478		226	240		114	67	
Queue Length 95th (ft)	m#186	#532		m106	m445		#370	#400		#231	122	
Internal Link Dist (ft)		360			615			2008			380	
Turn Bay Length (ft)	325			300								
Base Capacity (vph)	177	1458		162	1420		368	372		180	205	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.79	0.88		0.83	0.86		0.82	0.86		0.82	0.45	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 44.5

Intersection LOS: D

Intersection Capacity Utilization 80.6%

ICU Level of Service D

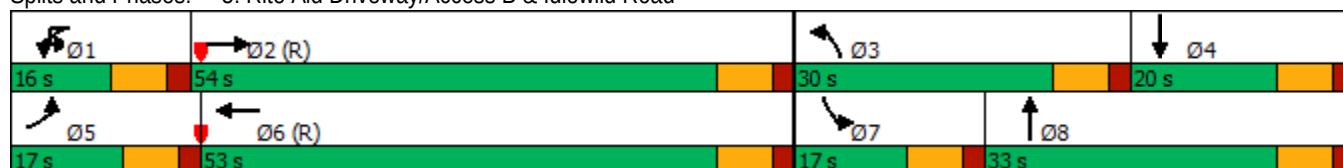
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road



Stinson Village
5: Rite Aid Driveway & Idlewild Road

2023 No-Build
Timing Plan: PM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↔	↑	↖	↗
Traffic Volume (vph)	1150	57	123	1039	276	282
Future Volume (vph)	1150	57	123	1039	276	282
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	150		0	500
Storage Lanes		1	1		1	1
Taper Length (ft)			100		100	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1863	1583	1770	1863	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1863	1583	1770	1863	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	558			460	2088	
Travel Time (s)	8.5			7.0	40.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1278	63	137	1154	307	313
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1278	63	137	1154	307	313
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	4	1	6	4	
Permitted Phases		2				4
Detector Phase	2	4	1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	19.0	14.0	14.0	19.0	14.0	14.0
Total Split (s)	80.0	20.0	20.0	100.0	20.0	20.0
Total Split (%)	66.7%	16.7%	16.7%	83.3%	16.7%	16.7%
Maximum Green (s)	73.0	13.0	13.0	93.0	13.0	13.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	6.0	1.0	1.0	6.0	1.0	1.0
Minimum Gap (s)	3.0	0.2	0.2	3.0	0.2	0.2
Time Before Reduce (s)	15.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	30.0	0.0	0.0	30.0	0.0	0.0
Recall Mode	C-Min	None	None	C-Min	None	None
Act Effect Green (s)	76.7	96.7	13.3	95.0	15.0	15.0
Actuated g/C Ratio	0.64	0.81	0.11	0.79	0.12	0.12
v/c Ratio	1.07	0.05	0.70	0.78	1.39	1.59
Control Delay	59.8	0.8	60.4	8.4	239.8	322.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.8	0.8	60.4	8.4	239.8	322.5

Stinson Village
5: Rite Aid Driveway & Idlewild Road

2023 No-Build
Timing Plan: PM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	E	A	E	A	F	F
Approach Delay	57.0			13.9	281.5	
Approach LOS	E			B	F	
Queue Length 50th (ft)	~1135	5	100	334	~317	~345
Queue Length 95th (ft)	m#1396	m1	m109	m531	#497	#526
Internal Link Dist (ft)	478			380	2008	
Turn Bay Length (ft)			150			500
Base Capacity (vph)	1191	1276	221	1474	221	197
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.07	0.05	0.62	0.78	1.39	1.59

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 93 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.59

Intersection Signal Delay: 82.7

Intersection LOS: F

Intersection Capacity Utilization 97.3%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway & Idlewild Road



Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2023 Full Build (without Gas Station)

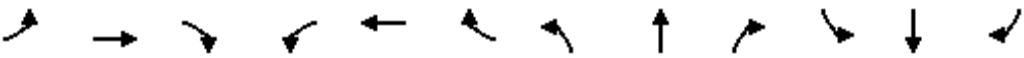
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	1139	57	123	1085	91	276	18	282	162	14	90
Future Volume (vph)	173	1139	57	123	1085	91	276	18	282	162	14	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	150		0	0		500	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.988			0.859			0.871	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1840	0	1770	1600	0	1770	1622	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	1770	1840	0	1770	1600	0	1770	1622	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			15	
Link Distance (ft)		440			695			2088			460	
Travel Time (s)		6.7			10.5			40.7			20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	192	1266	63	137	1206	101	307	20	313	180	16	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	1266	63	137	1307	0	307	333	0	180	116	0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2									
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0		14.0	25.0		14.0	14.0	
Total Split (s)	14.0	61.0	25.0	20.0	67.0		25.0	25.0		14.0	14.0	
Total Split (%)	11.7%	50.8%	20.8%	16.7%	55.8%		20.8%	20.8%		11.7%	11.7%	
Maximum Green (s)	7.0	54.0	18.0	13.0	60.0		18.0	18.0		7.0	7.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0	3.0	1.0	6.0		3.0	3.0		3.0	1.0	
Minimum Gap (s)	3.0	3.0	3.0	0.2	3.0		3.0	3.0		3.0	0.2	
Time Before Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	30.0	0.0	0.0	30.0		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Min	None	None	C-Min		None	None		None	None	
Act Effect Green (s)	9.0	57.7	82.7	13.3	62.0		20.0	20.0		9.0	9.0	
Actuated g/C Ratio	0.08	0.48	0.69	0.11	0.52		0.17	0.17		0.08	0.08	
v/c Ratio	1.45	1.41	0.06	0.70	1.38		1.04	1.25		1.36	0.96	
Control Delay	275.8	212.1	2.5	49.5	199.6		112.1	182.1		246.2	127.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	275.8	212.1	2.5	49.5	199.6		112.1	182.1		246.2	127.1	

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2023 Full Build (without Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F	A	D	F		F	F		F	F	
Approach Delay		211.5			185.4			148.5			199.5	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	~209	~1325	6	101	~1347		~257	~322		~183	91	
Queue Length 95th (ft)	m#296	m#1410	m6	m99	m#1285		#438	#506		#330	#211	
Internal Link Dist (ft)		360			615			2008			380	
Turn Bay Length (ft)	75			150								
Base Capacity (vph)	132	896	1091	221	950		295	266		132	121	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	1.45	1.41	0.06	0.62	1.38		1.04	1.25		1.36	0.96	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 116 (97%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.45

Intersection Signal Delay: 190.6

Intersection LOS: F

Intersection Capacity Utilization 116.2%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

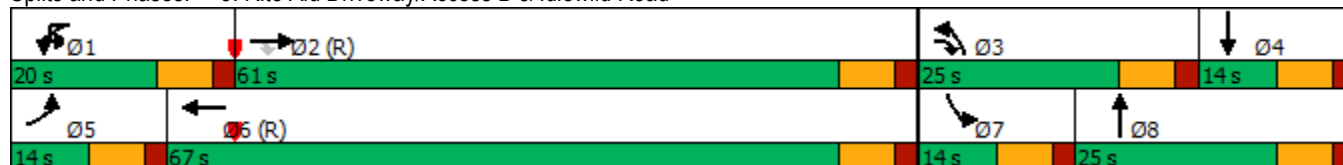
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road



Stinson Village

2023 Full Build (without Gas Station) with Improvements

5: Rite Aid Driveway/Access B & Idlewild Road

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	1139	57	123	1085	91	276	18	282	162	14	90
Future Volume (vph)	173	1139	57	123	1085	91	276	18	282	162	14	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		0	300		0	0		500	250		250
Storage Lanes	1		0	1		0	1		1	2		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.993			0.988			0.859				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3514	0	1770	3497	0	1770	1600	0	3433	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3514	0	1770	3497	0	1770	1600	0	3433	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			15	
Link Distance (ft)		440			695			2088			460	
Travel Time (s)		6.7			10.5			40.7			20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	192	1266	63	137	1206	101	307	20	313	180	16	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	1329	0	137	1307	0	307	333	0	180	16	100
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pt+ov
Protected Phases	5	2		1	6		3	8		7	4	4 5
Permitted Phases												
Detector Phase	5	2		1	6		3	8		7	4	4 5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	25.0		14.0	14.0	
Total Split (s)	20.0	57.0		16.0	53.0		30.0	33.0		14.0	17.0	
Total Split (%)	16.7%	47.5%		13.3%	44.2%		25.0%	27.5%		11.7%	14.2%	
Maximum Green (s)	13.0	50.0		9.0	46.0		23.0	26.0		7.0	10.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0		1.0	6.0		3.0	3.0		3.0	1.0	
Minimum Gap (s)	3.0	3.0		0.2	3.0		3.0	3.0		3.0	0.2	
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	30.0		0.0	30.0		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effect Green (s)	15.1	52.7		10.9	48.5		24.2	27.4		9.0	12.2	32.3
Actuated g/C Ratio	0.13	0.44		0.09	0.40		0.20	0.23		0.08	0.10	0.27
v/c Ratio	0.86	0.86		0.85	0.92		0.86	0.91		0.70	0.08	0.23
Control Delay	82.0	27.8		90.0	38.1		69.9	75.0		69.3	50.4	36.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	82.0	27.8		90.0	38.1		69.9	75.0		69.3	50.4	36.2

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	C		F	D		E	E		E	D	D
Approach Delay		34.6			43.0			72.6			57.1	
Approach LOS		C			D			E			E	
Queue Length 50th (ft)	143	327		96	504		230	251		71	11	61
Queue Length 95th (ft)	m#246	520		m#177	m#558		#378	#420		#118	34	109
Internal Link Dist (ft)		360			615			2008			380	
Turn Bay Length (ft)	325			300						250		250
Base Capacity (vph)	222	1542		162	1413		368	373		257	190	426
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.86	0.86		0.85	0.92		0.83	0.89		0.70	0.08	0.23

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 112 (93%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 45.7

Intersection LOS: D

Intersection Capacity Utilization 83.4%

ICU Level of Service E

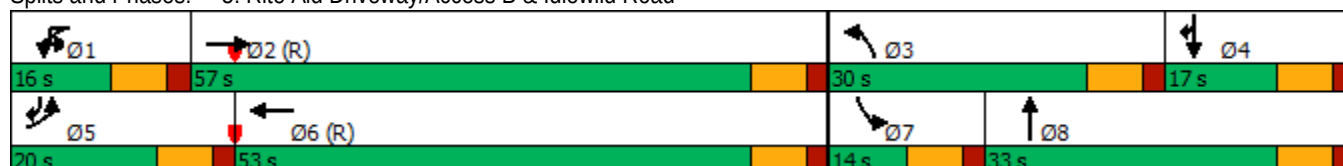
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road



Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2023 Full Build (with Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	1156	57	123	1119	126	276	27	282	231	23	134
Future Volume (vph)	234	1156	57	123	1119	126	276	27	282	231	23	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	150		0	0		500	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.985			0.863			0.872	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1835	0	1770	1608	0	1770	1624	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	1770	1835	0	1770	1608	0	1770	1624	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			15	
Link Distance (ft)		440			695			2088			460	
Travel Time (s)		6.7			10.5			40.7			20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	260	1284	63	137	1243	140	307	30	313	257	26	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	260	1284	63	137	1383	0	307	343	0	257	175	0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases			2									
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0		14.0	25.0		14.0	14.0	
Total Split (s)	14.0	61.0	25.0	20.0	67.0		25.0	25.0		14.0	14.0	
Total Split (%)	11.7%	50.8%	20.8%	16.7%	55.8%		20.8%	20.8%		11.7%	11.7%	
Maximum Green (s)	7.0	54.0	18.0	13.0	60.0		18.0	18.0		7.0	7.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0	3.0	1.0	6.0		3.0	3.0		3.0	1.0	
Minimum Gap (s)	3.0	3.0	3.0	0.2	3.0		3.0	3.0		3.0	0.2	
Time Before Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	30.0	0.0	0.0	30.0		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Min	None	None	C-Min		None	None		None	None	
Act Effect Green (s)	9.0	57.7	82.7	13.3	62.0		20.0	20.0		9.0	9.0	
Actuated g/C Ratio	0.08	0.48	0.69	0.11	0.52		0.17	0.17		0.08	0.08	
v/c Ratio	1.97	1.43	0.06	0.70	1.46		1.04	1.28		1.95	1.45	
Control Delay	485.6	219.8	1.6	51.8	233.6		112.1	192.3		482.2	280.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	485.6	219.8	1.6	51.8	233.6		112.1	192.3		482.2	280.4	

Stinson Village
5: Rite Aid Driveway/Access B & Idlewild Road

2023 Full Build (with Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F	A	D	F		F	F		F	F	
Approach Delay		254.3			217.2			154.4			400.4	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	~319	~1358	6	101	~1479		~257	~337		~307	~184	
Queue Length 95th (ft)	m#401	m#1368	m4	m94	m#1316		#438	#524		#475	#329	
Internal Link Dist (ft)		360			615			2008			380	
Turn Bay Length (ft)	75			150								
Base Capacity (vph)	132	896	1091	221	948		295	268		132	121	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	1.97	1.43	0.06	0.62	1.46		1.04	1.28		1.95	1.45	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 5 (4%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.97

Intersection Signal Delay: 240.5

Intersection LOS: F

Intersection Capacity Utilization 127.8%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

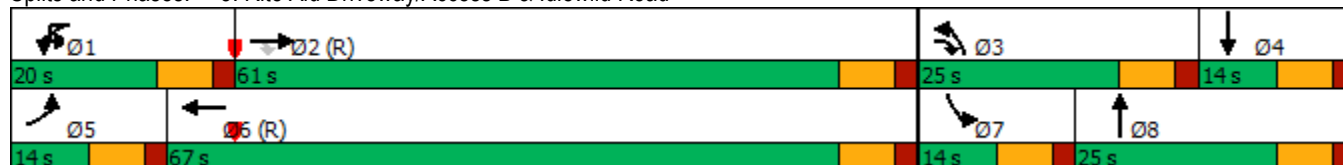
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road



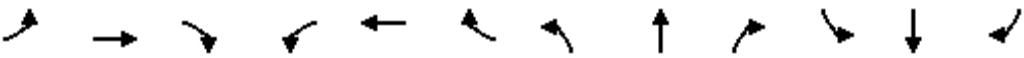
Stinson Village

2023 Full Build (with Gas Station) with Improvements

5: Rite Aid Driveway/Access B & Idlewild Road

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	1156	57	123	1119	126	276	27	282	231	23	134
Future Volume (vph)	234	1156	57	123	1119	126	276	27	282	231	23	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		0	300		400	0		500	250		250
Storage Lanes	2		0	1		1	1		1	2		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	0.97	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.993				0.850		0.863				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3514	0	1770	3539	1583	1770	1608	0	3433	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3514	0	1770	3539	1583	1770	1608	0	3433	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			15	
Link Distance (ft)		440			695			2088			460	
Travel Time (s)		6.7			10.5			40.7			20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	260	1284	63	137	1243	140	307	30	313	257	26	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	260	1347	0	137	1243	140	307	343	0	257	26	149
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA		Prot	NA	pt+ov
Protected Phases	5	2		1	6	7	3	8		7	4	4 5
Permitted Phases						6						
Detector Phase	5	2		1	6	7	3	8		7	4	4 5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	19.0		14.0	19.0	14.0	14.0	25.0		14.0	14.0	
Total Split (s)	17.0	52.0		16.0	51.0	20.0	34.0	32.0		20.0	18.0	
Total Split (%)	14.2%	43.3%		13.3%	42.5%	16.7%	28.3%	26.7%		16.7%	15.0%	
Maximum Green (s)	10.0	45.0		9.0	44.0	13.0	27.0	25.0		13.0	11.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	6.0		1.0	6.0	3.0	3.0	3.0		3.0	1.0	
Minimum Gap (s)	3.0	3.0		0.2	3.0	3.0	3.0	3.0		3.0	0.2	
Time Before Reduce (s)	0.0	15.0		0.0	15.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	30.0		0.0	30.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Min		None	C-Min	None	None	None		None	None	
Act Effect Green (s)	12.1	47.5		10.9	46.2	65.6	26.0	27.2		14.4	15.6	32.7
Actuated g/C Ratio	0.10	0.40		0.09	0.38	0.55	0.22	0.23		0.12	0.13	0.27
v/c Ratio	0.75	0.97		0.85	0.91	0.16	0.80	0.94		0.62	0.11	0.35
Control Delay	66.3	42.7		90.9	39.1	9.7	60.4	80.8		57.3	49.3	38.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	66.3	42.7		90.9	39.1	9.7	60.4	80.8		57.3	49.3	38.9

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	D		F	D	A	E	F		E	D	D
Approach Delay		46.5			41.0			71.2			50.5	
Approach LOS		D			D			E			D	
Queue Length 50th (ft)	100	450		98	506	43	222	264		98	18	95
Queue Length 95th (ft)	m135	m#685		m#163	m564	m58	324	#448		142	47	160
Internal Link Dist (ft)		360			615			2008			380	
Turn Bay Length (ft)	325			300		400				250		250
Base Capacity (vph)	347	1389		162	1363	873	427	364		429	241	431
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.75	0.97		0.85	0.91	0.16	0.72	0.94		0.60	0.11	0.35

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 5 (4%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 48.7

Intersection LOS: D

Intersection Capacity Utilization 82.7%

ICU Level of Service E

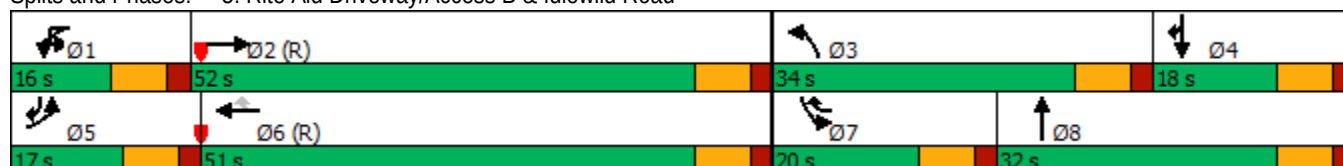
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road



Village at Idlewild
5: Rite Aid Driveway/Access B & Idlewild Road

2040 Full Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	2379	26	26	2098	126	145	27	55	231	23	134
Future Volume (vph)	234	2379	26	26	2098	126	145	27	55	231	23	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	325		375	300		100	400		300	250		250
Storage Lanes	2		1	1		1	2		1	2		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	0.97	1.00	1.00	0.97	1.00	0.88
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	3433	1863	1583	3433	1863	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	1770	5085	1583	3433	1863	1583	3433	1863	2787
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		440			695			2088			460	
Travel Time (s)		6.7			10.5			40.7			9.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	260	2643	29	29	2331	140	161	30	61	257	26	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	260	2643	29	29	2331	140	161	30	61	257	26	149
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	17.0	75.0	15.0	14.0	72.0	17.0	15.0	14.0	14.0	17.0	16.0	17.0
Total Split (%)	14.2%	62.5%	12.5%	11.7%	60.0%	14.2%	12.5%	11.7%	11.7%	14.2%	13.3%	14.2%
Maximum Green (s)	10.0	68.0	8.0	7.0	65.0	10.0	8.0	7.0	7.0	10.0	9.0	10.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes			Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Min	None	None	C-Min	None	None	None	None	None	None	None
Act Effect Green (s)	12.7	78.0	94.9	9.3	71.7	88.9	10.9	9.0	17.7	12.1	10.2	22.3
Actuated g/C Ratio	0.11	0.65	0.79	0.08	0.60	0.74	0.09	0.08	0.15	0.10	0.08	0.19
v/c Ratio	0.71	0.80	0.02	0.21	0.77	0.12	0.52	0.22	0.26	0.74	0.16	0.29
Control Delay	66.1	12.0	3.9	51.8	14.3	3.6	58.7	56.3	45.8	66.2	53.1	41.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	12.0	3.9	51.8	14.3	3.6	58.7	56.3	45.8	66.2	53.1	41.8
LOS	E	B	A	D	B	A	E	E	D	E	D	D
Approach Delay		16.7			14.2			55.3			57.0	
Approach LOS		B			B			E			E	

Village at Idlewild
5: Rite Aid Driveway/Access B & Idlewild Road

2040 Full Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	110	456	4	23	239	22	62	22	40	101	19	53
Queue Length 95th (ft)	m#155	355	m5	m32	324	m26	99	54	81	#157	48	86
Internal Link Dist (ft)		360			615			2008			380	
Turn Bay Length (ft)	325		375	300		100	400		300	250		250
Base Capacity (vph)	364	3306	1252	136	3040	1172	312	139	232	346	170	518
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.80	0.02	0.21	0.77	0.12	0.52	0.22	0.26	0.74	0.15	0.29

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 40 (33%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 20.1

Intersection LOS: C

Intersection Capacity Utilization 77.6%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Rite Aid Driveway/Access B & Idlewild Road

 Ø1	 Ø2 (R)	 Ø3	 Ø4
14 s	75 s	15 s	16 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
17 s	72 s	17 s	14 s

APPENDIX K

IDLEWILD ROAD AND STEVENS MILL ROAD

SYNCHRO REPORTS

Stinson Village
6: Stevens Mill Road & Idlewild Road

2019 Existing
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	378	75	82	972	38	79	89	64	97	163	272
Future Volume (vph)	56	378	75	82	972	38	79	89	64	97	163	272
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.975			0.994			0.937				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1816	0	1770	1852	0	1770	1745	0	1770	1863	1583
Flt Permitted	0.055			0.399			0.364			0.367		
Satd. Flow (perm)	102	1816	0	743	1852	0	678	1745	0	684	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2122			4537			5195			6223	
Travel Time (s)		32.2			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	62	420	83	91	1080	42	88	99	71	108	181	302
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	503	0	91	1122	0	88	170	0	108	181	302
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	13.0	18.0		13.0	18.0		13.0	13.0		13.0	13.0	13.0
Total Split (s)	14.0	78.0		13.0	77.0		13.0	16.0		13.0	16.0	14.0
Total Split (%)	11.7%	65.0%		10.8%	64.2%		10.8%	13.3%		10.8%	13.3%	11.7%
Maximum Green (s)	8.4	72.0		7.2	71.0		7.7	10.5		7.9	10.5	8.4
Yellow Time (s)	3.0	4.7		3.0	4.7		3.0	4.5		3.0	4.5	3.0
All-Red Time (s)	2.6	1.3		2.8	1.3		2.3	1.0		2.1	1.0	2.6
Lost Time Adjust (s)	-0.6	-1.0		-0.8	-1.0		-0.3	-0.5		-0.1	-0.5	-0.6
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	82.2	73.2		79.8	72.0		18.9	11.2		19.1	11.3	25.3
Actuated g/C Ratio	0.68	0.61		0.66	0.60		0.16	0.09		0.16	0.09	0.21
v/c Ratio	0.32	0.45		0.16	1.01		0.50	1.05		0.60	1.04	0.91
Control Delay	26.1	6.3		6.0	54.2		51.1	137.2		56.5	131.4	77.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	26.1	6.3		6.0	54.2		51.1	137.2		56.5	131.4	77.5

Stinson Village
6: Stevens Mill Road & Idlewild Road

2019 Existing
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	A		A	D		D	F		E	F	E
Approach Delay		8.5			50.6			107.8			90.2	
Approach LOS		A			D			F			F	
Queue Length 50th (ft)	10	135		19	~852		58	~145		72	~154	231
Queue Length 95th (ft)	m51	27		34	#1171		107	#287		#128	#301	#400
Internal Link Dist (ft)		2042			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	194	1107		563	1111		181	162		182	174	333
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.32	0.45		0.16	1.01		0.49	1.05		0.59	1.04	0.91

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 108 (90%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 56.1

Intersection LOS: E

Intersection Capacity Utilization 90.4%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road

 Ø1 13 s		 Ø2 (R) 78 s		 Ø3 13 s		 Ø4 16 s	
 Ø5 14 s		 Ø6 (R) 77 s		 Ø7 13 s		 Ø8 16 s	

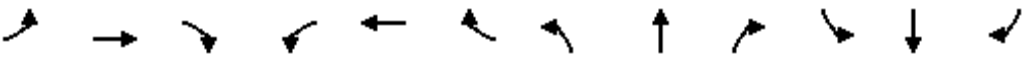
Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	459	107	88	1094	41	110	96	69	104	176	318
Future Volume (vph)	86	459	107	88	1094	41	110	96	69	104	176	318
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.972			0.995			0.937				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1811	0	1770	1853	0	1770	1745	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1811	0	1770	1853	0	1770	1745	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1663			4537			5195			6223	
Travel Time (s)		25.2			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	510	119	98	1216	46	122	107	77	116	196	353
Shared Lane Traffic (%)												
Lane Group Flow (vph)	96	629	0	98	1262	0	122	184	0	116	196	353
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0		14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%		11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0		7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	9.0	69.6		11.4	72.0		9.0	10.0		9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.58		0.10	0.60		0.08	0.08		0.08	0.08	0.20
v/c Ratio	0.73	0.60		0.58	1.14		0.92	1.27		0.88	1.26	1.12
Control Delay	76.3	13.3		65.9	97.6		115.8	208.5		106.6	204.7	130.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	76.3	13.3		65.9	97.6		115.8	208.5		106.6	204.7	130.3

Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	B		E	F		F	F		F	F	F
Approach Delay		21.7			95.3			171.5			148.1	
Approach LOS		C			F			F			F	
Queue Length 50th (ft)	71	147		74	~1138		96	~179		91	~191	~314
Queue Length 95th (ft)	#160	250		130	#1399		#215	#326		#203	#342	#502
Internal Link Dist (ft)		1583			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	132	1049		191	1111		132	145		132	155	316
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.73	0.60		0.51	1.14		0.92	1.27		0.88	1.26	1.12

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 104 (87%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.27

Intersection Signal Delay: 96.9

Intersection LOS: F

Intersection Capacity Utilization 98.3%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 Build Phase 1 (without Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	475	115	88	1111	41	119	96	69	104	176	327
Future Volume (vph)	94	475	115	88	1111	41	119	96	69	104	176	327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.971			0.995			0.937				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1809	0	1770	1853	0	1770	1745	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1809	0	1770	1853	0	1770	1745	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	104	528	128	98	1234	46	132	107	77	116	196	363
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	656	0	98	1280	0	132	184	0	116	196	363
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0		14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%		11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0		7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	9.0	69.6		11.4	72.0		9.0	10.0		9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.58		0.10	0.60		0.08	0.08		0.08	0.08	0.20
v/c Ratio	0.79	0.63		0.58	1.15		1.00	1.27		0.88	1.26	1.15
Control Delay	87.3	10.4		65.9	104.1		134.2	208.5		106.6	204.7	140.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	87.3	10.4		65.9	104.1		134.2	208.5		106.6	204.7	140.5

Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 Build Phase 1 (without Gas Station)

Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	B		E	F		F	F		F	F	F
Approach Delay		20.9			101.4			177.4			153.3	
Approach LOS		C			F			F			F	
Queue Length 50th (ft)	86	115		74	~1167		104	~179		91	~191	~330
Queue Length 95th (ft)	m#164	160		130	#1428		#235	#326		#203	#342	#522
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	132	1048		191	1111		132	145		132	155	316
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.79	0.63		0.51	1.15		1.00	1.27		0.88	1.26	1.15

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 17 (14%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.27

Intersection Signal Delay: 100.7

Intersection LOS: F

Intersection Capacity Utilization 100.3%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village

2022 Build Phase 1 (without Gas Station) with Improvements

6: Stevens Mill Road & Idlewild Road

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	475	115	88	1111	41	119	96	69	104	176	327
Future Volume (vph)	94	475	115	88	1111	41	119	96	69	104	176	327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		0	250		0	500		500	250		275
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.971			0.995				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1809	0	1770	1853	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1809	0	1770	1853	0	1770	1863	1583	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	104	528	128	98	1234	46	132	107	77	116	196	363
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	656	0	98	1280	0	132	107	77	116	196	363
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Detector Phase	5	2		1	6		3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0	18.0	14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%	15.0%	11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0	11.0	7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0	1.0	1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0	0.2	0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0	0.0	0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0	0.0	0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Act Effect Green (s)	9.0	69.6		11.4	72.0		9.0	10.0	26.4	9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.58		0.10	0.60		0.08	0.08	0.22	0.08	0.08	0.20
v/c Ratio	0.79	0.63		0.58	1.15		1.00	0.69	0.22	0.88	1.26	1.15
Control Delay	87.7	12.9		65.9	104.1		134.2	76.5	39.7	106.6	204.7	140.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.7	12.9		65.9	104.1		134.2	76.5	39.7	106.6	204.7	140.5

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	B		E	F		F	E	D	F	F	F
Approach Delay		23.1			101.4			91.6			153.3	
Approach LOS		C			F			F			F	
Queue Length 50th (ft)	78	150		74	~1167		104	82	49	91	~191	~330
Queue Length 95th (ft)	#177	192		130	#1428		#235	#165	92	#203	#342	#522
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	500			250			500		500	250		275
Base Capacity (vph)	132	1048		191	1111		132	155	369	132	155	316
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.63		0.51	1.15		1.00	0.69	0.21	0.88	1.26	1.15

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 7 (6%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.26

Intersection Signal Delay: 92.6

Intersection LOS: F

Intersection Capacity Utilization 100.3%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 Build Phase 1 (with Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	516	136	88	1153	41	139	96	69	104	176	347
Future Volume (vph)	115	516	136	88	1153	41	139	96	69	104	176	347
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.969			0.995			0.937				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1805	0	1770	1853	0	1770	1745	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1805	0	1770	1853	0	1770	1745	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	128	573	151	98	1281	46	154	107	77	116	196	386
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	724	0	98	1327	0	154	184	0	116	196	386
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0		14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%		11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0		7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	9.0	69.6		11.4	72.0		9.0	10.0		9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.58		0.10	0.60		0.08	0.08		0.08	0.08	0.20
v/c Ratio	0.97	0.69		0.58	1.19		1.17	1.27		0.88	1.26	1.22
Control Delay	125.5	10.3		65.9	121.5		178.3	208.5		106.6	204.7	165.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	125.5	10.3		65.9	121.5		178.3	208.5		106.6	204.7	165.9

Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 Build Phase 1 (with Gas Station)

Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	B		E	F		F	F		F	F	F
Approach Delay		27.6			117.7			194.7			166.9	
Approach LOS		C			F			F			F	
Queue Length 50th (ft)	107	192		74	~1243		~141	~179		91	~191	~367
Queue Length 95th (ft)	m#174	m170		130	#1506		#278	#326		#203	#342	#562
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	132	1046		191	1111		132	145		132	155	316
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.97	0.69		0.51	1.19		1.17	1.27		0.88	1.26	1.22

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 38 (32%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.27

Intersection Signal Delay: 112.7

Intersection LOS: F

Intersection Capacity Utilization 104.9%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village

2022 Build Phase 1 (with Gas Station) with Improvements

6: Stevens Mill Road & Idlewild Road

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	516	136	88	1153	41	139	96	69	104	176	347
Future Volume (vph)	115	516	136	88	1153	41	139	96	69	104	176	347
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		0	250		0	500		500	250		275
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.969			0.995				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1805	0	1770	1853	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1805	0	1770	1853	0	1770	1863	1583	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	128	573	151	98	1281	46	154	107	77	116	196	386
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	724	0	98	1327	0	154	107	77	116	196	386
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Detector Phase	5	2		1	6		3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0	18.0	14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%	15.0%	11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0	11.0	7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0	1.0	1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0	0.2	0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0	0.0	0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0	0.0	0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Act Effect Green (s)	9.0	69.6		11.4	72.0		9.0	10.0	26.4	9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.58		0.10	0.60		0.08	0.08	0.22	0.08	0.08	0.20
v/c Ratio	0.97	0.69		0.58	1.19		1.17	0.69	0.22	0.88	1.26	1.22
Control Delay	137.0	13.6		65.9	121.5		178.3	76.5	39.7	106.6	204.7	165.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	137.0	13.6		65.9	121.5		178.3	76.5	39.7	106.6	204.7	165.9

Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 Build Phase 1 (with Gas Station) with Improvements

Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	B		E	F		F	E	D	F	F	F
Approach Delay		32.2			117.7			114.5			166.9	
Approach LOS		C			F			F			F	
Queue Length 50th (ft)	106	230		74	~1243		~141	82	49	91	~191	~367
Queue Length 95th (ft)	m#213	m544		130	#1506		#278	#165	92	#203	#342	#562
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	500			250			500		500	250		275
Base Capacity (vph)	132	1046		191	1111		132	155	369	132	155	316
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.69		0.51	1.19		1.17	0.69	0.21	0.88	1.26	1.22

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 41 (34%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.26

Intersection Signal Delay: 105.7

Intersection LOS: F

Intersection Capacity Utilization 104.9%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



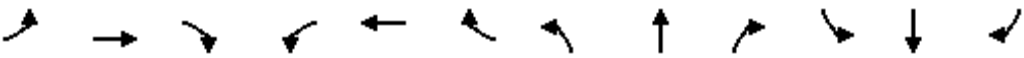
Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	469	109	91	1120	42	112	98	71	107	180	325
Future Volume (vph)	88	469	109	91	1120	42	112	98	71	107	180	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.972			0.995			0.937				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1811	0	1770	1853	0	1770	1745	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1811	0	1770	1853	0	1770	1745	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1663			4537			5195			6223	
Travel Time (s)		25.2			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	98	521	121	101	1244	47	124	109	79	119	200	361
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	642	0	101	1291	0	124	188	0	119	200	361
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0		14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%		11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0		7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	9.0	69.5		11.5	72.0		9.0	10.0		9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.58		0.10	0.60		0.08	0.08		0.08	0.08	0.20
v/c Ratio	0.74	0.61		0.60	1.16		0.94	1.30		0.90	1.29	1.14
Control Delay	76.6	13.8		66.7	108.1		119.2	218.2		111.0	213.8	138.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	76.6	13.8		66.7	108.1		119.2	218.2		111.0	213.8	138.4

Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 No-Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	B		E	F		F	F		F	F	F
Approach Delay		22.1			105.1			178.9			155.8	
Approach LOS		C			F			F			F	
Queue Length 50th (ft)	72	146		76	~1185		97	~186		93	~197	~327
Queue Length 95th (ft)	#164	255		135	#1448		#219	#336		#207	#349	#517
Internal Link Dist (ft)		1583			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	132	1048		191	1111		132	145		132	155	316
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.74	0.61		0.53	1.16		0.94	1.30		0.90	1.29	1.14

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 105 (88%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 103.8

Intersection LOS: F

Intersection Capacity Utilization 100.3%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (without Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	558	153	91	1191	42	148	98	71	107	180	361
Future Volume (vph)	132	558	153	91	1191	42	148	98	71	107	180	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.968			0.995			0.937				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1803	0	1770	1853	0	1770	1745	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1803	0	1770	1853	0	1770	1745	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	147	620	170	101	1323	47	164	109	79	119	200	401
Shared Lane Traffic (%)												
Lane Group Flow (vph)	147	790	0	101	1370	0	164	188	0	119	200	401
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0		14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%		11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0		7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	9.0	69.5		11.5	72.0		9.0	10.0		9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.58		0.10	0.60		0.08	0.08		0.08	0.08	0.20
v/c Ratio	1.11	0.76		0.60	1.23		1.24	1.30		0.90	1.29	1.27
Control Delay	143.7	10.9		66.7	137.8		203.0	218.2		111.0	213.8	183.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	143.7	10.9		66.7	137.8		203.0	218.2		111.0	213.8	183.5

Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (without Gas Station)
Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	B		E	F		F	F		F	F	F
Approach Delay		31.8			132.9			211.1			180.0	
Approach LOS		C			F			F			F	
Queue Length 50th (ft)	~127	389		76	~1312		~157	~186		93	~197	~391
Queue Length 95th (ft)	m#179	m333		135	#1575		#298	#336		#207	#349	#588
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	132	1044		191	1111		132	145		132	155	316
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.11	0.76		0.53	1.23		1.24	1.30		0.90	1.29	1.27

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 50 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 123.3

Intersection LOS: F

Intersection Capacity Utilization 108.3%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (without Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	558	153	91	1191	42	148	98	71	107	180	361
Future Volume (vph)	132	558	153	91	1191	42	148	98	71	107	180	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		0	250		500	500		500	250		275
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.968			0.995				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1803	0	1770	3522	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1803	0	1770	3522	0	1770	1863	1583	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	147	620	170	101	1323	47	164	109	79	119	200	401
Shared Lane Traffic (%)												
Lane Group Flow (vph)	147	790	0	101	1370	0	164	109	79	119	200	401
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Detector Phase	5	2		1	6		3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	23.0	66.0		14.0	57.0		19.0	20.0	14.0	20.0	21.0	23.0
Total Split (%)	19.2%	55.0%		11.7%	47.5%		15.8%	16.7%	11.7%	16.7%	17.5%	19.2%
Maximum Green (s)	16.0	59.0		7.0	50.0		12.0	13.0	7.0	13.0	14.0	16.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0	1.0	1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0	0.2	0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0	0.0	0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0	0.0	0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Act Effect Green (s)	15.9	61.2		9.0	54.3		13.5	17.0	31.0	12.8	16.3	37.2
Actuated g/C Ratio	0.13	0.51		0.08	0.45		0.11	0.14	0.26	0.11	0.14	0.31
v/c Ratio	0.63	0.86		0.77	0.86		0.83	0.41	0.19	0.63	0.79	0.82
Control Delay	51.0	36.3		88.8	36.8		83.5	53.1	37.2	66.2	72.8	52.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.0	36.3		88.8	36.8		83.5	53.1	37.2	66.2	72.8	52.7

Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (without Gas Station) with Improvements

Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D		F	D		F	D	D	E	E	D
Approach Delay		38.6			40.4			63.7			60.5	
Approach LOS		D			D			E			E	
Queue Length 50th (ft)	101	627		78	507		126	78	48	89	153	280
Queue Length 95th (ft)	m158	m#793		#172	#620		#238	140	93	151	#274	#417
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	500			250			500		500	250		275
Base Capacity (vph)	265	919		132	1593		206	264	409	221	253	518
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.86		0.77	0.86		0.80	0.41	0.19	0.54	0.79	0.77

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 80 (67%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 46.4

Intersection LOS: D

Intersection Capacity Utilization 78.8%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (with Gas Station)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	599	174	91	1233	42	169	98	71	107	180	382
Future Volume (vph)	153	599	174	91	1233	42	169	98	71	107	180	382
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.966			0.995			0.937				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1799	0	1770	1853	0	1770	1745	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1799	0	1770	1853	0	1770	1745	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	170	666	193	101	1370	47	188	109	79	119	200	424
Shared Lane Traffic (%)												
Lane Group Flow (vph)	170	859	0	101	1417	0	188	188	0	119	200	424
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0		14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%		11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0		7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	9.0	69.5		11.5	72.0		9.0	10.0		9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.58		0.10	0.60		0.08	0.08		0.08	0.08	0.20
v/c Ratio	1.29	0.83		0.60	1.28		1.42	1.30		0.90	1.29	1.34
Control Delay	185.5	10.4		66.7	155.9		269.0	218.2		111.0	213.8	211.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	185.5	10.4		66.7	155.9		269.0	218.2		111.0	213.8	211.7

Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (with Gas Station)
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	B		E	F		F	F		F	F	F
Approach Delay		39.3			150.0			243.6			196.1	
Approach LOS		D			F			F			F	
Queue Length 50th (ft)	~165	389		76	~1388		~196	~186		93	~197	~428
Queue Length 95th (ft)	m#190	m250		135	#1651		#346	#336		#207	#349	#630
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	132	1041		191	1111		132	145		132	155	316
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.29	0.83		0.53	1.28		1.42	1.30		0.90	1.29	1.34

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 51 (43%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.42

Intersection Signal Delay: 137.9

Intersection LOS: F

Intersection Capacity Utilization 113.0%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (with Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	599	174	91	1233	42	169	98	71	107	180	382
Future Volume (vph)	153	599	174	91	1233	42	169	98	71	107	180	382
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		0	250		500	500		500	250		275
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.966			0.995				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1799	0	1770	3522	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1799	0	1770	3522	0	1770	1863	1583	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	170	666	193	101	1370	47	188	109	79	119	200	424
Shared Lane Traffic (%)												
Lane Group Flow (vph)	170	859	0	101	1417	0	188	109	79	119	200	424
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Detector Phase	5	2		1	6		3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	23.0	68.0		14.0	59.0		19.0	19.0	14.0	19.0	19.0	23.0
Total Split (%)	19.2%	56.7%		11.7%	49.2%		15.8%	15.8%	11.7%	15.8%	15.8%	19.2%
Maximum Green (s)	16.0	61.0		7.0	52.0		12.0	12.0	7.0	12.0	12.0	16.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0	1.0	1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0	0.2	0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0	0.0	0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0	0.0	0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Act Effect Green (s)	16.5	62.2		9.0	54.6		14.1	16.5	30.5	12.4	14.8	36.3
Actuated g/C Ratio	0.14	0.52		0.08	0.46		0.12	0.14	0.25	0.10	0.12	0.30
v/c Ratio	0.70	0.92		0.77	0.88		0.91	0.43	0.20	0.65	0.87	0.89
Control Delay	54.7	36.1		88.8	38.0		95.1	54.6	38.1	68.5	86.7	61.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.7	36.1		88.8	38.0		95.1	54.6	38.1	68.5	86.7	61.3

Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (with Gas Station) with Improvements

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D		F	D		F	D	D	E	F	E
Approach Delay		39.2			41.3			71.4			69.3	
Approach LOS		D			D			E			E	
Queue Length 50th (ft)	115	658		78	520		146	80	49	89	156	310
Queue Length 95th (ft)	m174	m#856		#172	628		#287	141	94	152	#299	#492
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	500			250			500		500	250		275
Base Capacity (vph)	265	944		132	1603		207	255	401	206	229	498
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.91		0.77	0.88		0.91	0.43	0.20	0.58	0.87	0.85

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 73 (61%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 49.5

Intersection LOS: D

Intersection Capacity Utilization 83.4%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road

 Ø1	 Ø2 (R)	 Ø3	 Ø4
14 s	68 s	19 s	19 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
23 s	59 s	19 s	19 s

Village at Idlewild
6: Stevens Mill Road & Idlewild Road

2040 Full Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	217	1907	173	128	2309	250	163	187	102	265	248	248
Future Volume (vph)	217	1907	173	128	2309	250	163	187	102	265	248	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		200	425		250	500		200	475		225
Storage Lanes	2		1	1		1	2		1	2		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	0.97	0.95	1.00	0.97	0.95	0.88
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	3433	3539	1583	3433	3539	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	1770	5085	1583	3433	3539	1583	3433	3539	2787
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			1573			5195			4910	
Travel Time (s)		21.6			23.8			78.7			74.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	241	2119	192	142	2566	278	181	208	113	294	276	276
Shared Lane Traffic (%)												
Lane Group Flow (vph)	241	2119	192	142	2566	278	181	208	113	294	276	276
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	16.0	67.0	14.0	21.0	72.0	18.0	14.0	14.0	21.0	18.0	18.0	16.0
Total Split (%)	13.3%	55.8%	11.7%	17.5%	60.0%	15.0%	11.7%	11.7%	17.5%	15.0%	15.0%	13.3%
Maximum Green (s)	9.0	60.0	7.0	14.0	65.0	11.0	7.0	7.0	14.0	11.0	11.0	9.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Min	None	None	C-Min	None	None	None	None	None	None	None
Act Effect Green (s)	11.0	63.2	77.2	14.8	67.0	85.0	9.0	9.0	28.8	13.0	13.0	29.0
Actuated g/C Ratio	0.09	0.53	0.64	0.12	0.56	0.71	0.08	0.08	0.24	0.11	0.11	0.24
v/c Ratio	0.77	0.79	0.19	0.65	0.90	0.25	0.70	0.78	0.30	0.79	0.72	0.41
Control Delay	57.1	30.7	10.3	64.5	29.4	6.8	69.6	75.3	39.4	68.4	63.2	40.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.1	30.7	10.3	64.5	29.4	6.8	69.6	75.3	39.4	68.4	63.2	40.5
LOS	E	C	B	E	C	A	E	E	D	E	E	D
Approach Delay		31.6			28.9			65.2			57.6	
Approach LOS		C			C			E			E	

Village at Idlewild
6: Stevens Mill Road & Idlewild Road

2040 Full Build
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	94	415	53	105	619	68	71	84	71	116	110	102
Queue Length 95th (ft)	m#147	480	m97	174	700	103	#119	#145	125	#180	158	148
Internal Link Dist (ft)		1348			1493			5115			4830	
Turn Bay Length (ft)	500		200	425		250	500		200	475		225
Base Capacity (vph)	314	2679	1018	236	2839	1121	257	265	395	371	383	673
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.79	0.19	0.60	0.90	0.25	0.70	0.78	0.29	0.79	0.72	0.41

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 21 (18%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 36.1

Intersection LOS: D

Intersection Capacity Utilization 80.9%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road

							
21 s	67 s			14 s	18 s		
							
16 s	72 s			18 s	14 s		

Village at Idlewild
6: Stevens Mill Road & Idlewild Road

2040 Full Build (Median U-Turn)

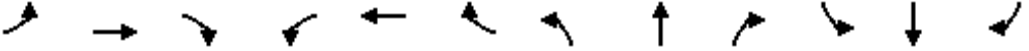
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑		↑↑↑			↑	↑↑		↑	↑↑
Traffic Volume (vph)	0	2389	301	0	2600	467	0	187	265	0	248	513
Future Volume (vph)	0	2389	301	0	2600	467	0	187	265	0	248	513
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		225	425		250	0		250	0		475
Storage Lanes	0		1	0		0	0		2	0		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	0.88	1.00	1.00	0.88
Frt			0.850		0.977				0.850			0.850
Flt Protected												
Satd. Flow (prot)	0	5085	1583	0	4968	0	0	1863	2787	0	1863	2787
Flt Permitted												
Satd. Flow (perm)	0	5085	1583	0	4968	0	0	1863	2787	0	1863	2787
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		938			892			5195			4910	
Travel Time (s)		14.2			13.5			78.7			74.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	2654	334	0	2889	519	0	208	294	0	276	570
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2654	334	0	3408	0	0	208	294	0	276	570
Turn Type		NA	Perm		NA			NA	Perm		NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases			2						8			4
Detector Phase		2	2		6			8	8		4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0		12.0			7.0	7.0		7.0	7.0
Minimum Split (s)		19.0	19.0		19.0			14.0	14.0		14.0	14.0
Total Split (s)		67.0	67.0		67.0			23.0	23.0		23.0	23.0
Total Split (%)		74.4%	74.4%		74.4%			25.6%	25.6%		25.6%	25.6%
Maximum Green (s)		60.0	60.0		60.0			16.0	16.0		16.0	16.0
Yellow Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
All-Red Time (s)		2.0	2.0		2.0			2.0	2.0		2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0		-2.0			-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0			3.0	3.0		3.0	3.0
Recall Mode		C-Min	C-Min		C-Min			None	None		None	None
Act Effect Green (s)		62.0	62.0		62.0			18.0	18.0		18.0	18.0
Actuated g/C Ratio		0.69	0.69		0.69			0.20	0.20		0.20	0.20
v/c Ratio		0.76	0.31		1.00			0.56	0.53		0.74	1.02
Control Delay		6.8	4.6		20.6			39.0	36.2		47.5	81.4
Queue Delay		0.0	0.0		0.0			0.0	0.0		0.0	0.0
Total Delay		6.8	4.6		20.6			39.0	36.2		47.5	81.4
LOS		A	A		C			D	D		D	F
Approach Delay		6.5			20.6			37.4			70.3	
Approach LOS		A			C			D			E	

Village at Idlewild
6: Stevens Mill Road & Idlewild Road

2040 Full Build (Median U-Turn)

Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		189	43		663			107	85		149	~192
Queue Length 95th (ft)		200	m62		#830			179	130		#260	#310
Internal Link Dist (ft)		858			812			5115			4830	
Turn Bay Length (ft)			225						250			475
Base Capacity (vph)		3503	1090		3422			372	557		372	557
Starvation Cap Reductn		0	0		0			0	0		0	0
Spillback Cap Reductn		0	0		0			0	0		0	0
Storage Cap Reductn		0	0		0			0	0		0	0
Reduced v/c Ratio		0.76	0.31		1.00			0.56	0.53		0.74	1.02

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 9 (10%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 21.7

Intersection LOS: C

Intersection Capacity Utilization 86.9%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

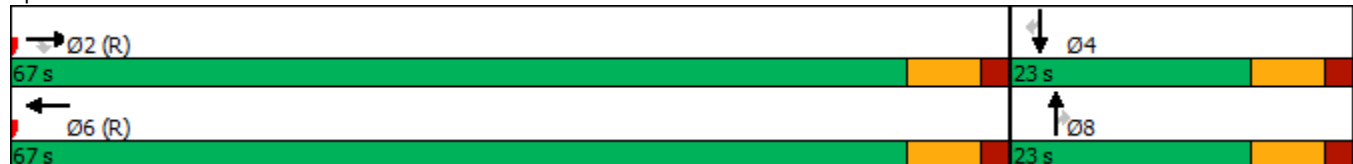
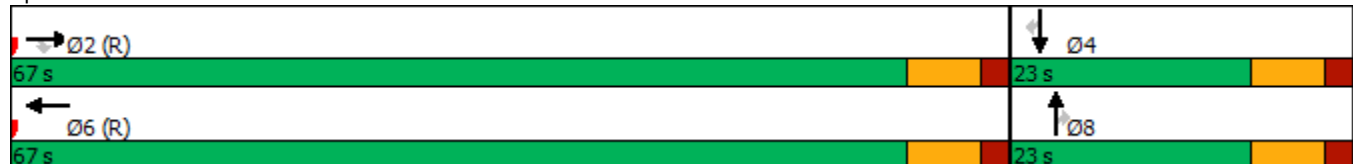
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

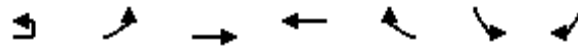
Splits and Phases: 6: Stevens Mill Road & Idlewild Road

	
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Village at Idlewild
62: Idlewild Road & Eastbound U-Turn

2040 Full Build (Median U-Turn)

Timing Plan: AM Peak Hour



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	⇐⇐		⇐⇐	⇐⇐⇐			
Traffic Volume (vph)	380	0	2274	2687	0	0	0
Future Volume (vph)	380	0	2274	2687	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		350			0	0	0
Storage Lanes		1			0	0	0
Taper Length (ft)		100				100	
Lane Util. Factor	0.97	1.00	0.95	0.91	1.00	1.00	1.00
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	3433	0	3539	5085	0	0	0
Flt Permitted	0.950						
Satd. Flow (perm)	3433	0	3539	5085	0	0	0
Right Turn on Red					No		No
Satd. Flow (RTOR)							
Link Speed (mph)			45	45		30	
Link Distance (ft)			892	681		877	
Travel Time (s)			13.5	10.3		19.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	422	0	2527	2986	0	0	0
Shared Lane Traffic (%)							
Lane Group Flow (vph)	422	0	2527	2986	0	0	0
Turn Type	Prot		NA	NA			
Protected Phases	5		Free	6			
Permitted Phases							
Detector Phase	5			6			
Switch Phase							
Minimum Initial (s)	7.0			12.0			
Minimum Split (s)	14.0			19.0			
Total Split (s)	22.0			68.0			
Total Split (%)	24.4%			75.6%			
Maximum Green (s)	15.0			61.0			
Yellow Time (s)	5.0			5.0			
All-Red Time (s)	2.0			2.0			
Lost Time Adjust (s)	-2.0			-2.0			
Total Lost Time (s)	5.0			5.0			
Lead/Lag	Lead			Lag			
Lead-Lag Optimize?	Yes			Yes			
Vehicle Extension (s)	3.0			3.0			
Recall Mode	None			C-Max			
Act Effect Green (s)	16.3		90.0	63.7			
Actuated g/C Ratio	0.18		1.00	0.71			
v/c Ratio	0.68		0.71	0.83			
Control Delay	32.4		2.7	12.1			
Queue Delay	0.0		0.0	0.0			
Total Delay	32.4		2.7	12.1			
LOS	C		A	B			
Approach Delay			7.0	12.1			
Approach LOS			A	B			

Village at Idlewild
62: Idlewild Road & Eastbound U-Turn

2040 Full Build (Median U-Turn)
Timing Plan: AM Peak Hour



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	121		35	387			
Queue Length 95th (ft)	m156		27	461			
Internal Link Dist (ft)			812	601		797	
Turn Bay Length (ft)	350						
Base Capacity (vph)	648		3539	3601			
Starvation Cap Reductn	0		0	0			
Spillback Cap Reductn	0		0	0			
Storage Cap Reductn	0		0	0			
Reduced v/c Ratio	0.65		0.71	0.83			

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 9.6

Intersection LOS: A

Intersection Capacity Utilization 71.1%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 62: Idlewild Road & Eastbound U-Turn



Village at Idlewild
61: Westbound U-Turn & Idlewild Road

2040 Full Build (Median U-Turn)

Timing Plan: AM Peak Hour

	→	↘	↶	↙	←	↖	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↓↓		↑↑↑		
Traffic Volume (vph)	2297	0	393	0	2720	0	0
Future Volume (vph)	2297	0	393	0	2720	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		350		0	0
Storage Lanes		0		2		0	0
Taper Length (ft)				200		100	
Lane Util. Factor	0.91	1.00	0.97	1.00	0.91	1.00	1.00
Frt							
Flt Protected			0.950				
Satd. Flow (prot)	5085	0	3433	0	5085	0	0
Flt Permitted			0.950				
Satd. Flow (perm)	5085	0	3433	0	5085	0	0
Right Turn on Red		No					No
Satd. Flow (RTOR)							
Link Speed (mph)	45				45	30	
Link Distance (ft)	1158				938	686	
Travel Time (s)	17.5				14.2	15.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	2552	0	437	0	3022	0	0
Shared Lane Traffic (%)							
Lane Group Flow (vph)	2552	0	437	0	3022	0	0
Turn Type	NA		Prot		NA		
Protected Phases	2		1		Free		
Permitted Phases							
Detector Phase	2		1				
Switch Phase							
Minimum Initial (s)	12.0		7.0				
Minimum Split (s)	19.0		14.0				
Total Split (s)	66.0		24.0				
Total Split (%)	73.3%		26.7%				
Maximum Green (s)	59.0		17.0				
Yellow Time (s)	5.0		5.0				
All-Red Time (s)	2.0		2.0				
Lost Time Adjust (s)	-2.0		-2.0				
Total Lost Time (s)	5.0		5.0				
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Vehicle Extension (s)	3.0		3.0				
Recall Mode	C-Min		None				
Act Effect Green (s)	62.5		17.5		90.0		
Actuated g/C Ratio	0.69		0.19		1.00		
v/c Ratio	0.72		0.65		0.59		
Control Delay	10.2		33.4		0.0		
Queue Delay	0.0		0.0		0.0		
Total Delay	10.2		33.4		0.0		
LOS	B		C		A		
Approach Delay	10.2				4.3		
Approach LOS	B				A		

Village at Idlewild
61: Westbound U-Turn & Idlewild Road

2040 Full Build (Median U-Turn)
Timing Plan: AM Peak Hour

	→	↘	↶	↙	←	↵	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Queue Length 50th (ft)	293		129		0		
Queue Length 95th (ft)	356		m127		m0		
Internal Link Dist (ft)	1078				858	606	
Turn Bay Length (ft)			350				
Base Capacity (vph)	3530		724		5085		
Starvation Cap Reductn	0		0		0		
Spillback Cap Reductn	0		0		0		
Storage Cap Reductn	0		0		0		
Reduced v/c Ratio	0.72		0.60		0.59		

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 14 (16%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 6.8

Intersection LOS: A

Intersection Capacity Utilization 63.9%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 61: Westbound U-Turn & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2019 Existing
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	214	914	90	42	701	124	84	127	100	71	90	176
Future Volume (vph)	214	914	90	42	701	124	84	127	100	71	90	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.977			0.934				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1839	0	1770	1820	0	1770	1740	0	1770	1863	1583
Flt Permitted	0.069			0.061			0.598			0.247		
Satd. Flow (perm)	129	1839	0	114	1820	0	1114	1740	0	460	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2122			4537			5195			6223	
Travel Time (s)		32.2			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	238	1016	100	47	779	138	93	141	111	79	100	196
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	1116	0	47	917	0	93	252	0	79	100	196
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	13.0	18.0		13.0	18.0		13.0	13.0		13.0	13.0	13.0
Total Split (s)	14.0	73.0		13.0	72.0		13.0	21.0		13.0	21.0	14.0
Total Split (%)	11.7%	60.8%		10.8%	60.0%		10.8%	17.5%		10.8%	17.5%	11.7%
Maximum Green (s)	8.4	67.0		7.2	66.0		7.7	15.5		7.9	15.5	8.4
Yellow Time (s)	3.0	4.7		3.0	4.7		3.0	4.5		3.0	4.5	3.0
All-Red Time (s)	2.6	1.3		2.8	1.3		2.3	1.0		2.1	1.0	2.6
Lost Time Adjust (s)	-0.6	-1.0		-0.8	-1.0		-0.3	-0.5		-0.1	-0.5	-0.6
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	78.0	70.8		74.8	67.0		25.1	18.8		23.9	16.3	30.3
Actuated g/C Ratio	0.65	0.59		0.62	0.56		0.21	0.16		0.20	0.14	0.25
v/c Ratio	1.15	1.03		0.26	0.90		0.34	0.92		0.45	0.40	0.49
Control Delay	101.6	43.6		10.8	37.3		40.6	89.5		45.1	52.7	43.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	101.6	43.6		10.8	37.3		40.6	89.5		45.1	52.7	43.4

Stinson Village
6: Stevens Mill Road & Idlewild Road

2019 Existing
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	D		B	D		D	F		D	D	D
Approach Delay		53.8			36.0			76.3			46.2	
Approach LOS		D			D			E			D	
Queue Length 50th (ft)	~158	~948		11	604		58	~217		49	72	131
Queue Length 95th (ft)	m#157	m#938		24	#907		105	#387		92	128	207
Internal Link Dist (ft)		2042			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	207	1084		181	1016		277	273		180	252	399
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.15	1.03		0.26	0.90		0.34	0.92		0.44	0.40	0.49

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay: 49.8

Intersection LOS: D

Intersection Capacity Utilization 94.7%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road

13 s	73 s	13 s	21 s
14 s	72 s	13 s	21 s

Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 No-Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	252	1028	119	45	804	134	116	137	108	76	97	216
Future Volume (vph)	252	1028	119	45	804	134	116	137	108	76	97	216
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.979			0.934				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1833	0	1770	1824	0	1770	1740	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1833	0	1770	1824	0	1770	1740	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2122			4537			5195			6223	
Travel Time (s)		32.2			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	280	1142	132	50	893	149	129	152	120	84	108	240
Shared Lane Traffic (%)												
Lane Group Flow (vph)	280	1274	0	50	1042	0	129	272	0	84	108	240
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	21.0	72.0		14.0	65.0		17.0	20.0		14.0	17.0	21.0
Total Split (%)	17.5%	60.0%		11.7%	54.2%		14.2%	16.7%		11.7%	14.2%	17.5%
Maximum Green (s)	14.0	65.0		7.0	58.0		10.0	13.0		7.0	10.0	14.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	16.0	69.8		9.0	60.0		11.5	15.0		9.0	12.5	33.5
Actuated g/C Ratio	0.13	0.58		0.08	0.50		0.10	0.12		0.08	0.10	0.28
v/c Ratio	1.19	1.20		0.38	1.14		0.76	1.25		0.64	0.56	0.54
Control Delay	134.1	111.0		61.6	106.9		80.7	189.2		75.8	63.1	42.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	134.1	111.0		61.6	106.9		80.7	189.2		75.8	63.1	42.4

Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 No-Build
Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F		E	F		F	F		E	E	D
Approach Delay		115.1			104.8			154.3			54.1	
Approach LOS		F			F			F			D	
Queue Length 50th (ft)	~260	~1234		38	~945		99	~263		64	81	159
Queue Length 95th (ft)	m#226	m#1079		80	#1199		#193	#436		#135	143	245
Internal Link Dist (ft)		2042			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	236	1066		132	912		177	217		132	194	442
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.19	1.20		0.38	1.14		0.73	1.25		0.64	0.56	0.54

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 61 (51%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.25

Intersection Signal Delay: 108.8

Intersection LOS: F

Intersection Capacity Utilization 103.5%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 Build Phase 1 (without Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	1040	125	45	818	134	123	137	108	76	97	223
Future Volume (vph)	258	1040	125	45	818	134	123	137	108	76	97	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.979			0.934				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1833	0	1770	1824	0	1770	1740	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1833	0	1770	1824	0	1770	1740	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	287	1156	139	50	909	149	137	152	120	84	108	248
Shared Lane Traffic (%)												
Lane Group Flow (vph)	287	1295	0	50	1058	0	137	272	0	84	108	248
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0		14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%		11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0		7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	9.0	73.9		9.9	72.0		9.0	10.0		9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.62		0.08	0.60		0.08	0.08		0.08	0.08	0.20
v/c Ratio	2.17	1.15		0.34	0.97		1.04	1.88		0.64	0.70	0.78
Control Delay	557.2	82.6		58.4	44.2		142.7	449.7		75.8	77.1	64.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	557.2	82.6		58.4	44.2		142.7	449.7		75.8	77.1	64.0

Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 Build Phase 1 (without Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F		E	D		F	F		E	E	E
Approach Delay		168.7			44.8			346.9			69.4	
Approach LOS		F			D			F			E	
Queue Length 50th (ft)	~368	~1186		38	735		~114	~322		64	83	184
Queue Length 95th (ft)	m#278	m206		77	#1078		#244	#494		#135	#168	#311
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	132	1128		191	1094		132	145		132	155	316
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	2.17	1.15		0.26	0.97		1.04	1.88		0.64	0.70	0.78

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 16 (13%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.17

Intersection Signal Delay: 138.1

Intersection LOS: F

Intersection Capacity Utilization 104.5%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village

2022 Build Phase 1 (without Gas Station) with Improvements

6: Stevens Mill Road & Idlewild Road

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	1040	125	45	818	134	123	137	108	76	97	223
Future Volume (vph)	258	1040	125	45	818	134	123	137	108	76	97	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		0	250		0	500		500	250		275
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.979				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1833	0	1770	1824	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1833	0	1770	1824	0	1770	1863	1583	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	287	1156	139	50	909	149	137	152	120	84	108	248
Shared Lane Traffic (%)												
Lane Group Flow (vph)	287	1295	0	50	1058	0	137	152	120	84	108	248
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Detector Phase	5	2		1	6		3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	23.0	78.0		14.0	69.0		14.0	14.0	14.0	14.0	14.0	23.0
Total Split (%)	19.2%	65.0%		11.7%	57.5%		11.7%	11.7%	11.7%	11.7%	11.7%	19.2%
Maximum Green (s)	16.0	71.0		7.0	62.0		7.0	7.0	7.0	7.0	7.0	16.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0	1.0	1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0	0.2	0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0	0.0	0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0	0.0	0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Act Effect Green (s)	18.0	73.0		9.0	64.0		9.0	9.0	23.0	9.0	9.0	32.0
Actuated g/C Ratio	0.15	0.61		0.08	0.53		0.08	0.08	0.19	0.08	0.08	0.27
v/c Ratio	1.08	1.16		0.38	1.09		1.04	1.09	0.40	0.64	0.78	0.59
Control Delay	124.4	96.1		61.6	84.3		142.7	154.9	47.0	75.8	88.9	44.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	124.4	96.1		61.6	84.3		142.7	154.9	47.0	75.8	88.9	44.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F		E	F		F	F	D	E	F	D
Approach Delay		101.3			83.3			119.2			61.6	
Approach LOS		F			F			F			E	
Queue Length 50th (ft)	~258	~1196		38	~921		~114	~132	82	64	84	168
Queue Length 95th (ft)	m#379	#1475		80	#1176		#244	#269	142	#135	#181	257
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	500			250			500		500	250		275
Base Capacity (vph)	265	1115		132	972		132	139	303	132	139	422
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	1.08	1.16		0.38	1.09		1.04	1.09	0.40	0.64	0.78	0.59

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 24 (20%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 92.8

Intersection LOS: F

Intersection Capacity Utilization 97.9%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 Build Phase 1 (with Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	274	1070	141	45	849	134	138	137	108	76	97	238
Future Volume (vph)	274	1070	141	45	849	134	138	137	108	76	97	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.983			0.980			0.934				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1831	0	1770	1825	0	1770	1740	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1831	0	1770	1825	0	1770	1740	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	304	1189	157	50	943	149	153	152	120	84	108	264
Shared Lane Traffic (%)												
Lane Group Flow (vph)	304	1346	0	50	1092	0	153	272	0	84	108	264
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0		14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%		11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0		7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	9.0	73.9		9.9	72.0		9.0	10.0		9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.62		0.08	0.60		0.08	0.08		0.08	0.08	0.20
v/c Ratio	2.30	1.19		0.34	1.00		1.16	1.88		0.64	0.70	0.84
Control Delay	613.3	105.2		58.4	51.2		176.0	449.7		75.8	77.1	69.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	613.3	105.2		58.4	51.2		176.0	449.7		75.8	77.1	69.1

Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 Build Phase 1 (with Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F		E	D		F	F		E	E	E
Approach Delay		198.8			51.5			351.2			72.2	
Approach LOS		F			D			F			E	
Queue Length 50th (ft)	~397	~1275		38	794		~140	~322		64	83	198
Queue Length 95th (ft)	m#279	m236		77	#1134		#277	#494		#135	#168	#340
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	132	1127		191	1095		132	145		132	155	316
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	2.30	1.19		0.26	1.00		1.16	1.88		0.64	0.70	0.84

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 20 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.30

Intersection Signal Delay: 154.9

Intersection LOS: F

Intersection Capacity Utilization 107.0%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village

2022 Build Phase 1 (with Gas Station) with Improvements

6: Stevens Mill Road & Idlewild Road

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	274	1070	141	45	849	134	138	137	108	76	97	238
Future Volume (vph)	274	1070	141	45	849	134	138	137	108	76	97	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		0	250		0	500		500	250		275
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.983			0.980				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1831	0	1770	1825	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1831	0	1770	1825	0	1770	1863	1583	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	304	1189	157	50	943	149	153	152	120	84	108	264
Shared Lane Traffic (%)												
Lane Group Flow (vph)	304	1346	0	50	1092	0	153	152	120	84	108	264
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Detector Phase	5	2		1	6		3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	22.0	78.0		14.0	70.0		14.0	14.0	14.0	14.0	14.0	22.0
Total Split (%)	18.3%	65.0%		11.7%	58.3%		11.7%	11.7%	11.7%	11.7%	11.7%	18.3%
Maximum Green (s)	15.0	71.0		7.0	63.0		7.0	7.0	7.0	7.0	7.0	15.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0	1.0	1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0	0.2	0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0	0.0	0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0	0.0	0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Act Effect Green (s)	17.0	73.0		9.0	65.0		9.0	9.0	23.0	9.0	9.0	31.0
Actuated g/C Ratio	0.14	0.61		0.08	0.54		0.08	0.08	0.19	0.08	0.08	0.26
v/c Ratio	1.22	1.21		0.38	1.11		1.16	1.09	0.40	0.64	0.78	0.65
Control Delay	167.4	117.0		61.6	89.8		176.0	154.9	47.0	75.8	88.9	48.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	167.4	117.0		61.6	89.8		176.0	154.9	47.0	75.8	88.9	48.1

Stinson Village
6: Stevens Mill Road & Idlewild Road

2022 Build Phase 1 (with Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F		E	F		F	F	D	E	F	D
Approach Delay		126.3			88.6			132.0			62.9	
Approach LOS		F			F			F			E	
Queue Length 50th (ft)	~298	~1278		38	~963		~140	~132	82	64	84	183
Queue Length 95th (ft)	m#375	#1550		80	#1220		#277	#269	142	#135	#181	277
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	500			250			500		500	250		275
Base Capacity (vph)	250	1113		132	988		132	139	303	132	139	408
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	1.22	1.21		0.38	1.11		1.16	1.09	0.40	0.64	0.78	0.65

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 28 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.22

Intersection Signal Delay: 107.3

Intersection LOS: F

Intersection Capacity Utilization 100.8%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 No-Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	1053	121	46	823	137	119	140	110	78	99	220
Future Volume (vph)	258	1053	121	46	823	137	119	140	110	78	99	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.979			0.934				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1835	0	1770	1824	0	1770	1740	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1835	0	1770	1824	0	1770	1740	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1663			4537			5195			6223	
Travel Time (s)		25.2			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	287	1170	134	51	914	152	132	156	122	87	110	244
Shared Lane Traffic (%)												
Lane Group Flow (vph)	287	1304	0	51	1066	0	132	278	0	87	110	244
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0		14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%		11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0		7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	9.0	73.9		9.9	72.0		9.0	10.0		9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.62		0.08	0.60		0.08	0.08		0.08	0.08	0.20
v/c Ratio	2.17	1.15		0.35	0.97		1.00	1.92		0.66	0.71	0.77
Control Delay	558.6	87.5		58.6	45.7		134.2	467.2		77.6	78.2	62.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	558.6	87.5		58.6	45.7		134.2	467.2		77.6	78.2	62.9

Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 No-Build
Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F		E	D		F	F		E	E	E
Approach Delay		172.5			46.3			360.0			69.6	
Approach LOS		F			D			F			E	
Queue Length 50th (ft)	~358	~1202		38	750		104	~331		67	85	180
Queue Length 95th (ft)	m#300	m#973		78	#1091		#235	#504		#141	#171	#304
Internal Link Dist (ft)		1583			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	132	1130		191	1094		132	145		132	155	316
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	2.17	1.15		0.27	0.97		1.00	1.92		0.66	0.71	0.77

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.17

Intersection Signal Delay: 141.7

Intersection LOS: F

Intersection Capacity Utilization 105.2%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (without Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	287	1110	150	46	895	137	155	140	110	78	99	256
Future Volume (vph)	287	1110	150	46	895	137	155	140	110	78	99	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.980			0.934				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1829	0	1770	1825	0	1770	1740	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1829	0	1770	1825	0	1770	1740	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	319	1233	167	51	994	152	172	156	122	87	110	284
Shared Lane Traffic (%)												
Lane Group Flow (vph)	319	1400	0	51	1146	0	172	278	0	87	110	284
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0		14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%		11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0		7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	9.0	73.9		9.9	72.0		9.0	10.0		9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.62		0.08	0.60		0.08	0.08		0.08	0.08	0.20
v/c Ratio	2.42	1.24		0.35	1.05		1.30	1.92		0.66	0.71	0.90
Control Delay	663.2	128.1		58.6	65.1		224.1	467.2		77.6	78.2	77.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	663.2	128.1		58.6	65.1		224.1	467.2		77.6	78.2	77.9

Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (without Gas Station)

Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F		E	E		F	F		E	E	E
Approach Delay		227.4			64.8			374.3			77.9	
Approach LOS		F			E			F			E	
Queue Length 50th (ft)	~422	~1363		38	~965		~170	~331		67	85	216
Queue Length 95th (ft)	m#276	m242		78	#1223		#314	#504		#141	#171	#377
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	132	1126		191	1095		132	145		132	155	316
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	2.42	1.24		0.27	1.05		1.30	1.92		0.66	0.71	0.90

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 16 (13%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.42

Intersection Signal Delay: 175.3

Intersection LOS: F

Intersection Capacity Utilization 109.9%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (without Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	287	1110	150	46	895	137	155	140	110	78	99	256
Future Volume (vph)	287	1110	150	46	895	137	155	140	110	78	99	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		0	250		500	500		500	250		275
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.980				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1829	0	1770	3468	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1829	0	1770	3468	0	1770	1863	1583	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	319	1233	167	51	994	152	172	156	122	87	110	284
Shared Lane Traffic (%)												
Lane Group Flow (vph)	319	1400	0	51	1146	0	172	156	122	87	110	284
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Detector Phase	5	2		1	6		3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	31.0	78.0		14.0	61.0		14.0	14.0	14.0	14.0	14.0	31.0
Total Split (%)	25.8%	65.0%		11.7%	50.8%		11.7%	11.7%	11.7%	11.7%	11.7%	25.8%
Maximum Green (s)	24.0	71.0		7.0	54.0		7.0	7.0	7.0	7.0	7.0	24.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0	1.0	1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0	0.2	0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0	0.0	0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0	0.0	0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Act Effect Green (s)	24.5	73.0		9.0	57.5		9.0	9.0	23.0	9.0	9.0	38.5
Actuated g/C Ratio	0.20	0.61		0.08	0.48		0.08	0.08	0.19	0.08	0.08	0.32
v/c Ratio	0.89	1.26		0.39	0.69		1.30	1.12	0.40	0.66	0.79	0.56
Control Delay	55.4	144.3		61.9	27.3		224.1	163.0	47.1	77.6	90.8	38.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.4	144.3		61.9	27.3		224.1	163.0	47.1	77.6	90.8	38.4

Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (without Gas Station) with Improvements

Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	F		E	C		F	F	D	E	F	D
Approach Delay		127.8			28.8			154.9			57.5	
Approach LOS		F			C			F			E	
Queue Length 50th (ft)	200	~1375		38	363		~170	~139	84	67	85	178
Queue Length 95th (ft)	m269	#1647		81	444		#314	#278	145	#141	#184	268
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	500			250			500		500	250		275
Base Capacity (vph)	383	1112		132	1662		132	139	303	132	139	527
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.83	1.26		0.39	0.69		1.30	1.12	0.40	0.66	0.79	0.54

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 58 (48%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 91.4

Intersection LOS: F

Intersection Capacity Utilization 104.4%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (with Gas Station)

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	304	1145	167	46	930	137	172	140	110	78	99	273
Future Volume (vph)	304	1145	167	46	930	137	172	140	110	78	99	273
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	275		0	135		150
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.981			0.981			0.934				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1827	0	1770	1827	0	1770	1740	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1827	0	1770	1827	0	1770	1740	0	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	338	1272	186	51	1033	152	191	156	122	87	110	303
Shared Lane Traffic (%)												
Lane Group Flow (vph)	338	1458	0	51	1185	0	191	278	0	87	110	303
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases												4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0		14.0	14.0	14.0
Total Split (s)	14.0	73.0		18.0	77.0		14.0	15.0		14.0	15.0	14.0
Total Split (%)	11.7%	60.8%		15.0%	64.2%		11.7%	12.5%		11.7%	12.5%	11.7%
Maximum Green (s)	7.0	66.0		11.0	70.0		7.0	8.0		7.0	8.0	7.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0		1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0		0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0		0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0		0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effect Green (s)	9.0	73.9		9.9	72.0		9.0	10.0		9.0	10.0	24.0
Actuated g/C Ratio	0.08	0.62		0.08	0.60		0.08	0.08		0.08	0.08	0.20
v/c Ratio	2.56	1.30		0.35	1.08		1.45	1.92		0.66	0.71	0.96
Control Delay	728.8	152.2		58.6	76.9		277.7	467.2		77.6	78.2	89.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	728.8	152.2		58.6	76.9		277.7	467.2		77.6	78.2	89.3

Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (with Gas Station)
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F		E	E		F	F		E	E	F
Approach Delay		260.7			76.1			390.0			84.8	
Approach LOS		F			E			F			F	
Queue Length 50th (ft)	~453	~1461		38	~1027		~201	~331		67	85	234
Queue Length 95th (ft)	m#277	m541		78	#1286		#351	#504		#141	#171	#412
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	250			150			275			135		150
Base Capacity (vph)	132	1125		191	1096		132	145		132	155	316
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	2.56	1.30		0.27	1.08		1.45	1.92		0.66	0.71	0.96

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 40 (33%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.56

Intersection Signal Delay: 196.9

Intersection LOS: F

Intersection Capacity Utilization 112.8%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (with Gas Station) with Improvements

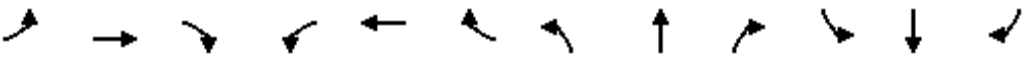
Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	304	1145	167	46	930	137	172	140	110	78	99	273
Future Volume (vph)	304	1145	167	46	930	137	172	140	110	78	99	273
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		0	250		500	500		500	250		275
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.981			0.981				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1827	0	1770	3472	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1827	0	1770	3472	0	1770	1863	1583	1770	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			4537			5195			6223	
Travel Time (s)		21.6			68.7			78.7			94.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	338	1272	186	51	1033	152	191	156	122	87	110	303
Shared Lane Traffic (%)												
Lane Group Flow (vph)	338	1458	0	51	1185	0	191	156	122	87	110	303
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases									8			4
Detector Phase	5	2		1	6		3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0		7.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0		14.0	19.0		14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	32.0	77.0		14.0	59.0		15.0	15.0	14.0	14.0	14.0	32.0
Total Split (%)	26.7%	64.2%		11.7%	49.2%		12.5%	12.5%	11.7%	11.7%	11.7%	26.7%
Maximum Green (s)	25.0	70.0		7.0	52.0		8.0	8.0	7.0	7.0	7.0	25.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	6.0		1.0	6.0		1.0	6.0	1.0	1.0	6.0	1.0
Minimum Gap (s)	0.2	3.0		0.2	3.0		0.2	3.0	0.2	0.2	3.0	0.2
Time Before Reduce (s)	0.0	15.0		0.0	15.0		0.0	5.0	0.0	0.0	5.0	0.0
Time To Reduce (s)	0.0	40.0		0.0	40.0		0.0	15.0	0.0	0.0	15.0	0.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None
Act Effect Green (s)	25.6	72.0		9.0	55.4		10.0	10.0	24.0	9.0	9.0	39.6
Actuated g/C Ratio	0.21	0.60		0.08	0.46		0.08	0.08	0.20	0.08	0.08	0.33
v/c Ratio	0.90	1.33		0.39	0.74		1.30	1.01	0.39	0.66	0.79	0.58
Control Delay	51.9	175.6		61.9	30.3		218.8	129.0	45.8	77.6	90.8	38.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.9	175.6		61.9	30.3		218.8	129.0	45.8	77.6	90.8	38.2

Stinson Village
6: Stevens Mill Road & Idlewild Road

2023 Full Build (with Gas Station) with Improvements

Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	F		E	C		F	F	D	E	F	D
Approach Delay		152.4			31.6			143.9			56.6	
Approach LOS		F			C			F			E	
Queue Length 50th (ft)	217	~1488		38	394		~189	~124	83	67	85	190
Queue Length 95th (ft)	m246	m#1604		81	482		#339	#265	143	#141	#184	284
Internal Link Dist (ft)		1348			4457			5115			6143	
Turn Bay Length (ft)	500			250			500		500	250		275
Base Capacity (vph)	398	1096		132	1602		147	155	316	132	139	540
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.85	1.33		0.39	0.74		1.30	1.01	0.39	0.66	0.79	0.56

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 76 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.33

Intersection Signal Delay: 102.1

Intersection LOS: F

Intersection Capacity Utilization 108.3%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Village at Idlewild
6: Stevens Mill Road & Idlewild Road

2040 Full Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	2282	149	102	1883	265	207	248	82	250	187	205
Future Volume (vph)	234	2282	149	102	1883	265	207	248	82	250	187	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		200	425		250	500		200	475		225
Storage Lanes	2		1	1		1	2		1	2		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	0.97	0.95	1.00	0.97	0.95	0.88
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	3433	3539	1583	3433	3539	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	1770	5085	1583	3433	3539	1583	3433	3539	2787
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1428			1573			5195			4910	
Travel Time (s)		21.6			23.8			78.7			74.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	260	2536	166	113	2092	294	230	276	91	278	208	228
Shared Lane Traffic (%)												
Lane Group Flow (vph)	260	2536	166	113	2092	294	230	276	91	278	208	228
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	19.0	72.0	15.0	15.0	68.0	17.0	15.0	16.0	15.0	17.0	18.0	19.0
Total Split (%)	15.8%	60.0%	12.5%	12.5%	56.7%	14.2%	12.5%	13.3%	12.5%	14.2%	15.0%	15.8%
Maximum Green (s)	12.0	65.0	8.0	8.0	61.0	10.0	8.0	9.0	8.0	10.0	11.0	12.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Min	None	None	C-Min	None	None	None	None	None	None	None
Act Effect Green (s)	13.7	67.0	82.0	10.0	63.3	80.3	10.0	11.0	26.0	12.0	13.0	31.7
Actuated g/C Ratio	0.11	0.56	0.68	0.08	0.53	0.67	0.08	0.09	0.22	0.10	0.11	0.26
v/c Ratio	0.66	0.89	0.15	0.77	0.78	0.28	0.80	0.85	0.27	0.81	0.54	0.31
Control Delay	48.6	29.9	8.7	85.8	25.4	8.9	75.3	77.6	41.6	71.7	56.5	36.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	29.9	8.7	85.8	25.4	8.9	75.3	77.6	41.6	71.7	56.5	36.7
LOS	D	C	A	F	C	A	E	E	D	E	E	D
Approach Delay		30.3			26.2			71.2			56.1	
Approach LOS		C			C			E			E	

Village at Idlewild
6: Stevens Mill Road & Idlewild Road

2040 Full Build
Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	105	455	43	87	461	85	91	112	59	110	81	80
Queue Length 95th (ft)	m135	520	m67	#184	524	128	#155	#187	108	#177	122	120
Internal Link Dist (ft)		1348			1493			5115			4830	
Turn Bay Length (ft)	500		200	425		250	500		200	475		225
Base Capacity (vph)	400	2839	1081	147	2682	1059	286	324	342	343	383	743
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.89	0.15	0.77	0.78	0.28	0.80	0.85	0.27	0.81	0.54	0.31

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 35 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 35.1

Intersection LOS: D

Intersection Capacity Utilization 80.6%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Stevens Mill Road & Idlewild Road

 Ø1	 Ø2 (R)	 Ø3	 Ø4
15 s	72 s	15 s	18 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
19 s	68 s	17 s	16 s

Village at Idlewild
6: Stevens Mill Road & Idlewild Road

2040 Full Build (Median U-Turn)

Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑		↑↑↑			↑	↑↑		↑	↑↑
Traffic Volume (vph)	0	1527	213	0	1148	441	0	140	282	0	99	351
Future Volume (vph)	0	1527	213	0	1148	441	0	140	282	0	99	351
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		225	425		250	0		250	0		475
Storage Lanes	0		1	0		0	0		2	0		2
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	0.88	1.00	1.00	0.88
Frt			0.850		0.958				0.850			0.850
Flt Protected												
Satd. Flow (prot)	0	5085	1583	0	4872	0	0	1863	2787	0	1863	2787
Flt Permitted												
Satd. Flow (perm)	0	5085	1583	0	4872	0	0	1863	2787	0	1863	2787
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		938			892			5195			4910	
Travel Time (s)		14.2			13.5			78.7			74.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1697	237	0	1276	490	0	156	313	0	110	390
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1697	237	0	1766	0	0	156	313	0	110	390
Turn Type		NA	Perm		NA			NA	Perm		NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases			2						8			4
Detector Phase		2	2		6			8	8		4	4
Switch Phase												
Minimum Initial (s)		12.0	12.0		12.0			7.0	7.0		7.0	7.0
Minimum Split (s)		19.0	19.0		19.0			14.0	14.0		14.0	14.0
Total Split (s)		39.0	39.0		39.0			21.0	21.0		21.0	21.0
Total Split (%)		65.0%	65.0%		65.0%			35.0%	35.0%		35.0%	35.0%
Maximum Green (s)		32.0	32.0		32.0			14.0	14.0		14.0	14.0
Yellow Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
All-Red Time (s)		2.0	2.0		2.0			2.0	2.0		2.0	2.0
Lost Time Adjust (s)		-2.0	-2.0		-2.0			-2.0	-2.0		-2.0	-2.0
Total Lost Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0			3.0	3.0		3.0	3.0
Recall Mode		C-Min	C-Min		C-Min			None	None		None	None
Act Effct Green (s)		35.5	35.5		35.5			14.5	14.5		14.5	14.5
Actuated g/C Ratio		0.59	0.59		0.59			0.24	0.24		0.24	0.24
v/c Ratio		0.56	0.25		0.61			0.35	0.46		0.24	0.58
Control Delay		5.4	4.2		6.7			20.7	21.5		19.2	23.5
Queue Delay		0.0	0.0		0.0			0.0	0.0		0.0	0.0
Total Delay		5.4	4.2		6.7			20.7	21.5		19.2	23.5
LOS		A	A		A			C	C		B	C
Approach Delay		5.2			6.7			21.2			22.6	
Approach LOS		A			A			C			C	

Village at Idlewild
6: Stevens Mill Road & Idlewild Road

2040 Full Build (Median U-Turn)
Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		30	12		98			46	53		31	68
Queue Length 95th (ft)		65	35		115			88	87		66	109
Internal Link Dist (ft)		858			812			5115			4830	
Turn Bay Length (ft)			225						250			475
Base Capacity (vph)		3005	935		2879			496	743		496	743
Starvation Cap Reductn		0	0		0			0	0		0	0
Spillback Cap Reductn		0	0		0			0	0		0	0
Storage Cap Reductn		0	0		0			0	0		0	0
Reduced v/c Ratio		0.56	0.25		0.61			0.31	0.42		0.22	0.52

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 3 (5%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 40

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 9.3

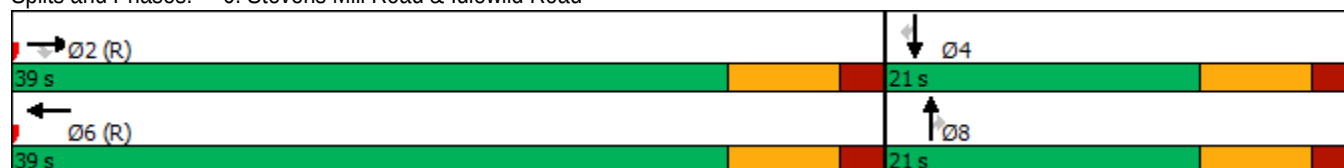
Intersection LOS: A

Intersection Capacity Utilization 52.6%

ICU Level of Service A

Analysis Period (min) 15

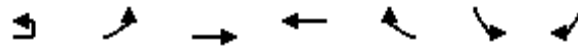
Splits and Phases: 6: Stevens Mill Road & Idlewild Road



Village at Idlewild
62: Idlewild Road & Eastbound U-Turn

2040 Full Build (Median U-Turn)

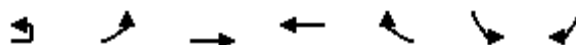
Timing Plan: PM Peak Hour



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	AA		AA	AAA			
Traffic Volume (vph)	476	0	1333	1113	0	0	0
Future Volume (vph)	476	0	1333	1113	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		350			0	0	0
Storage Lanes		1			0	0	0
Taper Length (ft)		100				100	
Lane Util. Factor	0.97	1.00	0.95	0.91	1.00	1.00	1.00
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	3433	0	3539	5085	0	0	0
Flt Permitted	0.950						
Satd. Flow (perm)	3433	0	3539	5085	0	0	0
Right Turn on Red					No		No
Satd. Flow (RTOR)							
Link Speed (mph)			45	45		30	
Link Distance (ft)			892	681		877	
Travel Time (s)			13.5	10.3		19.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	529	0	1481	1237	0	0	0
Shared Lane Traffic (%)							
Lane Group Flow (vph)	529	0	1481	1237	0	0	0
Turn Type	Prot		NA	NA			
Protected Phases	5		Free	6			
Permitted Phases							
Detector Phase	5			6			
Switch Phase							
Minimum Initial (s)	7.0			12.0			
Minimum Split (s)	14.0			19.0			
Total Split (s)	26.0			34.0			
Total Split (%)	43.3%			56.7%			
Maximum Green (s)	19.0			27.0			
Yellow Time (s)	5.0			5.0			
All-Red Time (s)	2.0			2.0			
Lost Time Adjust (s)	-2.0			-2.0			
Total Lost Time (s)	5.0			5.0			
Lead/Lag	Lead			Lag			
Lead-Lag Optimize?	Yes			Yes			
Vehicle Extension (s)	3.0			3.0			
Recall Mode	None			C-Max			
Act Effect Green (s)	16.5		60.0	33.5			
Actuated g/C Ratio	0.28		1.00	0.56			
v/c Ratio	0.56		0.42	0.44			
Control Delay	18.6		0.6	8.8			
Queue Delay	0.0		0.0	0.0			
Total Delay	18.6		0.6	8.8			
LOS	B		A	A			
Approach Delay			5.3	8.8			
Approach LOS			A	A			

Village at Idlewild
62: Idlewild Road & Eastbound U-Turn

2040 Full Build (Median U-Turn)
Timing Plan: PM Peak Hour



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	91		6	84			
Queue Length 95th (ft)	135		2	136			
Internal Link Dist (ft)			812	601		797	
Turn Bay Length (ft)	350						
Base Capacity (vph)	1201		3539	2839			
Starvation Cap Reductn	0		0	0			
Spillback Cap Reductn	0		0	0			
Storage Cap Reductn	0		0	0			
Reduced v/c Ratio	0.44		0.42	0.44			

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green

Natural Cycle: 40

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 6.6

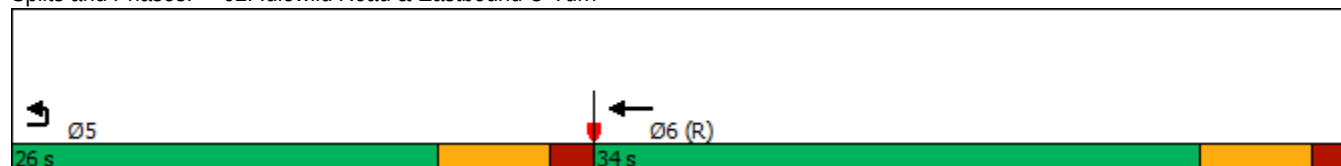
Intersection LOS: A

Intersection Capacity Utilization 43.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 62: Idlewild Road & Eastbound U-Turn



Village at Idlewild
61: Westbound U-Turn & Idlewild Road

2040 Full Build (Median U-Turn)

Timing Plan: PM Peak Hour

	→	↘	↶	↙	←	↖	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↓↓		↑↑↑		
Traffic Volume (vph)	1616	0	124	0	1375	0	0
Future Volume (vph)	1616	0	124	0	1375	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		350		0	0
Storage Lanes		0		2		0	0
Taper Length (ft)				200		100	
Lane Util. Factor	0.91	1.00	0.97	1.00	0.91	1.00	1.00
Frt							
Flt Protected			0.950				
Satd. Flow (prot)	5085	0	3433	0	5085	0	0
Flt Permitted			0.950				
Satd. Flow (perm)	5085	0	3433	0	5085	0	0
Right Turn on Red		No					No
Satd. Flow (RTOR)							
Link Speed (mph)	45				45	30	
Link Distance (ft)	1158				938	686	
Travel Time (s)	17.5				14.2	15.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1796	0	138	0	1528	0	0
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1796	0	138	0	1528	0	0
Turn Type	NA		Prot		NA		
Protected Phases	2		1		Free		
Permitted Phases							
Detector Phase	2		1				
Switch Phase							
Minimum Initial (s)	12.0		7.0				
Minimum Split (s)	19.0		14.0				
Total Split (s)	44.0		16.0				
Total Split (%)	73.3%		26.7%				
Maximum Green (s)	37.0		9.0				
Yellow Time (s)	5.0		5.0				
All-Red Time (s)	2.0		2.0				
Lost Time Adjust (s)	-2.0		-2.0				
Total Lost Time (s)	5.0		5.0				
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?	Yes		Yes				
Vehicle Extension (s)	3.0		3.0				
Recall Mode	C-Min		None				
Act Effect Green (s)	44.0		9.8		60.0		
Actuated g/C Ratio	0.73		0.16		1.00		
v/c Ratio	0.48		0.25		0.30		
Control Delay	5.1		17.5		0.1		
Queue Delay	0.0		0.0		0.0		
Total Delay	5.1		17.5		0.1		
LOS	A		B		A		
Approach Delay	5.1				1.6		
Approach LOS	A				A		

Village at Idlewild
61: Westbound U-Turn & Idlewild Road

2040 Full Build (Median U-Turn)
Timing Plan: PM Peak Hour

	→	↘	↶	↙	←	↵	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Queue Length 50th (ft)	96		20		0		
Queue Length 95th (ft)	136		m36		0		
Internal Link Dist (ft)	1078				858	606	
Turn Bay Length (ft)			350				
Base Capacity (vph)	3725		629		5085		
Starvation Cap Reductn	0		0		0		
Spillback Cap Reductn	0		0		0		
Storage Cap Reductn	0		0		0		
Reduced v/c Ratio	0.48		0.22		0.30		

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 53 (88%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 40

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 3.4

Intersection LOS: A

Intersection Capacity Utilization 45.4%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 61: Westbound U-Turn & Idlewild Road



APPENDIX L

IDLEWILD ROAD AND ACCESS A

SYNCHRO REPORTS AND TURN LANE WARRANTS

Stinson Village
7: Idlewild Road & Access A

2022 Build Phase 1 (without Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑			↗
Traffic Vol, veh/h	0	717	1699	23	0	22
Future Vol, veh/h	0	717	1699	23	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	797	1888	26	0	24
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	1901
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	86
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	86
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		62.7		
HCM LOS				F		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	86		
HCM Lane V/C Ratio	-	-	-	0.284		
HCM Control Delay (s)	-	-	-	62.7		
HCM Lane LOS	-	-	-	F		
HCM 95th %tile Q(veh)	-	-	-	1		

Stinson Village
7: Idlewild Road & Access A

2022 Build Phase 1 (without Gas Station) with Improvements
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Vol, veh/h	0	717	1699	23	0	22
Future Vol, veh/h	0	717	1699	23	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	797	1888	26	0	24
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	944
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	263
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	263
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		20.1		
HCM LOS	C					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	263		
HCM Lane V/C Ratio	-	-	-	0.093		
HCM Control Delay (s)	-	-	-	20.1		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.3		

Stinson Village
7: Idlewild Road & Access A

2022 Build Phase 1 (with Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑	↗		↗
Traffic Vol, veh/h	0	811	1772	43	0	43
Future Vol, veh/h	0	811	1772	43	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	75	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	901	1969	48	0	48
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	1969
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	78
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	78
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		106.5		
HCM LOS	F					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	78		
HCM Lane V/C Ratio	-	-	-	0.613		
HCM Control Delay (s)	-	-	-	106.5		
HCM Lane LOS	-	-	-	F		
HCM 95th %tile Q(veh)	-	-	-	2.7		

Stinson Village
7: Idlewild Road & Access A

2022 Build Phase 1 (with Gas Station) with Improvements
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Vol, veh/h	0	811	1772	43	0	43
Future Vol, veh/h	0	811	1772	43	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	901	1969	48	0	48
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	985
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	247
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	247
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		23		
HCM LOS				C		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	247		
HCM Lane V/C Ratio	-	-	-	0.193		
HCM Control Delay (s)	-	-	-	23		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.7		

Intersection						
Int Delay, s/veh	4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑	↗		↗
Traffic Vol, veh/h	0	854	1862	50	0	58
Future Vol, veh/h	0	854	1862	50	0	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	949	2069	56	0	64
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	2069
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	68
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	68
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		196.9		
HCM LOS	F					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	68		
HCM Lane V/C Ratio	-	-	-	0.948		
HCM Control Delay (s)	-	-	-	196.9		
HCM Lane LOS	-	-	-	F		
HCM 95th %tile Q(veh)	-	-	-	4.7		

Stinson Village
7: Idlewild Road & Access A

2023 Full Build (without Gas Station) with Improvements
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Vol, veh/h	0	854	1862	50	0	58
Future Vol, veh/h	0	854	1862	50	0	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	949	2069	56	0	64
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	1035
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	229
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	229
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		26.8		
HCM LOS	D					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	229		
HCM Lane V/C Ratio	-	-	-	0.281		
HCM Control Delay (s)	-	-	-	26.8		
HCM Lane LOS	-	-	-	D		
HCM 95th %tile Q(veh)	-	-	-	1.1		

Stinson Village
7: Idlewild Road & Access A

2023 Full Build (with Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	9.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑	↗		↗
Traffic Vol, veh/h	0	947	1935	71	0	78
Future Vol, veh/h	0	947	1935	71	0	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1052	2150	79	0	87
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	2150
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	~ 60
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	~ 60
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		\$ 386.4		
HCM LOS				F		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	60		
HCM Lane V/C Ratio	-	-	-	1.444		
HCM Control Delay (s)	-	-	-	\$ 386.4		
HCM Lane LOS	-	-	-	F		
HCM 95th %tile Q(veh)	-	-	-	7.6		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Stinson Village
7: Idlewild Road & Access A

2023 Full Build (with Gas Station) with Improvements
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Vol, veh/h	0	947	1935	71	0	78
Future Vol, veh/h	0	947	1935	71	0	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1052	2150	79	0	87
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	1075
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	215
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	215
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		32.6		
HCM LOS				D		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	215		
HCM Lane V/C Ratio	-	-	-	0.403		
HCM Control Delay (s)	-	-	-	32.6		
HCM Lane LOS	-	-	-	D		
HCM 95th %tile Q(veh)	-	-	-	1.8		

Village at Idlewild
7: Idlewild Road & Access A

2040 Full Build
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	2.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑↑	↑↑↑↓			↑
Traffic Vol, veh/h	0	2228	2755	71	0	78
Future Vol, veh/h	0	2228	2755	71	0	78
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2476	3061	79	0	87
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	1570
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	-	0	~ 85
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	~ 85
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		191.2		
HCM LOS				F		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	85		
HCM Lane V/C Ratio	-	-	-	1.02		
HCM Control Delay (s)	-	-	-	191.2		
HCM Lane LOS	-	-	-	F		
HCM 95th %tile Q(veh)	-	-	-	5.8		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Stinson Village
7: Idlewild Road & Access A

2022 Build Phase 1 (without Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑			↑
Traffic Vol, veh/h	0	1576	1266	14	0	13
Future Vol, veh/h	0	1576	1266	14	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1751	1407	16	0	14
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	1415
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	168
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	168
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		28.4		
HCM LOS	D					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	168		
HCM Lane V/C Ratio	-	-	-	0.086		
HCM Control Delay (s)	-	-	-	28.4		
HCM Lane LOS	-	-	-	D		
HCM 95th %tile Q(veh)	-	-	-	0.3		

Stinson Village
7: Idlewild Road & Access A

2022 Build Phase 1 (without Gas Station) with Improvements
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Vol, veh/h	0	1576	1266	14	0	13
Future Vol, veh/h	0	1576	1266	14	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1751	1407	16	0	14
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	704
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	379
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	379
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		14.9		
HCM LOS	B					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	379		
HCM Lane V/C Ratio	-	-	-	0.038		
HCM Control Delay (s)	-	-	-	14.9		
HCM Lane LOS	-	-	-	B		
HCM 95th %tile Q(veh)	-	-	-	0.1		

Stinson Village
7: Idlewild Road & Access A

2022 Build Phase 1 (with Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑	↗		↗
Traffic Vol, veh/h	0	1646	1318	31	0	31
Future Vol, veh/h	0	1646	1318	31	0	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	75	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1829	1464	34	0	34
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	1464
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	157
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	157
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		34.3		
HCM LOS	D					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	157		
HCM Lane V/C Ratio	-	-	-	0.219		
HCM Control Delay (s)	-	-	-	34.3		
HCM Lane LOS	-	-	-	D		
HCM 95th %tile Q(veh)	-	-	-	0.8		

Stinson Village
7: Idlewild Road & Access A

2022 Build Phase 1 (with Gas Station) with Improvements
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Vol, veh/h	0	1646	1318	31	0	31
Future Vol, veh/h	0	1646	1318	31	0	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1829	1464	34	0	34
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	732
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	364
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	364
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		15.9		
HCM LOS	C					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	364		
HCM Lane V/C Ratio	-	-	-	0.095		
HCM Control Delay (s)	-	-	-	15.9		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.3		

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑	↗		↗
Traffic Vol, veh/h	0	1744	1368	45	0	38
Future Vol, veh/h	0	1744	1368	45	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1938	1520	50	0	42
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1520
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	145
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	145
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		39.7	
HCM LOS					E	
Minor Lane/Major Mvmt		EBT	WBT	WBR	SBLn1	
Capacity (veh/h)		-	-	-	145	
HCM Lane V/C Ratio		-	-	-	0.291	
HCM Control Delay (s)		-	-	-	39.7	
HCM Lane LOS		-	-	-	E	
HCM 95th %tile Q(veh)		-	-	-	1.1	

Stinson Village
7: Idlewild Road & Access A

2023 Full Build (without Gas Station) with Improvements
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Vol, veh/h	0	1744	1368	45	0	38
Future Vol, veh/h	0	1744	1368	45	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1938	1520	50	0	42
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	760
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	349
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	349
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		16.7		
HCM LOS				C		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	349		
HCM Lane V/C Ratio	-	-	-	0.121		
HCM Control Delay (s)	-	-	-	16.7		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.4		

Stinson Village
7: Idlewild Road & Access A

2023 Full Build (with Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑	↗		↗
Traffic Vol, veh/h	0	1822	1429	62	0	55
Future Vol, veh/h	0	1822	1429	62	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2024	1588	69	0	61
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1588
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	0	-	-	-	0	132
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	132
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		53.9	
HCM LOS					F	
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	132		
HCM Lane V/C Ratio	-	-	-	0.463		
HCM Control Delay (s)	-	-	-	53.9		
HCM Lane LOS	-	-	-	F		
HCM 95th %tile Q(veh)	-	-	-	2.1		

Stinson Village
7: Idlewild Road & Access A

2023 Full Build (with Gas Station) with Improvements
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Vol, veh/h	0	1822	1429	62	0	55
Future Vol, veh/h	0	1822	1429	62	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2024	1588	69	0	61
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	794
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	331
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	331
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		18.3	
HCM LOS					C	
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	331		
HCM Lane V/C Ratio	-	-	-	0.185		
HCM Control Delay (s)	-	-	-	18.3		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.7		

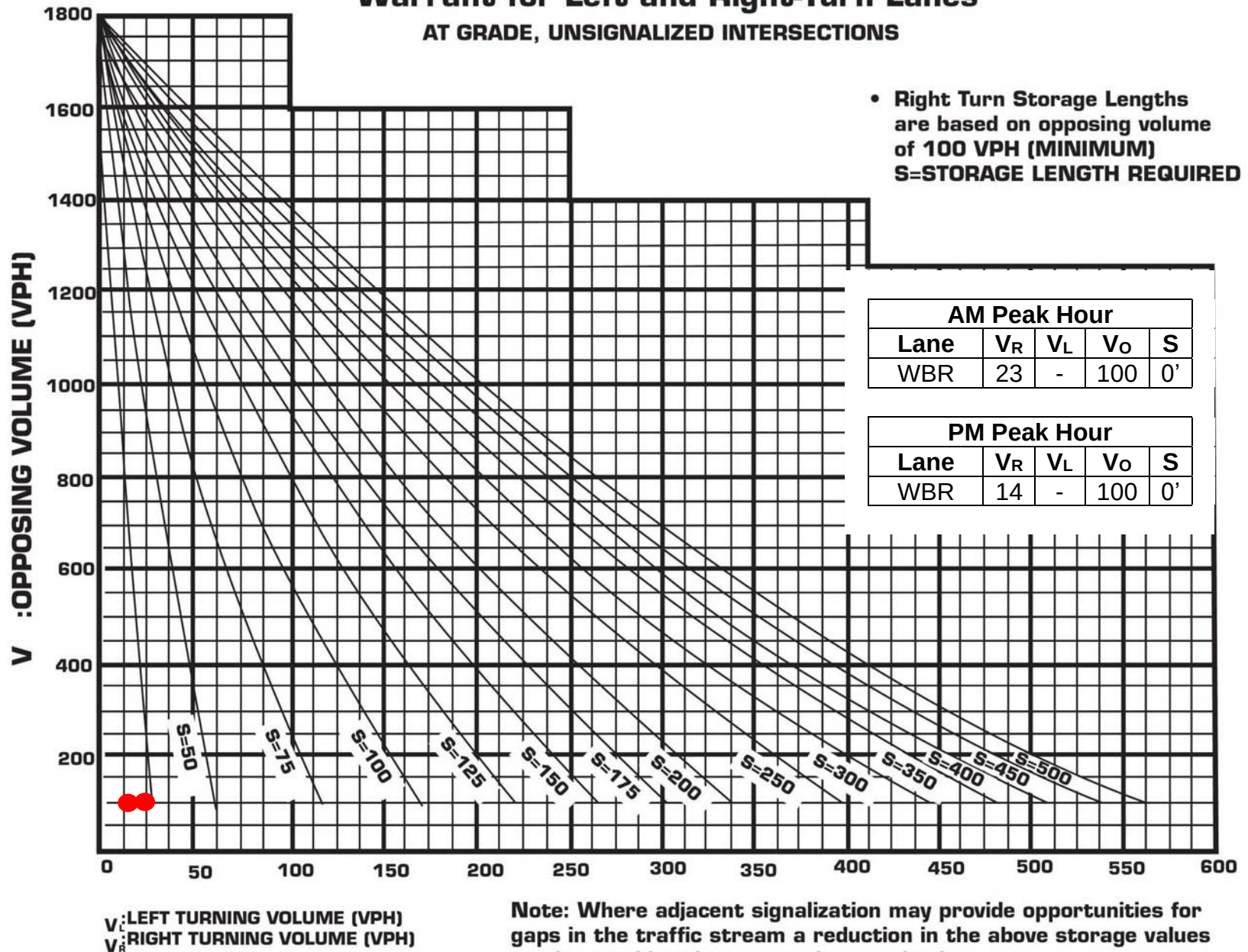
Village at Idlewild
7: Idlewild Road & Access A

2040 Full Build
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑↑	↑↑↑↑			↑↑
Traffic Vol, veh/h	0	2609	2291	62	0	55
Future Vol, veh/h	0	2609	2291	62	0	55
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2899	2546	69	0	61
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	1308
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	-	0	129
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	129
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		55.8		
HCM LOS	F					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	129		
HCM Lane V/C Ratio	-	-	-	0.474		
HCM Control Delay (s)	-	-	-	55.8		
HCM Lane LOS	-	-	-	F		
HCM 95th %tile Q(veh)	-	-	-	2.2		

Idlewild Road and Access A
2022 Build Phase 1 without Gas Station

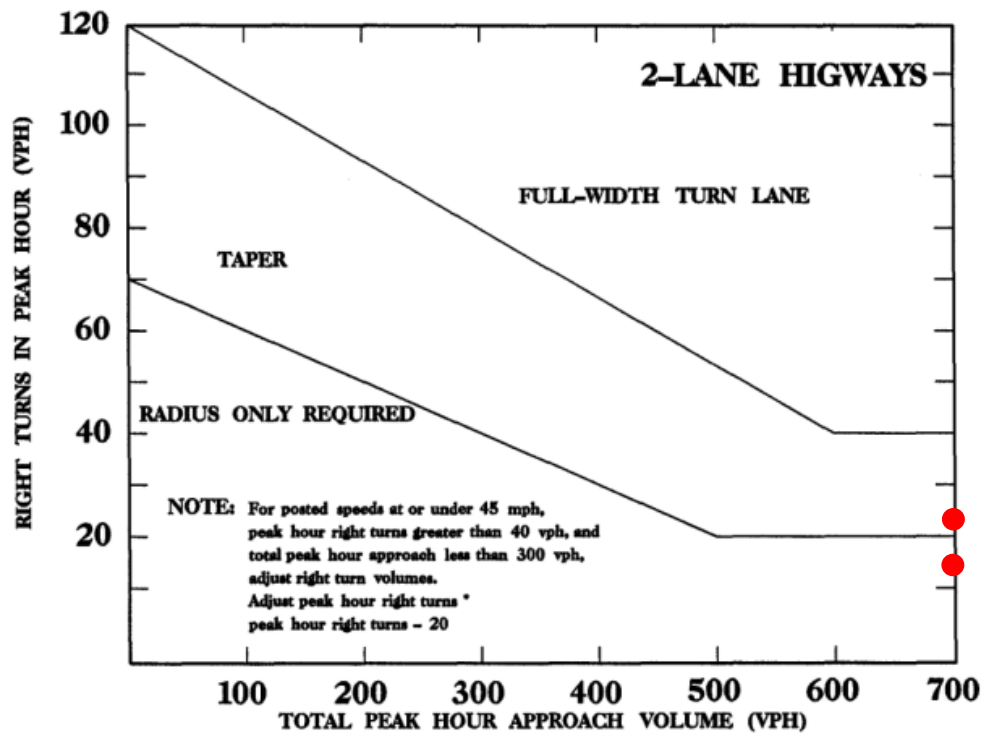
Warrant for Left and Right-Turn Lanes **AT GRADE, UNSIGNALIZED INTERSECTIONS**



Idlewild Road and Access A

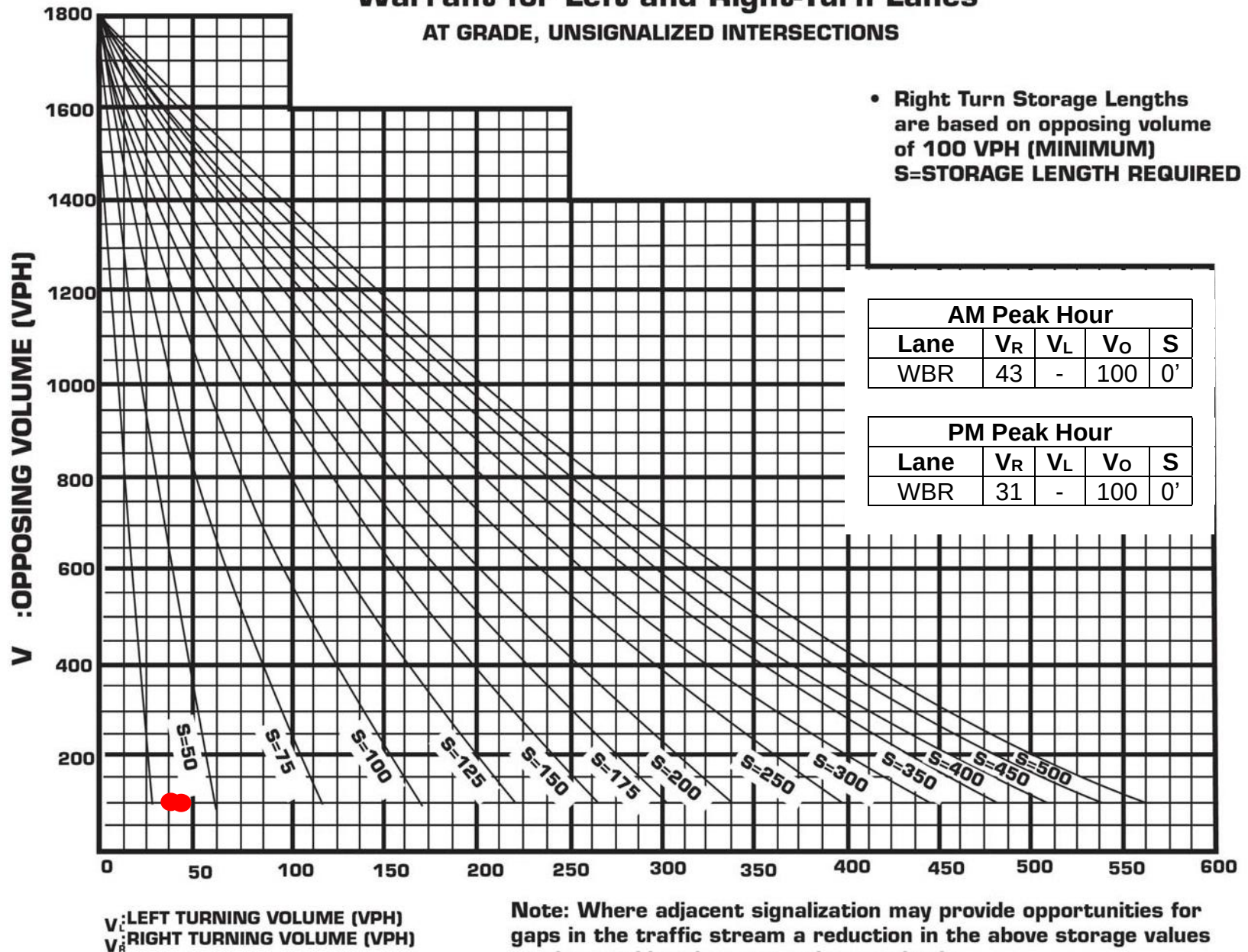
2022 Build Phase 1 without Gas Station				
Peak Hour	Approach	Right Turn Volume	Approach Volume	Warranted?
AM	Southbound	23	1722	No
PM	Southbound	14	1280	No

RIGHT TURN LANE WARRANTS



Idlewild Road and Access A
2022 Build Phase 1 (with gas station)

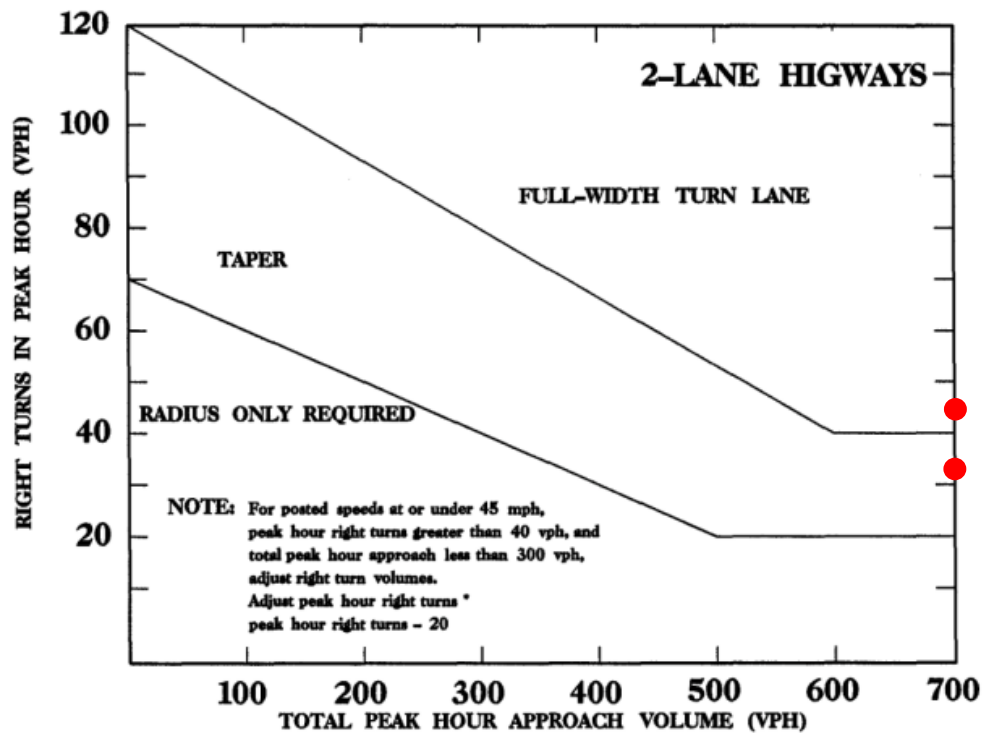
Warrant for Left and Right-Turn Lanes **AT GRADE, UNSIGNALIZED INTERSECTIONS**



Idlewild Road and Access A

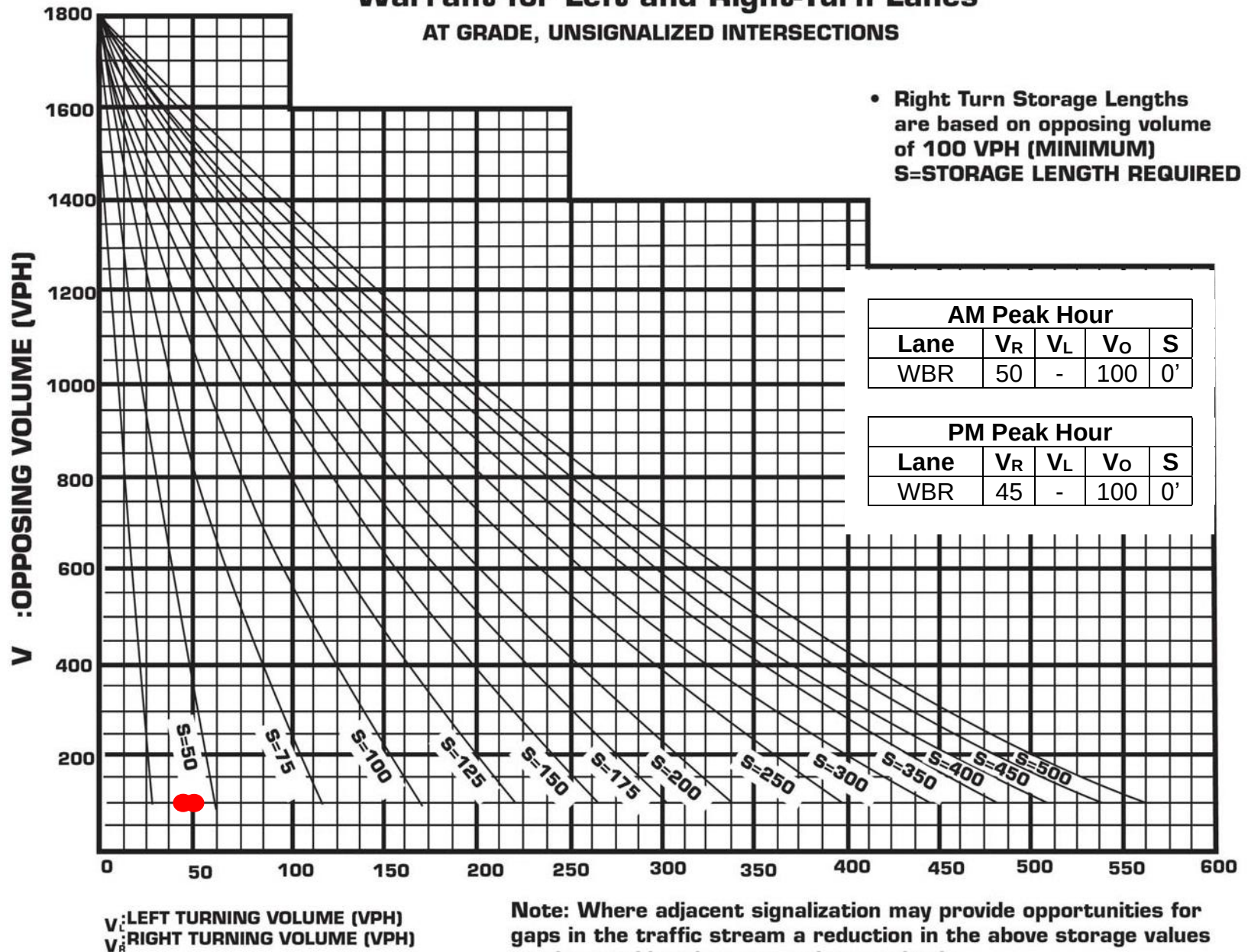
2022 Build Phase 1 (with gas station)				
Peak Hour	Approach	Right Turn Volume	Approach Volume	Warranted?
AM	Southbound	43	1815	Yes
PM	Southbound	31	1349	No

RIGHT TURN LANE WARRANTS



Idlewild Road and Access A
2023 Full Build (without gas station)

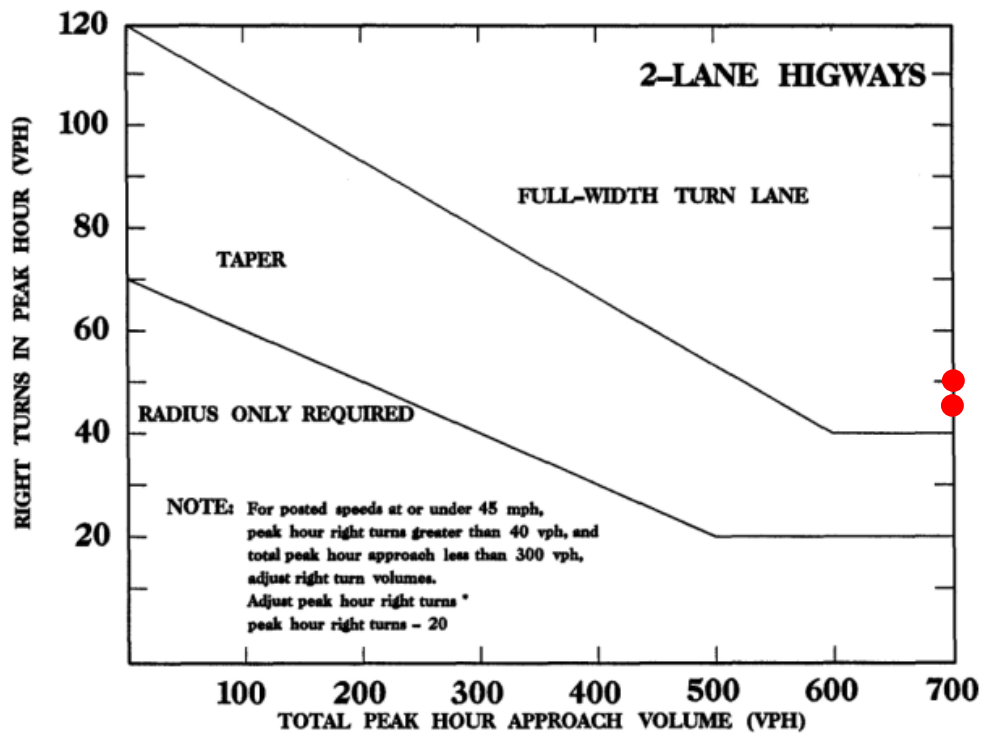
Warrant for Left and Right-Turn Lanes **AT GRADE, UNSIGNALIZED INTERSECTIONS**



Idlewild Road and Access A

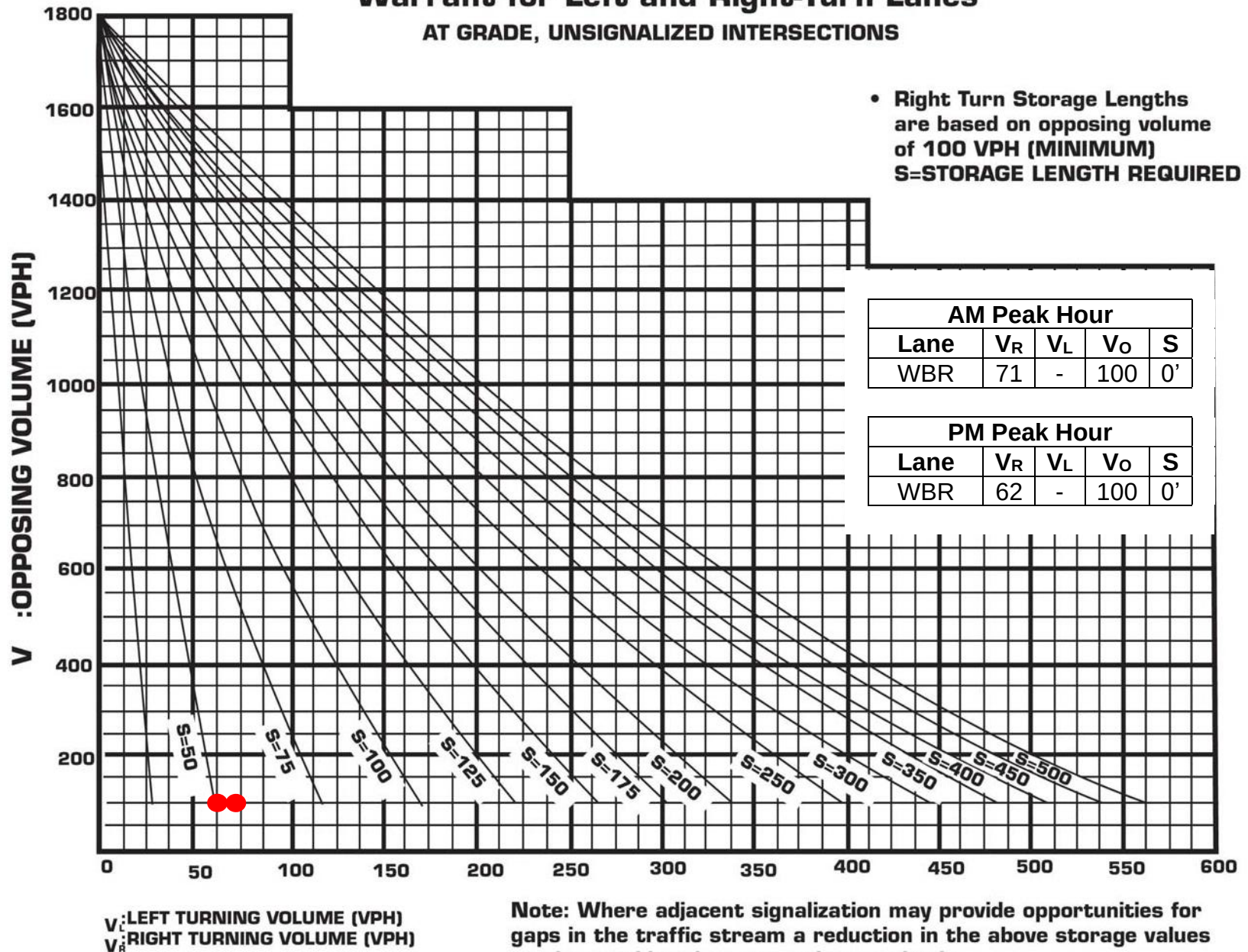
2023 Full Build (without gas station)				
Peak Hour	Approach	Right Turn Volume	Approach Volume	Warranted?
AM	Southbound	50	1912	Yes
PM	Southbound	45	1415	Yes

RIGHT TURN LANE WARRANTS



Idlewild Road and Access A
2023 Full Build with Gas Station

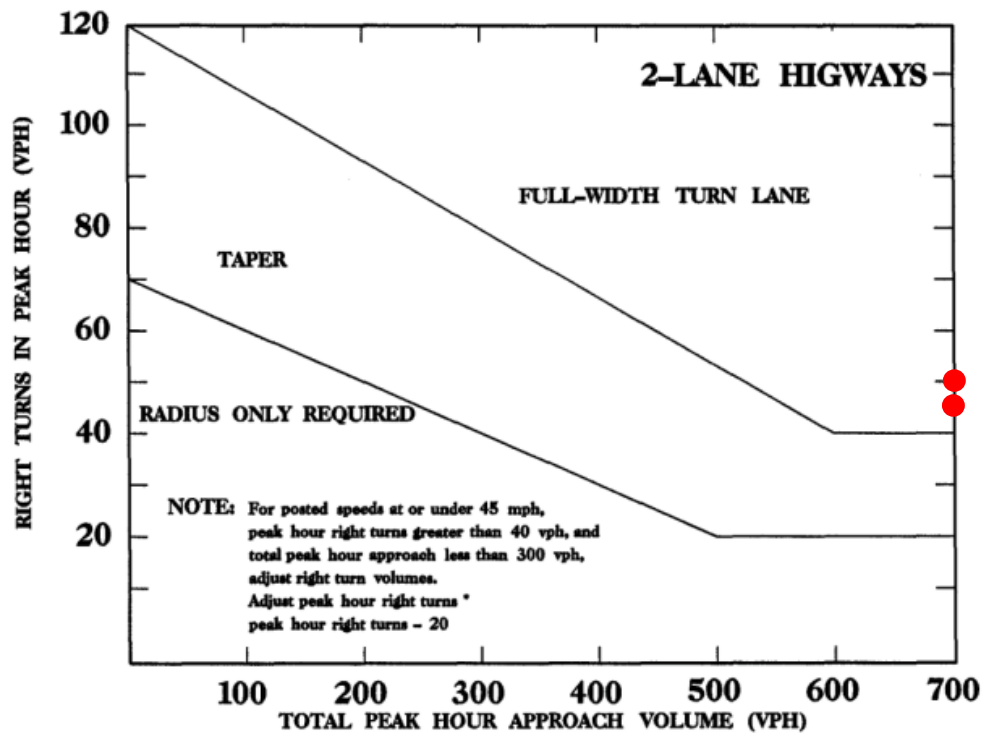
Warrant for Left and Right-Turn Lanes **AT GRADE, UNSIGNALIZED INTERSECTIONS**



Idlewild Road and Access A

2023 Full Build (with gas station)				
Peak Hour	Approach	Right Turn Volume	Approach Volume	Warranted?
AM	Southbound	71	2006	Yes
PM	Southbound	62	1491	Yes

RIGHT TURN LANE WARRANTS



APPENDIX M

IDLEWILD ROAD AND ACCESS C

SYNCHRO REPORTS AND TURN LANE WARRANTS

Stinson Village
8: Idlewild Road & Access C

2022 Build Phase 1 (without Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	684	1534	23	0	22
Future Vol, veh/h	9	684	1534	23	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	760	1704	26	0	24
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1730	0	-	0	-	1717
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	364	-	-	-	0	111
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	364	-	-	-	-	111
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		46.4		
HCM LOS	E					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	364	-	-	-	-	111
HCM Lane V/C Ratio	0.027	-	-	-	-	0.22
HCM Control Delay (s)	15.2	-	-	-	-	46.4
HCM Lane LOS	C	-	-	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.8

Stinson Village
8: Idlewild Road & Access C

2022 Build Phase 1 (without Gas Station) with Improvements
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	684	1534	23	0	22
Future Vol, veh/h	9	684	1534	23	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	760	1704	26	0	24
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1730	0	-	0	-	1704
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.13	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.219	-	-	-	-	3.319
Pot Cap-1 Maneuver	363	-	-	-	0	113
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	363	-	-	-	-	113
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		45.4		
HCM LOS	E					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	363	-	-	-	113	
HCM Lane V/C Ratio	0.028	-	-	-	0.216	
HCM Control Delay (s)	15.2	-	-	-	45.4	
HCM Lane LOS	C	-	-	-	E	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8	

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	767	1596	43	0	43
Future Vol, veh/h	29	767	1596	43	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	400	-	-	75	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	852	1773	48	0	48
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1821	0	-	0	-	1773
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	336	-	-	-	0	103
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	336	-	-	-	-	103
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.6	0		67.1		
HCM LOS	F					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	336	-	-	-	103	
HCM Lane V/C Ratio	0.096	-	-	-	0.464	
HCM Control Delay (s)	16.8	-	-	-	67.1	
HCM Lane LOS	C	-	-	-	F	
HCM 95th %tile Q(veh)	0.3	-	-	-	2	

Stinson Village
8: Idlewild Road & Access C

2022 Build Phase 1 (with Gas Station) with Improvements
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	767	1596	43	0	43
Future Vol, veh/h	29	767	1596	43	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	852	1773	48	0	48
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1821	0	-	0	-	1773
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.13	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.219	-	-	-	-	3.319
Pot Cap-1 Maneuver	334	-	-	-	0	102
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	334	-	-	-	-	102
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.6	0		68.2		
HCM LOS	F					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	334	-	-	-	102	
HCM Lane V/C Ratio	0.096	-	-	-	0.468	
HCM Control Delay (s)	16.9	-	-	-	68.2	
HCM Lane LOS	C	-	-	-	F	
HCM 95th %tile Q(veh)	0.3	-	-	-	2	

Stinson Village
8: Idlewild Road & Access C

2023 Full Build (without Gas Station)

Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	843	1650	50	0	58
Future Vol, veh/h	36	843	1650	50	0	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	400	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	937	1833	56	0	64
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1889	0	-	0	-	1833
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	316	-	-	-	0	95
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	316	-	-	-	-	95
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		100.2		
HCM LOS	F					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	316	-	-	-	-	95
HCM Lane V/C Ratio	0.127	-	-	-	-	0.678
HCM Control Delay (s)	18	-	-	-	-	100.2
HCM Lane LOS	C	-	-	-	-	F
HCM 95th %tile Q(veh)	0.4	-	-	-	-	3.4

Stinson Village
8: Idlewild Road & Access C

2023 Full Build (without Gas Station) with Improvements
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	843	1650	50	0	58
Future Vol, veh/h	36	843	1650	50	0	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	937	1833	56	0	64
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1889	0	-	0	-	917
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	313	-	-	-	0	274
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	313	-	-	-	-	274
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		22.1		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	313	-	-	-	-	274
HCM Lane V/C Ratio	0.128	-	-	-	-	0.235
HCM Control Delay (s)	18.2	-	-	-	-	22.1
HCM Lane LOS	C	-	-	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	-	0.9

Stinson Village
8: Idlewild Road & Access C

2023 Full Build (with Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	5.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	57	926	1713	71	0	79
Future Vol, veh/h	57	926	1713	71	0	79
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	400	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	1029	1903	79	0	88

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1982	0	0 - 1903
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	4.12	-	- - 6.22
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	2.218	-	- - 3.318
Pot Cap-1 Maneuver	291	-	- 0 ~ 86
Stage 1	-	-	- 0 -
Stage 2	-	-	- 0 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	291	-	- - ~ 86
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	190.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	291	-	-	-	86
HCM Lane V/C Ratio	0.218	-	-	-	1.021
HCM Control Delay (s)	20.8	-	-	-	190.3
HCM Lane LOS	C	-	-	-	F
HCM 95th %tile Q(veh)	0.8	-	-	-	5.8

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

Stinson Village
8: Idlewild Road & Access C

2023 Full Build (with Gas Station) with Improvements
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	57	926	1713	71	0	79
Future Vol, veh/h	57	926	1713	71	0	79
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	1029	1903	79	0	88
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	1982	0	-	0	-	952
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	288	-	-	-	0	260
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	288	-	-	-	-	260
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.2	0		25.7		
HCM LOS				D		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	288	-	-	-	260	
HCM Lane V/C Ratio	0.22	-	-	-	0.338	
HCM Control Delay (s)	21	-	-	-	25.7	
HCM Lane LOS	C	-	-	-	D	
HCM 95th %tile Q(veh)	0.8	-	-	-	1.4	

Village at Idlewild
8: Idlewild Road & Access C

2040 Full Build
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	57	2284	2596	71	0	79
Future Vol, veh/h	57	2284	2596	71	0	79
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	2538	2884	79	0	88
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2963	0	-	0	-	1482
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	-	-	3.92
Pot Cap-1 Maneuver	~ 40	-	-	-	0	98
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	~ 40	-	-	-	-	98
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	12.5	0		142.2		
HCM LOS	F					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	~ 40	-	-	-	98	
HCM Lane V/C Ratio	1.583	-	-	-	0.896	
HCM Control Delay (s)	\$ 511.5	-	-	-	142.2	
HCM Lane LOS	F	-	-	-	F	
HCM 95th %tile Q(veh)	6.5	-	-	-	5.1	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Stinson Village
8: Idlewild Road & Access C

2022 Build Phase 1 (without Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	1424	1150	14	0	13
Future Vol, veh/h	7	1424	1150	14	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	1582	1278	16	0	14
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1294	0	-	0	-	1286
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	536	-	-	-	0	201
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	536	-	-	-	-	201
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		24.3		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	536	-	-	-	201	
HCM Lane V/C Ratio	0.015	-	-	-	0.072	
HCM Control Delay (s)	11.8	-	-	-	24.3	
HCM Lane LOS	B	-	-	-	C	
HCM 95th %tile Q(veh)	0	-	-	-	0.2	

Stinson Village
8: Idlewild Road & Access C

2022 Build Phase 1 (without Gas Station) with Improvements
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	1424	1150	14	0	13
Future Vol, veh/h	7	1424	1150	14	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	1582	1278	16	0	14
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	1294	0	-	0	-	1278
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.13	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.219	-	-	-	-	3.319
Pot Cap-1 Maneuver	534	-	-	-	0	202
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	534	-	-	-	-	202
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		24.2		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	534	-	-	-	202	
HCM Lane V/C Ratio	0.015	-	-	-	0.072	
HCM Control Delay (s)	11.8	-	-	-	24.2	
HCM Lane LOS	B	-	-	-	C	
HCM 95th %tile Q(veh)	0	-	-	-	0.2	

Stinson Village
8: Idlewild Road & Access C

2022 Build Phase 1 (with Gas Station)

Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	1486	1194	31	0	31
Future Vol, veh/h	22	1486	1194	31	0	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	400	-	-	75	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	1651	1327	34	0	34
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1361	0	-	0	-	1327
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	505	-	-	-	0	190
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	505	-	-	-	-	190
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		28.1		
HCM LOS	D					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	505	-	-	-	190	
HCM Lane V/C Ratio	0.048	-	-	-	0.181	
HCM Control Delay (s)	12.5	-	-	-	28.1	
HCM Lane LOS	B	-	-	-	D	
HCM 95th %tile Q(veh)	0.2	-	-	-	0.6	

Stinson Village
8: Idlewild Road & Access C

2022 Build Phase 1 (with Gas Station) with Improvements
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	1486	1194	31	0	31
Future Vol, veh/h	22	1486	1194	31	0	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	1651	1327	34	0	34
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	1361	0	-	0	-	1327
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.13	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.219	-	-	-	-	3.319
Pot Cap-1 Maneuver	503	-	-	-	0	189
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	503	-	-	-	-	189
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		28.2		
HCM LOS				D		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	503	-	-	-	-	189
HCM Lane V/C Ratio	0.049	-	-	-	-	0.182
HCM Control Delay (s)	12.5	-	-	-	-	28.2
HCM Lane LOS	B	-	-	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.6

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	1547	1261	45	0	38
Future Vol, veh/h	36	1547	1261	45	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	400	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	1719	1401	50	0	42
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	1451	0	-	0	-	1401
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	467	-	-	-	0	172
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	467	-	-	-	-	172
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.3	0		32.6		
HCM LOS				D		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	467	-	-	-	172	
HCM Lane V/C Ratio	0.086	-	-	-	0.245	
HCM Control Delay (s)	13.4	-	-	-	32.6	
HCM Lane LOS	B	-	-	-	D	
HCM 95th %tile Q(veh)	0.3	-	-	-	0.9	

Stinson Village
8: Idlewild Road & Access C

2023 Full Build (without Gas Station) with Improvements
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	1547	1261	45	0	38
Future Vol, veh/h	36	1547	1261	45	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	1719	1401	50	0	42
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1451	0	-	0	-	701
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	463	-	-	-	0	381
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	463	-	-	-	-	381
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.3	0		15.6		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	463	-	-	-	381	
HCM Lane V/C Ratio	0.086	-	-	-	0.111	
HCM Control Delay (s)	13.5	-	-	-	15.6	
HCM Lane LOS	B	-	-	-	C	
HCM 95th %tile Q(veh)	0.3	-	-	-	0.4	

Stinson Village
8: Idlewild Road & Access C

2023 Full Build (with Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	53	1616	1313	62	0	55
Future Vol, veh/h	53	1616	1313	62	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	400	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	1796	1459	69	0	61
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1528	0	-	0	-	1459
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	436	-	-	-	0	159
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	436	-	-	-	-	159
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.5	0		41.1		
HCM LOS	E					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	436	-	-	-	-	159
HCM Lane V/C Ratio	0.135	-	-	-	-	0.384
HCM Control Delay (s)	14.5	-	-	-	-	41.1
HCM Lane LOS	B	-	-	-	-	E
HCM 95th %tile Q(veh)	0.5	-	-	-	-	1.6

Stinson Village
8: Idlewild Road & Access C

2023 Full Build (with Gas Station) with Improvements
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	53	1616	1313	62	0	55
Future Vol, veh/h	53	1616	1313	62	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	1796	1459	69	0	61
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1528	0	-	0	-	730
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	432	-	-	-	0	365
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	432	-	-	-	-	365
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.5	0		16.8		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	432	-	-	-	-	365
HCM Lane V/C Ratio	0.136	-	-	-	-	0.167
HCM Control Delay (s)	14.6	-	-	-	-	16.8
HCM Lane LOS	B	-	-	-	-	C
HCM 95th %tile Q(veh)	0.5	-	-	-	-	0.6

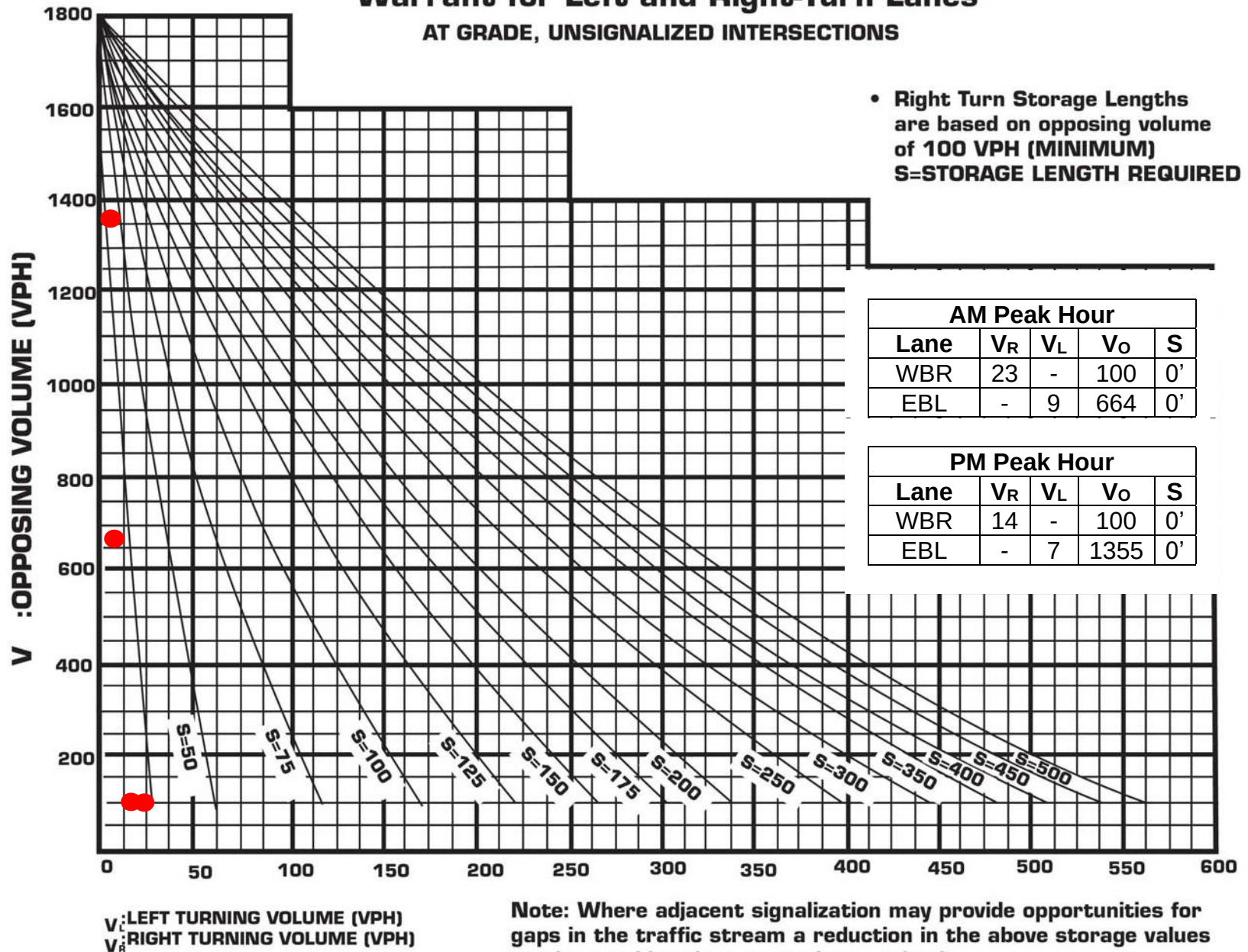
Village at Idlewild
8: Idlewild Road & Access C

2040 Full Build
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	53	2612	2195	62	0	55
Future Vol, veh/h	53	2612	2195	62	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	2902	2439	69	0	61
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2508	0	-	0	-	1254
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	-	-	3.92
Pot Cap-1 Maneuver	69	-	-	-	0	140
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	69	-	-	-	-	140
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		SB	
HCM Control Delay, s	3.4		0		49.3	
HCM LOS	E					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	69	-	-	-	140	
HCM Lane V/C Ratio	0.853	-	-	-	0.437	
HCM Control Delay (s)	169.5	-	-	-	49.3	
HCM Lane LOS	F	-	-	-	E	
HCM 95th %tile Q(veh)	4.1	-	-	-	1.9	

Idlewild Road and Access C
2022 Build Phase 1 without Gas Station

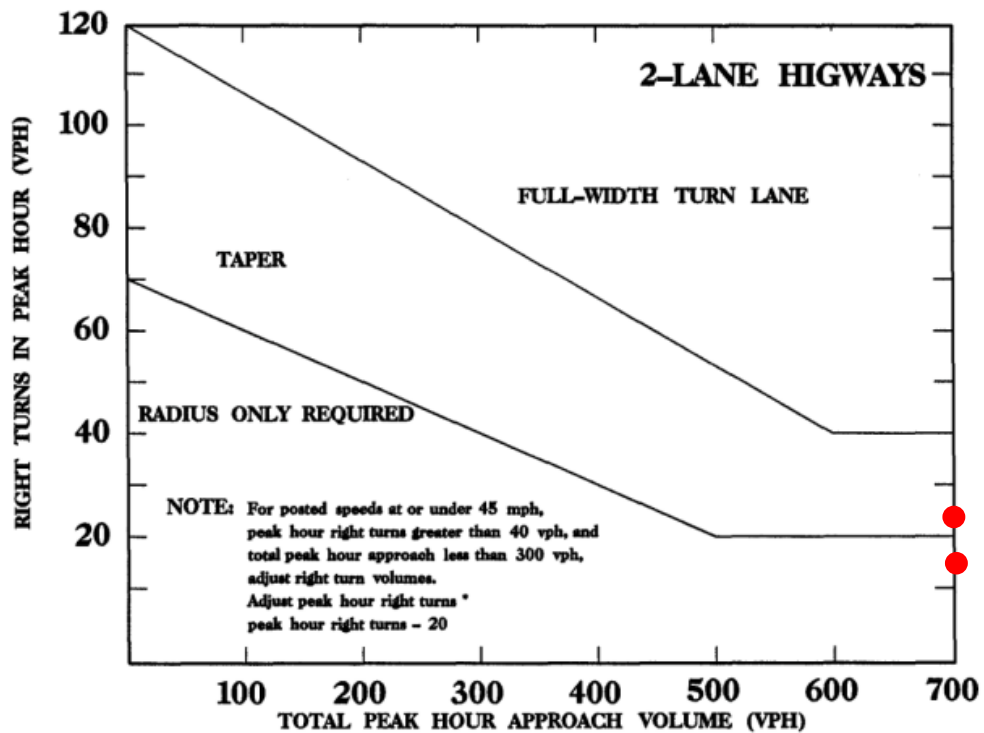
Warrant for Left and Right-Turn Lanes **AT GRADE, UNSIGNALIZED INTERSECTIONS**



Idlewild Road and Access C

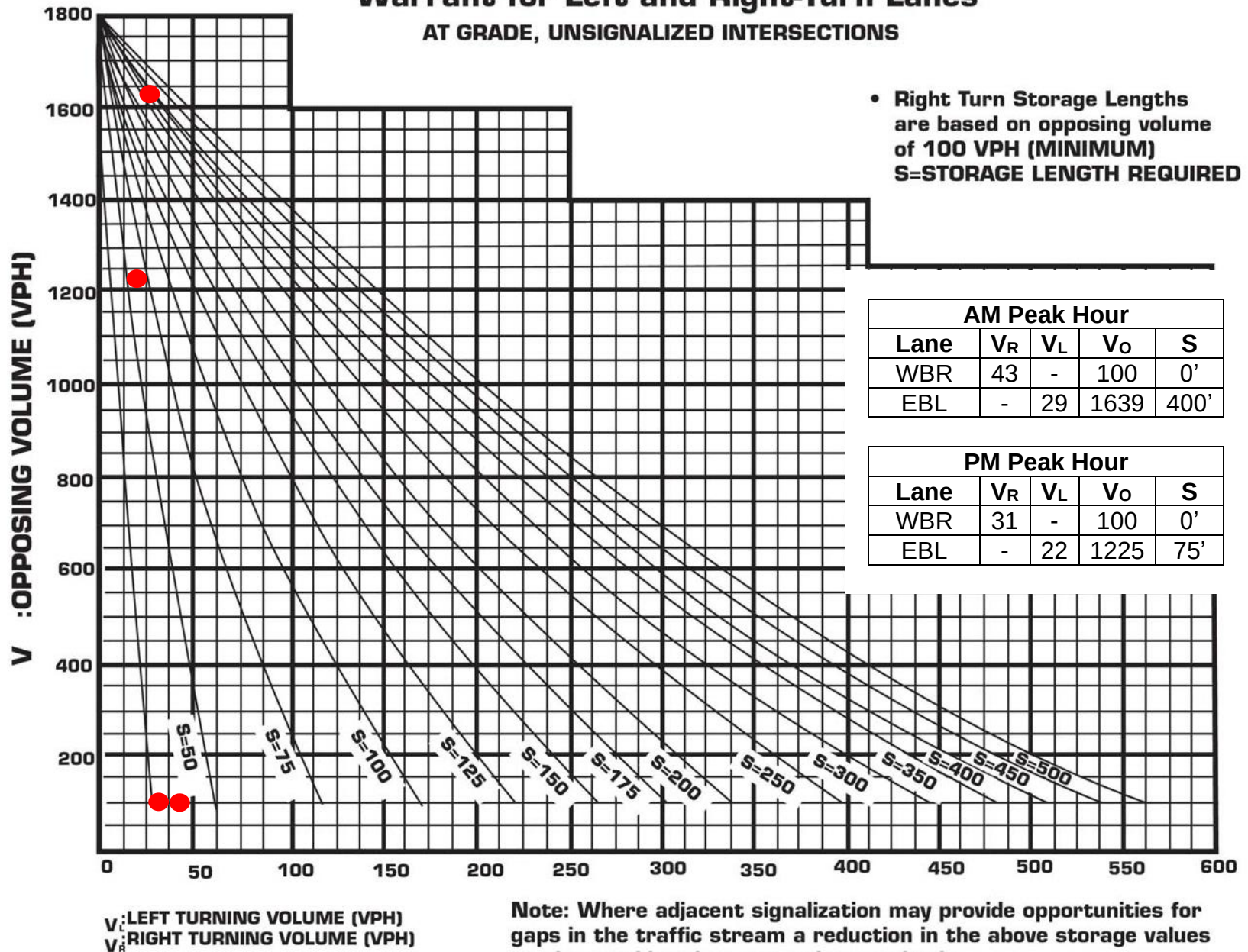
2022 Build Phase 1 without Gas Station				
Peak Hour	Approach	Right Turn Volume	Approach Volume	Warranted?
AM	Westbound	23	1474	No
PM	Westbound	14	1106	No

RIGHT TURN LANE WARRANTS



Idlewild Road and Access C
2022 Build Phase 1 (with gas station)

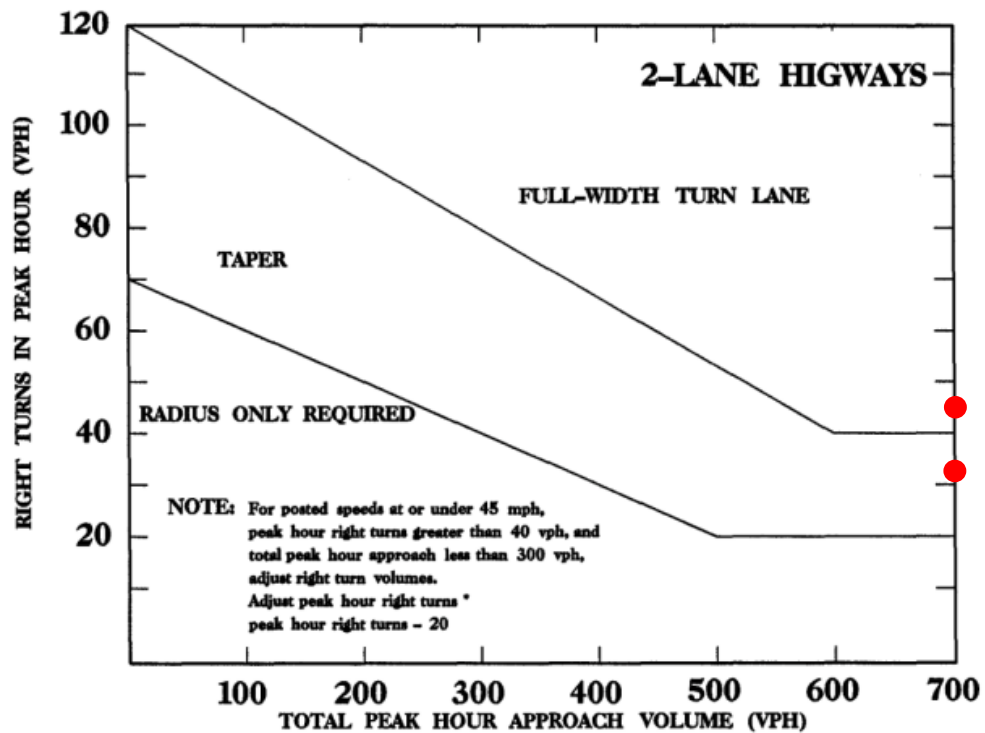
Warrant for Left and Right-Turn Lanes **AT GRADE, UNSIGNALIZED INTERSECTIONS**



Idlewild Road and Access C

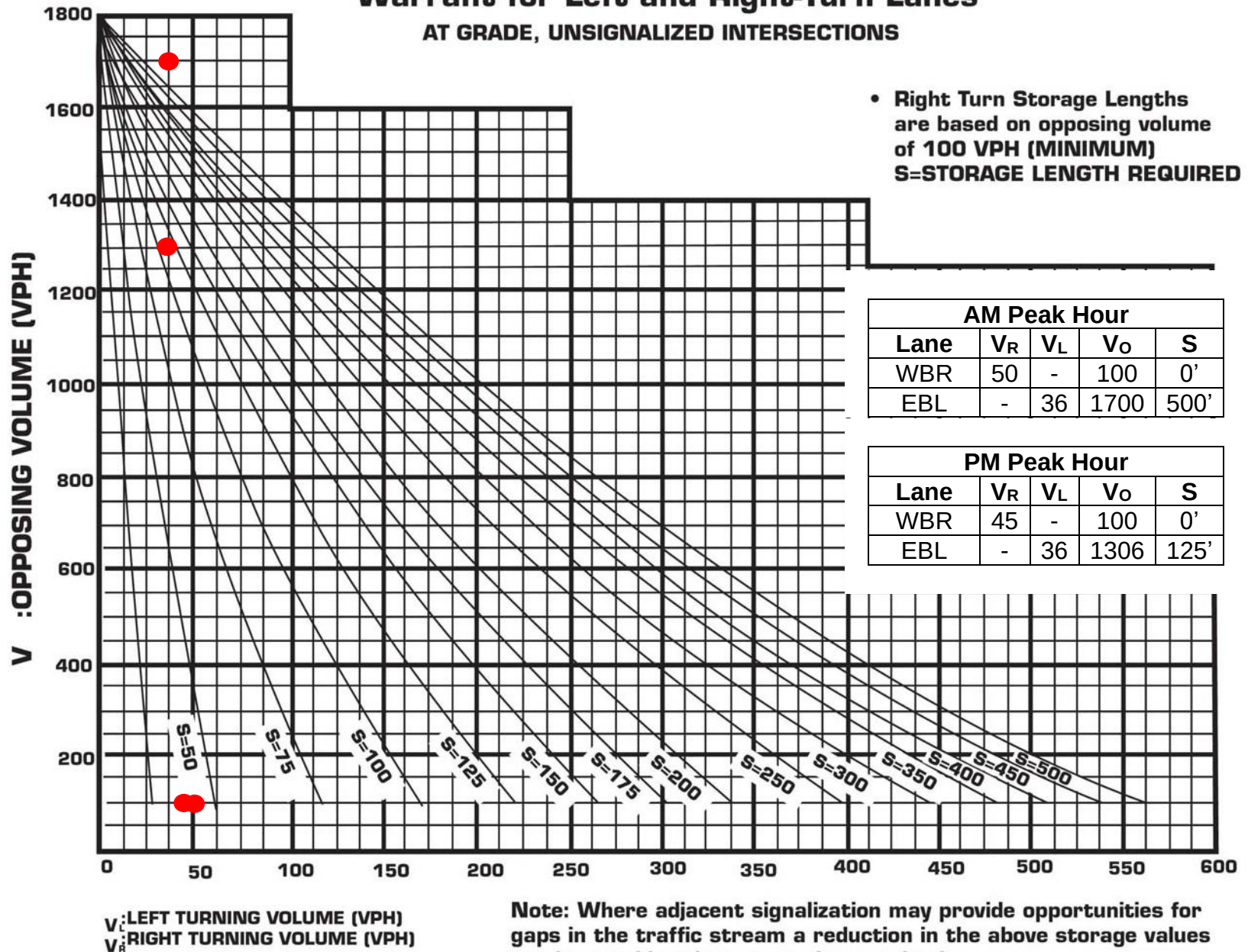
2022 Build Phase 1 (with gas station)				
Peak Hour	Approach	Right Turn Volume	Approach Volume	Warranted?
AM	Westbound	43	1638	Yes
PM	Westbound	31	1225	No

RIGHT TURN LANE WARRANTS



Idlewild Road and Access C
2023 Full Build (without gas station)

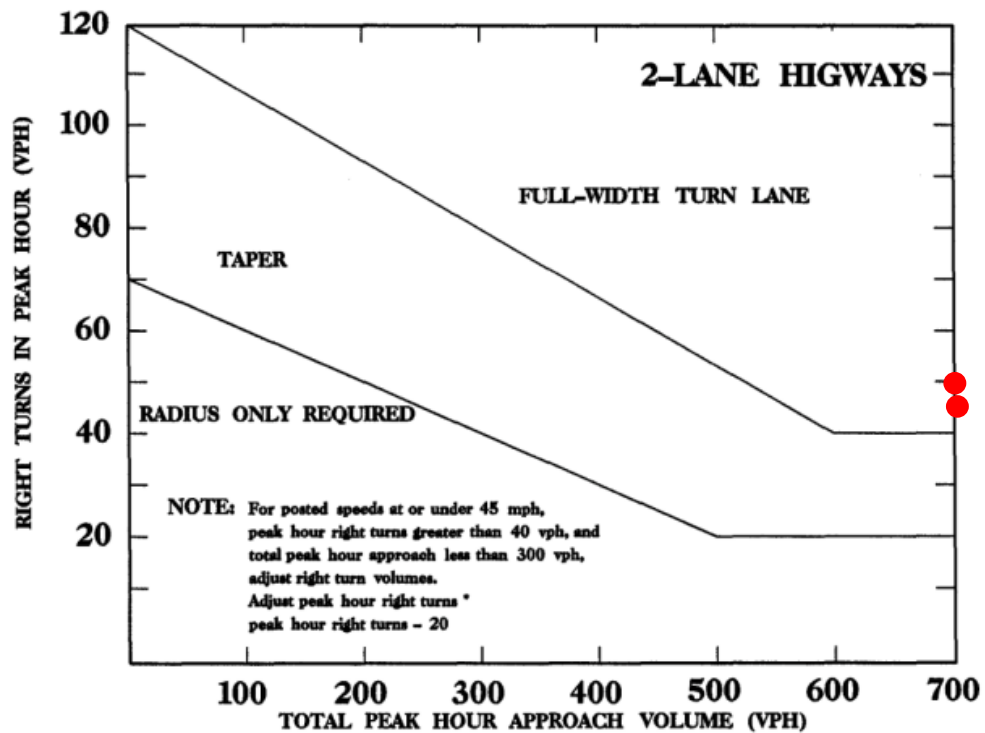
Warrant for Left and Right-Turn Lanes **AT GRADE, UNSIGNALIZED INTERSECTIONS**



Idlewild Road and Access C

2023 Full Build (without gas station)				
Peak Hour	Approach	Right Turn Volume	Approach Volume	Warranted?
AM	Westbound	50	1700	Yes
PM	Westbound	45	1306	Yes

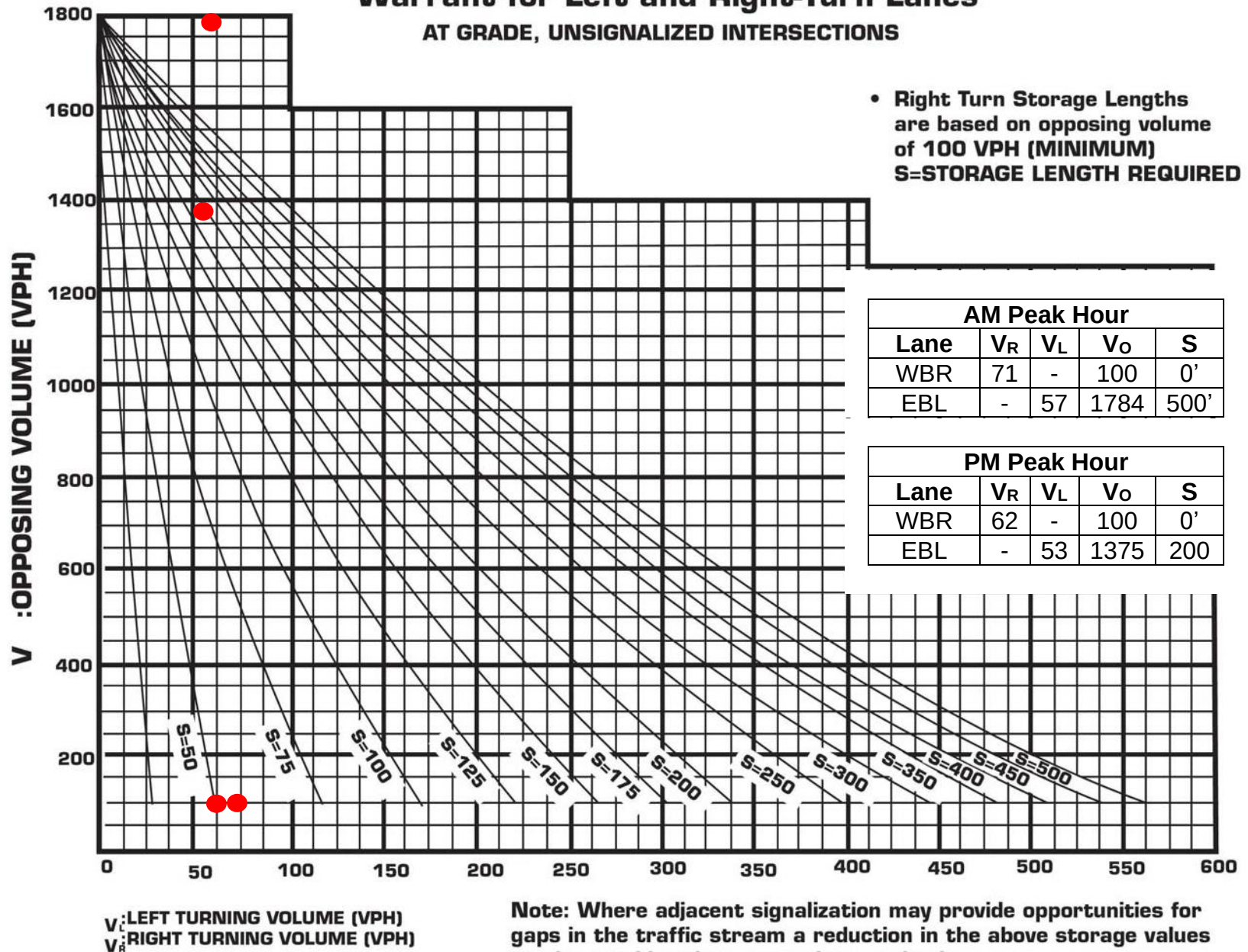
RIGHT TURN LANE WARRANTS



Idlewild Road and Access C
2023 Full Build (with gas station)

Warrant for Left and Right-Turn Lanes

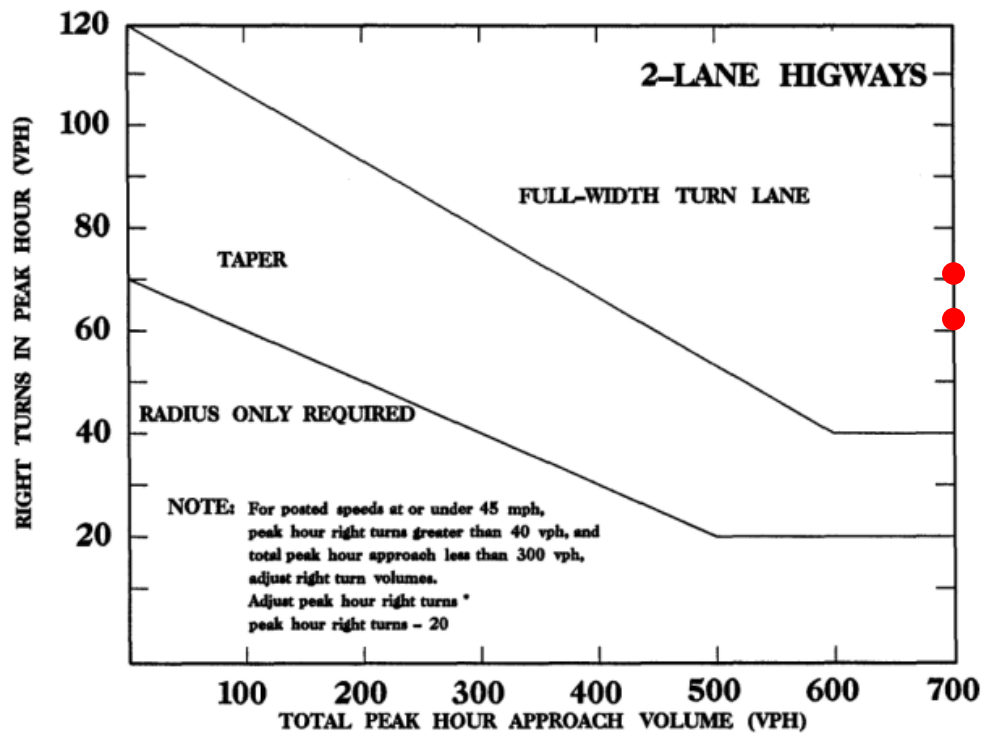
AT GRADE, UNSIGNALIZED INTERSECTIONS



Idlewild Road and Access C

2023 Full Build (with gas station)				
Peak Hour	Approach	Right Turn Volume	Approach Volume	Warranted?
AM	Westbound	71	1784	Yes
PM	Westbound	62	1375	Yes

RIGHT TURN LANE WARRANTS



APPENDIX N

MARSHAL HOOKS ROAD AND ACCESS D

SYNCHRO REPORTS

Stinson Village
9: Marshall Hooks Road & Access D

2022 Build Phase 1 (without Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	4.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	4	4	8	4	4
Future Vol, veh/h	8	4	4	8	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	4	4	9	4	4
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	21	9	0	0	13	0
Stage 1	9	-	-	-	-	-
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	996	1073	-	-	1606	-
Stage 1	1014	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	994	1073	-	-	1606	-
Mov Cap-2 Maneuver	994	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	1009	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.6	0		3.6		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	1019	1606	-	
HCM Lane V/C Ratio	-	-	0.013	0.003	-	
HCM Control Delay (s)	-	-	8.6	7.2	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2022 Build Phase 1 (with Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	4.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	4	4	29	4	4
Future Vol, veh/h	29	4	4	29	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	4	4	32	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	32	20	0	0	36	0
Stage 1	20	-	-	-	-	-
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	982	1058	-	-	1575	-
Stage 1	1003	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	979	1058	-	-	1575	-
Mov Cap-2 Maneuver	979	-	-	-	-	-
Stage 1	1003	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.8	0		3.6		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 988		1575	-	
HCM Lane V/C Ratio	-	- 0.037		0.003	-	
HCM Control Delay (s)	-	- 8.8		7.3	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0.1		0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2023 Full Build (without Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	4.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	44	4	4	35	4	4
Future Vol, veh/h	44	4	4	35	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	4	4	39	4	4
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	36	24	0	0	43	0
Stage 1	24	-	-	-	-	-
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	977	1052	-	-	1566	-
Stage 1	999	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	974	1052	-	-	1566	-
Mov Cap-2 Maneuver	974	-	-	-	-	-
Stage 1	999	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.9	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	980	1566	-	
HCM Lane V/C Ratio	-	-	0.054	0.003	-	
HCM Control Delay (s)	-	-	8.9	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2023 Full Build (with Gas Station)

Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	4.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	4	4	57	4	4
Future Vol, veh/h	65	4	4	57	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	4	4	63	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	48	36	0	0	67	0
Stage 1	36	-	-	-	-	-
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	962	1037	-	-	1535	-
Stage 1	986	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	959	1037	-	-	1535	-
Mov Cap-2 Maneuver	959	-	-	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.1	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 963		1535	-	
HCM Lane V/C Ratio	-	- 0.08		0.003	-	
HCM Control Delay (s)	-	- 9.1		7.4	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0.3		0	-	

Village at Idlewild
9: Marshall Hooks Road & Access D

2040 Full Build
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	4.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	4	4	57	4	4
Future Vol, veh/h	65	4	4	57	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	4	4	63	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	48	36	0	0	67	0
Stage 1	36	-	-	-	-	-
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	962	1037	-	-	1535	-
Stage 1	986	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	959	1037	-	-	1535	-
Mov Cap-2 Maneuver	959	-	-	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.1	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 963		1535	-	
HCM Lane V/C Ratio	-	- 0.08		0.003	-	
HCM Control Delay (s)	-	- 9.1		7.4	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0.3		0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2022 Build Phase 1 (without Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	4	4	7	4	4
Future Vol, veh/h	6	4	4	7	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	4	4	8	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	20	8	0	0	12	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	-	-	1607	-
Stage 1	1015	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	995	1074	-	-	1607	-
Mov Cap-2 Maneuver	995	-	-	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1009	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.6	0		3.6		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 1025		1607	-	
HCM Lane V/C Ratio	-	- 0.011		0.003	-	
HCM Control Delay (s)	-	- 8.6		7.2	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0		0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2022 Build Phase 1 (with Gas Station)

Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	4	4	22	4	4
Future Vol, veh/h	21	4	4	22	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	4	4	24	4	4
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	28	16	0	0	28	0
Stage 1	16	-	-	-	-	-
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	987	1063	-	-	1585	-
Stage 1	1007	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	984	1063	-	-	1585	-
Mov Cap-2 Maneuver	984	-	-	-	-	-
Stage 1	1007	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.7	0		3.6		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	996	1585	-	
HCM Lane V/C Ratio	-	-	0.028	0.003	-	
HCM Control Delay (s)	-	-	8.7	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2023 Full Build (without Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	4	4	36	4	4
Future Vol, veh/h	29	4	4	36	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	4	4	40	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	36	24	0	0	44	0
Stage 1	24	-	-	-	-	-
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	977	1052	-	-	1564	-
Stage 1	999	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	974	1052	-	-	1564	-
Mov Cap-2 Maneuver	974	-	-	-	-	-
Stage 1	999	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.8	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 983		1564	-	
HCM Lane V/C Ratio	-	- 0.037		0.003	-	
HCM Control Delay (s)	-	- 8.8		7.3	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0.1		0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2023 Full Build (with Gas Station)

Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	4	4	53	4	4
Future Vol, veh/h	46	4	4	53	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	4	4	59	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	46	34	0	0	63	0
Stage 1	34	-	-	-	-	-
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	964	1039	-	-	1540	-
Stage 1	988	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	961	1039	-	-	1540	-
Mov Cap-2 Maneuver	961	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	967	1540	-	
HCM Lane V/C Ratio	-	-	0.057	0.003	-	
HCM Control Delay (s)	-	-	9	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Village at Idlewild
9: Marshall Hooks Road & Access D

2040 Full Build
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	4	4	53	4	4
Future Vol, veh/h	46	4	4	53	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	4	4	59	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	46	34	0	0	63	0
Stage 1	34	-	-	-	-	-
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	964	1039	-	-	1540	-
Stage 1	988	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	961	1039	-	-	1540	-
Mov Cap-2 Maneuver	961	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	967	1540	-	
HCM Lane V/C Ratio	-	-	0.057	0.003	-	
HCM Control Delay (s)	-	-	9	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2022 Build Phase 1 (with Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	4.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	4	4	29	4	4
Future Vol, veh/h	29	4	4	29	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	4	4	32	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	32	20	0	0	36	0
Stage 1	20	-	-	-	-	-
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	982	1058	-	-	1575	-
Stage 1	1003	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	979	1058	-	-	1575	-
Mov Cap-2 Maneuver	979	-	-	-	-	-
Stage 1	1003	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.8	0		3.6		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 988		1575	-	
HCM Lane V/C Ratio	-	- 0.037		0.003	-	
HCM Control Delay (s)	-	- 8.8		7.3	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0.1		0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2023 Full Build (without Gas Station)
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	4.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	44	4	4	35	4	4
Future Vol, veh/h	44	4	4	35	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	4	4	39	4	4
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	36	24	0	0	43	0
Stage 1	24	-	-	-	-	-
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	977	1052	-	-	1566	-
Stage 1	999	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	974	1052	-	-	1566	-
Mov Cap-2 Maneuver	974	-	-	-	-	-
Stage 1	999	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.9	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	980	1566	-	
HCM Lane V/C Ratio	-	-	0.054	0.003	-	
HCM Control Delay (s)	-	-	8.9	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2023 Full Build (with Gas Station)

Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	4.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	4	4	57	4	4
Future Vol, veh/h	65	4	4	57	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	4	4	63	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	48	36	0	0	67	0
Stage 1	36	-	-	-	-	-
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	962	1037	-	-	1535	-
Stage 1	986	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	959	1037	-	-	1535	-
Mov Cap-2 Maneuver	959	-	-	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.1	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-		963	1535	
HCM Lane V/C Ratio	-	-		0.08	0.003	
HCM Control Delay (s)	-	-		9.1	7.4	
HCM Lane LOS	-	-		A	A	
HCM 95th %tile Q(veh)	-	-		0.3	0	

Village at Idlewild
9: Marshall Hooks Road & Access D

2040 Full Build
Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	4.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	4	4	57	4	4
Future Vol, veh/h	65	4	4	57	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	4	4	63	4	4
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	48	36	0	0	67	0
Stage 1	36	-	-	-	-	-
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	962	1037	-	-	1535	-
Stage 1	986	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	959	1037	-	-	1535	-
Mov Cap-2 Maneuver	959	-	-	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.1	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	963	1535	-	
HCM Lane V/C Ratio	-	-	0.08	0.003	-	
HCM Control Delay (s)	-	-	9.1	7.4	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2022 Build Phase 1 (without Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	4	4	7	4	4
Future Vol, veh/h	6	4	4	7	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	4	4	8	4	4
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	20	8	0	0	12	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	-	-	1607	-
Stage 1	1015	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	995	1074	-	-	1607	-
Mov Cap-2 Maneuver	995	-	-	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1009	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.6	0		3.6		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	1025	1607	-	
HCM Lane V/C Ratio	-	-	0.011	0.003	-	
HCM Control Delay (s)	-	-	8.6	7.2	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2022 Build Phase 1 (with Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	4	4	22	4	4
Future Vol, veh/h	21	4	4	22	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	4	4	24	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	28	16	0	0	28	0
Stage 1	16	-	-	-	-	-
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	987	1063	-	-	1585	-
Stage 1	1007	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	984	1063	-	-	1585	-
Mov Cap-2 Maneuver	984	-	-	-	-	-
Stage 1	1007	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.7	0		3.6		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 996		1585	-	
HCM Lane V/C Ratio	-	- 0.028		0.003	-	
HCM Control Delay (s)	-	- 8.7		7.3	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0.1		0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2023 Full Build (without Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	4	4	36	4	4
Future Vol, veh/h	29	4	4	36	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	4	4	40	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	36	24	0	0	44	0
Stage 1	24	-	-	-	-	-
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	977	1052	-	-	1564	-
Stage 1	999	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	974	1052	-	-	1564	-
Mov Cap-2 Maneuver	974	-	-	-	-	-
Stage 1	999	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.8	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	983	1564	-	
HCM Lane V/C Ratio	-	-	0.037	0.003	-	
HCM Control Delay (s)	-	-	8.8	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Stinson Village
9: Marshall Hooks Road & Access D

2023 Full Build (with Gas Station)
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	4	4	53	4	4
Future Vol, veh/h	46	4	4	53	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	4	4	59	4	4
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	46	34	0	0	63	0
Stage 1	34	-	-	-	-	-
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	964	1039	-	-	1540	-
Stage 1	988	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	961	1039	-	-	1540	-
Mov Cap-2 Maneuver	961	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	967	1540	-	
HCM Lane V/C Ratio	-	-	0.057	0.003	-	
HCM Control Delay (s)	-	-	9	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Village at Idlewild
9: Marshall Hooks Road & Access D

2040 Full Build
Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	4	4	53	4	4
Future Vol, veh/h	46	4	4	53	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	4	4	59	4	4
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	46	34	0	0	63	0
Stage 1	34	-	-	-	-	-
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	964	1039	-	-	1540	-
Stage 1	988	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	961	1039	-	-	1540	-
Mov Cap-2 Maneuver	961	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9	0		3.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	967	1540	-	
HCM Lane V/C Ratio	-	-	0.057	0.003	-	
HCM Control Delay (s)	-	-	9	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

APPENDIX O

ACCESS B AND INTERNAL ROADWAY

SIDRA REPORTS

MOVEMENT SUMMARY

 **Site: 101 [2022 Build Phase 1 AM (without gas station)]**

Access B and Internal Roadway
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Access B											
3	L2	53	3.0	0.084	3.4	LOS A	0.4	10.7	0.08	0.02	34.3
8	T1	10	3.0	0.084	3.4	LOS A	0.4	10.7	0.08	0.02	34.3
18	R2	47	3.0	0.084	3.4	LOS A	0.4	10.7	0.08	0.02	33.4
Approach		110	3.0	0.084	3.4	LOS A	0.4	10.7	0.08	0.02	33.9
East: Internal Roadway											
1	L2	50	3.0	0.047	3.3	LOS A	0.2	5.7	0.20	0.08	33.4
6	T1	4	3.0	0.047	3.3	LOS A	0.2	5.7	0.20	0.08	33.4
16	R2	4	3.0	0.047	3.3	LOS A	0.2	5.7	0.20	0.08	32.6
Approach		59	3.0	0.047	3.3	LOS A	0.2	5.7	0.20	0.08	33.3
North: Access B											
7	L2	4	3.0	0.015	3.1	LOS A	0.1	1.7	0.25	0.10	35.1
4	T1	9	3.0	0.015	3.1	LOS A	0.1	1.7	0.25	0.10	35.2
14	R2	4	3.0	0.015	3.1	LOS A	0.1	1.7	0.25	0.10	34.2
Approach		17	3.0	0.015	3.1	LOS A	0.1	1.7	0.25	0.10	34.9
West: Internal Roadway											
5	L2	4	3.0	0.053	3.3	LOS A	0.3	6.5	0.20	0.07	35.5
2	T1	4	3.0	0.053	3.3	LOS A	0.3	6.5	0.20	0.07	35.5
12	R2	57	3.0	0.053	3.3	LOS A	0.3	6.5	0.20	0.07	34.5
Approach		65	3.0	0.053	3.3	LOS A	0.3	6.5	0.20	0.07	34.7
All Vehicles		251	3.0	0.084	3.4	LOS A	0.4	10.7	0.15	0.05	34.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [2022 Build Phase 1 AM (with gas station)]**

Access B and Internal Roadway
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Access B											
3	L2	111	3.0	0.190	4.4	LOS A	1.1	27.7	0.09	0.02	33.9
8	T1	33	3.0	0.190	4.4	LOS A	1.1	27.7	0.09	0.02	33.9
18	R2	104	3.0	0.190	4.4	LOS A	1.1	27.7	0.09	0.02	33.0
Approach		248	3.0	0.190	4.4	LOS A	1.1	27.7	0.09	0.02	33.5
East: Internal Roadway											
1	L2	117	3.0	0.110	4.1	LOS A	0.5	14.0	0.32	0.17	32.8
6	T1	4	3.0	0.110	4.1	LOS A	0.5	14.0	0.32	0.17	32.9
16	R2	4	3.0	0.110	4.1	LOS A	0.5	14.0	0.32	0.17	32.0
Approach		126	3.0	0.110	4.1	LOS A	0.5	14.0	0.32	0.17	32.8
North: Access B											
7	L2	4	3.0	0.037	3.7	LOS A	0.2	4.5	0.39	0.22	35.3
4	T1	30	3.0	0.037	3.7	LOS A	0.2	4.5	0.39	0.22	35.3
14	R2	4	3.0	0.037	3.7	LOS A	0.2	4.5	0.39	0.22	34.3
Approach		39	3.0	0.037	3.7	LOS A	0.2	4.5	0.39	0.22	35.2
West: Internal Roadway											
5	L2	4	3.0	0.117	4.2	LOS A	0.6	15.5	0.34	0.19	35.1
2	T1	4	3.0	0.117	4.2	LOS A	0.6	15.5	0.34	0.19	35.2
12	R2	124	3.0	0.117	4.2	LOS A	0.6	15.5	0.34	0.19	34.2
Approach		133	3.0	0.117	4.2	LOS A	0.6	15.5	0.34	0.19	34.2
All Vehicles		546	3.0	0.190	4.2	LOS A	1.1	27.7	0.23	0.11	33.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Full Build AM (without gas station)]**

Access B and Internal Roadway
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Access B											
3	L2	127	3.0	0.220	4.6	LOS A	1.3	33.7	0.10	0.02	33.8
8	T1	39	3.0	0.220	4.6	LOS A	1.3	33.7	0.10	0.02	33.8
18	R2	121	3.0	0.220	4.6	LOS A	1.3	33.7	0.10	0.02	32.9
Approach		287	3.0	0.220	4.6	LOS A	1.3	33.7	0.10	0.02	33.4
East: Internal Roadway											
1	L2	168	3.0	0.157	4.6	LOS A	0.8	20.9	0.36	0.21	32.6
6	T1	4	3.0	0.157	4.6	LOS A	0.8	20.9	0.36	0.21	32.6
16	R2	4	3.0	0.157	4.6	LOS A	0.8	20.9	0.36	0.21	31.8
Approach		177	3.0	0.157	4.6	LOS A	0.8	20.9	0.36	0.21	32.5
North: Access B											
7	L2	4	3.0	0.057	4.1	LOS A	0.3	7.3	0.45	0.29	35.1
4	T1	49	3.0	0.057	4.1	LOS A	0.3	7.3	0.45	0.29	35.2
14	R2	4	3.0	0.057	4.1	LOS A	0.3	7.3	0.45	0.29	34.2
Approach		58	3.0	0.057	4.1	LOS A	0.3	7.3	0.45	0.29	35.1
West: Internal Roadway											
5	L2	4	3.0	0.172	4.9	LOS A	0.9	24.1	0.43	0.28	34.7
2	T1	4	3.0	0.172	4.9	LOS A	0.9	24.1	0.43	0.28	34.8
12	R2	175	3.0	0.172	4.9	LOS A	0.9	24.1	0.43	0.28	33.8
Approach		184	3.0	0.172	4.9	LOS A	0.9	24.1	0.43	0.28	33.9
All Vehicles		705	3.0	0.220	4.7	LOS A	1.3	33.7	0.28	0.16	33.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Full Build AM (with gas station)]**

Access B and Internal Roadway
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Access B											
3	L2	184	3.0	0.324	5.7	LOS A	2.2	57.3	0.11	0.03	33.3
8	T1	61	3.0	0.324	5.7	LOS A	2.2	57.3	0.11	0.03	33.3
18	R2	177	3.0	0.324	5.7	LOS A	2.2	57.3	0.11	0.03	32.4
Approach		422	3.0	0.324	5.7	LOS A	2.2	57.3	0.11	0.03	32.9
East: Internal Roadway											
1	L2	236	3.0	0.232	5.6	LOS A	1.3	32.9	0.46	0.32	32.1
6	T1	4	3.0	0.232	5.6	LOS A	1.3	32.9	0.46	0.32	32.1
16	R2	4	3.0	0.232	5.6	LOS A	1.3	32.9	0.46	0.32	31.3
Approach		245	3.0	0.232	5.6	LOS A	1.3	32.9	0.46	0.32	32.1
North: Access B											
7	L2	4	3.0	0.089	4.8	LOS A	0.5	12.0	0.55	0.40	34.8
4	T1	72	3.0	0.089	4.8	LOS A	0.5	12.0	0.55	0.40	34.9
14	R2	4	3.0	0.089	4.8	LOS A	0.5	12.0	0.55	0.40	33.9
Approach		80	3.0	0.089	4.8	LOS A	0.5	12.0	0.55	0.40	34.8
West: Internal Roadway											
5	L2	4	3.0	0.255	6.2	LOS A	1.5	38.7	0.54	0.40	34.1
2	T1	4	3.0	0.255	6.2	LOS A	1.5	38.7	0.54	0.40	34.1
12	R2	242	3.0	0.255	6.2	LOS A	1.5	38.7	0.54	0.40	33.2
Approach		251	3.0	0.255	6.2	LOS A	1.5	38.7	0.54	0.40	33.2
All Vehicles		998	3.0	0.324	5.7	LOS A	2.2	57.3	0.34	0.22	32.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [2022 Build Phase 1 PM (without gas station)]**

Access B and Internal Roadway
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Access B											
3	L2	50	3.0	0.077	3.4	LOS A	0.4	9.7	0.08	0.02	34.3
8	T1	8	3.0	0.077	3.4	LOS A	0.4	9.7	0.08	0.02	34.3
18	R2	43	3.0	0.077	3.4	LOS A	0.4	9.7	0.08	0.02	33.4
Approach		101	3.0	0.077	3.4	LOS A	0.4	9.7	0.08	0.02	33.9
East: Internal Roadway											
1	L2	45	3.0	0.043	3.2	LOS A	0.2	5.1	0.19	0.07	33.5
6	T1	4	3.0	0.043	3.2	LOS A	0.2	5.1	0.19	0.07	33.5
16	R2	4	3.0	0.043	3.2	LOS A	0.2	5.1	0.19	0.07	32.6
Approach		53	3.0	0.043	3.2	LOS A	0.2	5.1	0.19	0.07	33.4
North: Access B											
7	L2	4	3.0	0.013	3.1	LOS A	0.1	1.5	0.24	0.09	35.0
4	T1	7	3.0	0.013	3.1	LOS A	0.1	1.5	0.24	0.09	35.1
14	R2	4	3.0	0.013	3.1	LOS A	0.1	1.5	0.24	0.09	34.1
Approach		15	3.0	0.013	3.1	LOS A	0.1	1.5	0.24	0.09	34.8
West: Internal Roadway											
5	L2	4	3.0	0.048	3.3	LOS A	0.2	5.9	0.18	0.06	35.5
2	T1	4	3.0	0.048	3.3	LOS A	0.2	5.9	0.18	0.06	35.6
12	R2	51	3.0	0.048	3.3	LOS A	0.2	5.9	0.18	0.06	34.6
Approach		60	3.0	0.048	3.3	LOS A	0.2	5.9	0.18	0.06	34.7
All Vehicles		229	3.0	0.077	3.3	LOS A	0.4	9.7	0.14	0.05	34.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [2022 Build Phase 1 PM (with gas station)]**

Access B and Internal Roadway
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Access B											
3	L2	101	3.0	0.168	4.2	LOS A	0.9	23.8	0.09	0.02	34.0
8	T1	24	3.0	0.168	4.2	LOS A	0.9	23.8	0.09	0.02	34.0
18	R2	95	3.0	0.168	4.2	LOS A	0.9	23.8	0.09	0.02	33.1
Approach		220	3.0	0.168	4.2	LOS A	0.9	23.8	0.09	0.02	33.6
East: Internal Roadway											
1	L2	102	3.0	0.095	3.9	LOS A	0.5	12.0	0.30	0.15	33.0
6	T1	4	3.0	0.095	3.9	LOS A	0.5	12.0	0.30	0.15	33.0
16	R2	4	3.0	0.095	3.9	LOS A	0.5	12.0	0.30	0.15	32.2
Approach		111	3.0	0.095	3.9	LOS A	0.5	12.0	0.30	0.15	32.9
North: Access B											
7	L2	4	3.0	0.030	3.6	LOS A	0.1	3.7	0.36	0.19	35.3
4	T1	24	3.0	0.030	3.6	LOS A	0.1	3.7	0.36	0.19	35.3
14	R2	4	3.0	0.030	3.6	LOS A	0.1	3.7	0.36	0.19	34.3
Approach		33	3.0	0.030	3.6	LOS A	0.1	3.7	0.36	0.19	35.2
West: Internal Roadway											
5	L2	4	3.0	0.101	4.0	LOS A	0.5	13.3	0.31	0.16	35.2
2	T1	4	3.0	0.101	4.0	LOS A	0.5	13.3	0.31	0.16	35.3
12	R2	109	3.0	0.101	4.0	LOS A	0.5	13.3	0.31	0.16	34.3
Approach		117	3.0	0.101	4.0	LOS A	0.5	13.3	0.31	0.16	34.4
All Vehicles		480	3.0	0.168	4.0	LOS A	0.9	23.8	0.21	0.10	33.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Full Build PM (without gas station)]**

Access B and Internal Roadway
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Access B											
3	L2	137	3.0	0.235	4.8	LOS A	1.4	36.0	0.10	0.02	33.7
8	T1	39	3.0	0.235	4.8	LOS A	1.4	36.0	0.10	0.02	33.7
18	R2	130	3.0	0.235	4.8	LOS A	1.4	36.0	0.10	0.02	32.8
Approach		307	3.0	0.235	4.8	LOS A	1.4	36.0	0.10	0.02	33.3
East: Internal Roadway											
1	L2	114	3.0	0.110	4.2	LOS A	0.5	14.1	0.36	0.21	32.8
6	T1	4	3.0	0.110	4.2	LOS A	0.5	14.1	0.36	0.21	32.8
16	R2	4	3.0	0.110	4.2	LOS A	0.5	14.1	0.36	0.21	32.0
Approach		123	3.0	0.110	4.2	LOS A	0.5	14.1	0.36	0.21	32.8
North: Access B											
7	L2	4	3.0	0.037	3.8	LOS A	0.2	4.6	0.41	0.24	35.2
4	T1	30	3.0	0.037	3.8	LOS A	0.2	4.6	0.41	0.24	35.3
14	R2	4	3.0	0.037	3.8	LOS A	0.2	4.6	0.41	0.24	34.3
Approach		39	3.0	0.037	3.8	LOS A	0.2	4.6	0.41	0.24	35.1
West: Internal Roadway											
5	L2	4	3.0	0.134	4.3	LOS A	0.7	18.3	0.34	0.19	35.1
2	T1	4	3.0	0.134	4.3	LOS A	0.7	18.3	0.34	0.19	35.1
12	R2	145	3.0	0.134	4.3	LOS A	0.7	18.3	0.34	0.19	34.1
Approach		153	3.0	0.134	4.3	LOS A	0.7	18.3	0.34	0.19	34.2
All Vehicles		622	3.0	0.235	4.5	LOS A	1.4	36.0	0.23	0.11	33.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Full Build PM (with gas station)]**

Access B and Internal Roadway
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Access B											
3	L2	185	3.0	0.323	5.7	LOS A	2.2	56.1	0.11	0.03	33.3
8	T1	58	3.0	0.323	5.7	LOS A	2.2	56.1	0.11	0.03	33.3
18	R2	178	3.0	0.323	5.7	LOS A	2.2	56.1	0.11	0.03	32.4
Approach		421	3.0	0.323	5.7	LOS A	2.2	56.1	0.11	0.03	32.9
East: Internal Roadway											
1	L2	183	3.0	0.181	5.1	LOS A	1.0	24.7	0.44	0.30	32.3
6	T1	4	3.0	0.181	5.1	LOS A	1.0	24.7	0.44	0.30	32.4
16	R2	4	3.0	0.181	5.1	LOS A	1.0	24.7	0.44	0.30	31.6
Approach		191	3.0	0.181	5.1	LOS A	1.0	24.7	0.44	0.30	32.3
North: Access B											
7	L2	4	3.0	0.062	4.4	LOS A	0.3	8.1	0.50	0.34	35.0
4	T1	50	3.0	0.062	4.4	LOS A	0.3	8.1	0.50	0.34	35.0
14	R2	4	3.0	0.062	4.4	LOS A	0.3	8.1	0.50	0.34	34.1
Approach		59	3.0	0.062	4.4	LOS A	0.3	8.1	0.50	0.34	35.0
West: Internal Roadway											
5	L2	4	3.0	0.188	5.2	LOS A	1.1	27.1	0.45	0.30	34.6
2	T1	4	3.0	0.188	5.2	LOS A	1.1	27.1	0.45	0.30	34.6
12	R2	189	3.0	0.188	5.2	LOS A	1.1	27.1	0.45	0.30	33.7
Approach		198	3.0	0.188	5.2	LOS A	1.1	27.1	0.45	0.30	33.7
All Vehicles		868	3.0	0.323	5.3	LOS A	2.2	56.1	0.29	0.17	33.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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APPENDIX P

SIMTRAFFIC REPORTS

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	38	234	901
Average Queue (ft)	4	94	452
95th Queue (ft)	21	170	861
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	326	285	197	326	271	283	264	431
Average Queue (ft)	184	132	88	206	149	166	83	260
95th Queue (ft)	293	243	166	298	245	271	175	388
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		10	8	1	0		0	2
Queuing Penalty (veh)		14	18	5	0		0	3

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	262	133	115	236	222	210	192	192	165
Average Queue (ft)	133	29	18	97	61	49	107	103	47
95th Queue (ft)	233	96	67	206	156	140	171	167	119
Link Distance (ft)		856	856	509	509			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	0				2	1	0	0	
Queuing Penalty (veh)	1				6	7	1	0	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	31	16	37	38
Average Queue (ft)	4	1	10	8
95th Queue (ft)	18	10	32	29
Link Distance (ft)			394	2282
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	350	100		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Rite Aid Driveway & Idlewild Road

Movement	EB	EB	WB	WB	NB
Directions Served	T	R	UL	T	LR
Maximum Queue (ft)	178	14	63	182	124
Average Queue (ft)	53	1	24	76	47
95th Queue (ft)	137	8	52	154	103
Link Distance (ft)	494	494		2058	2037
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			150		
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	104	221	250	1242	141	316	234	1064	250
Average Queue (ft)	37	79	81	677	65	155	114	536	220
95th Queue (ft)	82	184	230	1073	122	287	237	1161	300
Link Distance (ft)		2058		4497		5157		6183	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)		0	0	35		3	5	44	49
Queuing Penalty (veh)		0	0	29		2	22	162	129

Network Summary

Network wide Queuing Penalty: 400

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	40	241	2520
Average Queue (ft)	5	113	1635
95th Queue (ft)	23	202	2769
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			12
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	368	349	200	374	485	344	795	467
Average Queue (ft)	201	167	91	255	172	162	370	383
95th Queue (ft)	321	298	186	391	384	305	990	529
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		24	8	9	0		1	23
Queuing Penalty (veh)		34	22	37	1		3	49

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	299	198	78	312	299	223	204	197	174
Average Queue (ft)	161	13	6	169	132	112	100	109	74
95th Queue (ft)	262	99	34	263	235	207	175	174	145
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	2	0			5	5	1	0	
Queuing Penalty (veh)	4	0			21	31	1	1	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	L	R	R
Maximum Queue (ft)	22	13	64	35	22
Average Queue (ft)	2	1	21	13	3
95th Queue (ft)	12	7	48	30	15
Link Distance (ft)				380	2282
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	350	100	125		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Rite Aid Driveway & Idlewild Road

Movement	EB	EB	WB	WB	B12	NB	NB
Directions Served	T	R	UL	T	T	L	R
Maximum Queue (ft)	279	33	249	459	86	330	124
Average Queue (ft)	96	2	89	254	4	176	52
95th Queue (ft)	227	15	185	418	43	305	107
Link Distance (ft)	494	494		400	1591	2038	
Upstream Blk Time (%)				1			
Queuing Penalty (veh)				22			
Storage Bay Dist (ft)			150				500
Storage Blk Time (%)			1	12		0	
Queuing Penalty (veh)			8	13		0	

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	203	341	250	4554	347	1057	234	5199	250
Average Queue (ft)	73	143	118	3301	251	619	119	3248	247
95th Queue (ft)	150	279	269	5237	483	1243	261	5294	273
Link Distance (ft)		1591		4497		5157		6183	
Upstream Blk Time (%)				29					
Queuing Penalty (veh)				0					
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)		2	0	41		66	5	65	71
Queuing Penalty (veh)		2	5	36		73	27	275	198

Network Summary

Network wide Queuing Penalty: 862

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	32	244	2004
Average Queue (ft)	4	103	1198
95th Queue (ft)	20	192	2208
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			2
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	389	352	199	364	462	354	1075	475
Average Queue (ft)	207	168	83	235	113	118	583	414
95th Queue (ft)	330	285	165	361	281	247	1320	550
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)							0	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		24	7	7	0		1	38
Queuing Penalty (veh)		35	20	29	0		3	85

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	317	226	117	272	277	220	203	209	192
Average Queue (ft)	165	31	16	152	121	102	100	126	84
95th Queue (ft)	281	137	66	241	213	182	171	197	166
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	1	0			6	4	0	1	
Queuing Penalty (veh)	4	0			23	24	1	2	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	L	R	R
Maximum Queue (ft)	34	33	70	46	34
Average Queue (ft)	6	2	18	15	6
95th Queue (ft)	25	15	48	34	26
Link Distance (ft)				380	326
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	350	100	125		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	117	209	31	250	650	291	128	119	145
Average Queue (ft)	39	99	5	87	639	153	53	44	52
95th Queue (ft)	90	189	24	218	646	253	109	89	113
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)					24				
Queuing Penalty (veh)					380				
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	6	12		0	45				
Queuing Penalty (veh)	36	6		6	46				

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	206	316	250	4558	370	1219	234	5522	250
Average Queue (ft)	98	149	139	4197	295	702	115	3395	246
95th Queue (ft)	175	255	312	5404	468	1521	258	5924	281
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)				78				4	
Queuing Penalty (veh)				0				0	
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)		1	0	70	23	48	12	72	78
Queuing Penalty (veh)		1	0	62	38	57	60	309	217

Intersection: 7: Idlewild Road & Access A

Movement	WB	SB
Directions Served	TR	R
Maximum Queue (ft)	6	67
Average Queue (ft)	0	19
95th Queue (ft)	4	52
Link Distance (ft)	376	867
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Idlewild Road & Access C

Movement	EB	WB	SB
Directions Served	L	TR	R
Maximum Queue (ft)	37	1365	237
Average Queue (ft)	4	1305	119
95th Queue (ft)	21	1521	258
Link Distance (ft)		1357	987
Upstream Blk Time (%)		2	
Queuing Penalty (veh)		36	
Storage Bay Dist (ft)	100		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	27
Average Queue (ft)	9
95th Queue (ft)	29
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	19	41	37	12
Average Queue (ft)	1	3	2	0
95th Queue (ft)	12	20	18	6
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 1481

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	42	230	2648
Average Queue (ft)	6	106	1940
95th Queue (ft)	26	194	3038
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			25
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	326	348	200	374	655	406	676	471
Average Queue (ft)	183	174	106	283	184	101	298	387
95th Queue (ft)	302	300	218	414	512	275	665	521
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		32	7	19	0		1	19
Queuing Penalty (veh)		47	21	83	0		7	43

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	321	179	156	294	229	190	177	196	165
Average Queue (ft)	155	18	23	121	83	64	96	117	84
95th Queue (ft)	284	95	94	221	163	130	166	184	157
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	1				2	1	0	0	
Queuing Penalty (veh)	3				10	5	0	0	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	L	R	R
Maximum Queue (ft)	32	22	64	40	30
Average Queue (ft)	3	1	21	16	6
95th Queue (ft)	19	8	51	34	26
Link Distance (ft)				380	326
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	350	100	125		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	TR
Maximum Queue (ft)	112	132	150	250	383	361	247	173	138	126
Average Queue (ft)	43	41	51	97	261	270	138	68	46	46
95th Queue (ft)	93	98	110	217	360	354	227	126	98	98
Link Distance (ft)		377	377		631		2040		358	358
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	175			150		350		500		
Storage Blk Time (%)		0		1	19	0				
Queuing Penalty (veh)		0		8	164	2				

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	178	288	250	4540	298	325	231	234	5368	250
Average Queue (ft)	77	165	106	3641	175	119	48	99	2997	248
95th Queue (ft)	152	270	264	5117	312	307	142	229	5204	272
Link Distance (ft)		1357		4493		5158			6183	
Upstream Blk Time (%)				32						
Queuing Penalty (veh)				0						
Storage Bay Dist (ft)	500		150		275		500	135		150
Storage Blk Time (%)			0	41	8			2	65	84
Queuing Penalty (veh)			3	36	14			9	280	236

Intersection: 7: Idlewild Road & Access A

Movement	SB
Directions Served	R
Maximum Queue (ft)	46
Average Queue (ft)	13
95th Queue (ft)	36
Link Distance (ft)	842
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	36	31	35	53
Average Queue (ft)	6	1	2	15
95th Queue (ft)	26	15	18	40
Link Distance (ft)		631	631	974
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	27
Average Queue (ft)	7
95th Queue (ft)	26
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	19	28	39	12
Average Queue (ft)	1	1	2	1
95th Queue (ft)	9	13	18	8
Link Distance (ft)	270	278	358	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 971

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	80	327	217	2530
Average Queue (ft)	43	225	89	1646
95th Queue (ft)	193	1129	189	3068
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	15	12		22
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	471	430	177	362	349	299	1193	475
Average Queue (ft)	312	274	77	224	102	119	746	355
95th Queue (ft)	644	631	185	335	241	236	1565	639
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	12	16					16	
Queuing Penalty (veh)	48	61					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		39	5	5	0		19	32
Queuing Penalty (veh)		56	17	21	0		95	83

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	336	428	299	237	198	204	248	569	342
Average Queue (ft)	151	199	178	139	106	102	94	391	181
95th Queue (ft)	309	739	722	229	197	189	211	1197	433
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		18	17					15	
Queuing Penalty (veh)		80	77					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	2	20			5	5	2	26	
Queuing Penalty (veh)	7	49			23	30	5	76	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	R	L	R	R
Maximum Queue (ft)	125	212	206	54	52	123	58
Average Queue (ft)	28	136	128	2	18	81	19
95th Queue (ft)	160	502	485	29	51	302	49
Link Distance (ft)		508	508			380	326
Upstream Blk Time (%)		22	20			14	
Queuing Penalty (veh)		103	91			0	
Storage Bay Dist (ft)	350			100	125		
Storage Blk Time (%)		24	1				
Queuing Penalty (veh)		7	1				

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	165	314	34	250	646	326	159	429	414
Average Queue (ft)	118	226	3	98	638	157	61	304	248
95th Queue (ft)	229	467	20	251	644	277	120	499	485
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		14			28			36	16
Queuing Penalty (veh)		58			452			45	20
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	63	17		0	47				
Queuing Penalty (veh)	364	21		3	49				

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	196	303	250	4554	375	1623	214	5900	250
Average Queue (ft)	103	132	165	4384	342	921	80	3913	250
95th Queue (ft)	206	232	336	5113	468	1727	197	6632	252
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)				87				15	
Queuing Penalty (veh)				0				0	
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	0	1	0	81	25	74	3	46	91
Queuing Penalty (veh)	1	1	0	71	42	103	18	208	255

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	148	302	232	83
Average Queue (ft)	70	170	111	24
95th Queue (ft)	177	482	407	58
Link Distance (ft)	61	415	415	854
Upstream Blk Time (%)	37	24	20	
Queuing Penalty (veh)	150	99	81	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Idlewild Road & Access C

Movement	EB	WB	WB	SB
Directions Served	L	T	R	R
Maximum Queue (ft)	52	1367	175	548
Average Queue (ft)	12	1316	42	316
95th Queue (ft)	41	1451	165	638
Link Distance (ft)		1357		974
Upstream Blk Time (%)		3		
Queuing Penalty (veh)		52		
Storage Bay Dist (ft)	400		75	
Storage Blk Time (%)		49		
Queuing Penalty (veh)		21		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	55	6
Average Queue (ft)	20	0
95th Queue (ft)	48	4
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	244	126	98	94
Average Queue (ft)	82	28	11	27
95th Queue (ft)	261	95	56	106
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	16			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 3044

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	27	238	2454
Average Queue (ft)	4	118	1897
95th Queue (ft)	18	208	3357
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			39
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	359	371	200	374	581	417	1458	475
Average Queue (ft)	208	195	106	272	144	105	751	432
95th Queue (ft)	332	343	225	399	423	270	1650	544
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)							9	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		37	8	13	0		1	45
Queuing Penalty (veh)		54	24	60	0		3	115

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	330	236	122	266	288	205	219	264	205
Average Queue (ft)	180	25	17	140	110	105	101	139	98
95th Queue (ft)	290	145	86	224	222	187	179	217	179
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	2	0			3	6	1	1	
Queuing Penalty (veh)	6	0			14	39	2	3	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	TR	R	R
Maximum Queue (ft)	56	8	64	4	47	56
Average Queue (ft)	13	0	19	0	14	20
95th Queue (ft)	40	5	49	3	33	50
Link Distance (ft)				531	380	326
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	350	100	125			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	TR
Maximum Queue (ft)	254	225	200	249	344	345	364	156	287	237
Average Queue (ft)	116	64	67	80	254	264	189	70	121	95
95th Queue (ft)	240	189	155	184	317	324	323	131	220	194
Link Distance (ft)		377	377		631		2040		358	358
Upstream Blk Time (%)	0	0	0						0	0
Queuing Penalty (veh)	0	2	0						0	0
Storage Bay Dist (ft)	325			150		350		500		
Storage Blk Time (%)	2	0		0	21	0	0			
Queuing Penalty (veh)	5	0		7	189	0	0			

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	322	343	250	4551	351	817	405	234	5871	250
Average Queue (ft)	189	126	119	4082	304	461	203	100	3692	249
95th Queue (ft)	351	255	266	5331	456	1104	614	244	6322	261
Link Distance (ft)		1357		4493		5158			6183	
Upstream Blk Time (%)				64					8	
Queuing Penalty (veh)				0					0	
Storage Bay Dist (ft)	500		150		275		500	135		150
Storage Blk Time (%)	0	0	1	41	62	0		5	63	85
Queuing Penalty (veh)	1	0	10	36	102	0		24	283	239

Intersection: 7: Idlewild Road & Access A

Movement	EB	SB
Directions Served	T	R
Maximum Queue (ft)	16	84
Average Queue (ft)	1	23
95th Queue (ft)	9	54
Link Distance (ft)	531	842
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	R	R
Maximum Queue (ft)	65	71	40	8	4	96
Average Queue (ft)	23	4	3	0	0	32
95th Queue (ft)	53	33	24	6	4	73
Link Distance (ft)		631	631	1357		974
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	400				100	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	49	6
Average Queue (ft)	18	0
95th Queue (ft)	43	4
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	49	51	63	48
Average Queue (ft)	8	9	6	4
95th Queue (ft)	34	35	33	26
Link Distance (ft)	270	278	358	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 1219

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	30	259	2638
Average Queue (ft)	4	113	1624
95th Queue (ft)	20	212	2793
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			6
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	377	313	200	374	646	556	1299	475
Average Queue (ft)	210	167	91	278	246	220	744	438
95th Queue (ft)	335	281	191	411	653	555	1523	549
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)					1	0	5	
Queuing Penalty (veh)					8	2	0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		25	7	18	0		1	47
Queuing Penalty (veh)		37	19	75	0		5	103

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	359	312	69	346	292	215	219	229	177
Average Queue (ft)	160	23	7	193	154	117	103	118	83
95th Queue (ft)	282	141	39	338	279	209	181	187	159
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)				0	0				
Queuing Penalty (veh)				3	0				
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	2	0			8	4	1	0	
Queuing Penalty (veh)	7	0			35	26	2	1	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	T	R	R
Maximum Queue (ft)	24	13	76	36	42	27
Average Queue (ft)	2	1	26	2	14	3
95th Queue (ft)	14	9	61	28	30	18
Link Distance (ft)				411	380	2282
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	350	100	125			
Storage Blk Time (%)				0		
Queuing Penalty (veh)				0		

Intersection: 5: Rite Aid Driveway & Idlewild Road

Movement	EB	EB	WB	WB	B12	NB	NB
Directions Served	T	R	UL	T	T	L	R
Maximum Queue (ft)	313	26	248	471	80	401	167
Average Queue (ft)	94	2	92	261	4	194	58
95th Queue (ft)	229	15	196	425	39	359	123
Link Distance (ft)	494	494		400	1591	2038	
Upstream Blk Time (%)				2			
Queuing Penalty (veh)				25			
Storage Bay Dist (ft)			150			500	
Storage Blk Time (%)			1	13		1	
Queuing Penalty (veh)			10	14		1	

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	228	378	250	4548	375	1787	235	4616	250
Average Queue (ft)	90	163	120	3706	317	980	144	2904	244
95th Queue (ft)	204	332	269	5620	495	1863	276	5080	287
Link Distance (ft)		1591		4497		5157		6183	
Upstream Blk Time (%)				49					
Queuing Penalty (veh)				0					
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	1	3	1	41	3	93	13	72	73
Queuing Penalty (veh)	4	3	9	37	5	104	64	312	210

Network Summary

Network wide Queuing Penalty: 1122

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	28	290	2484
Average Queue (ft)	5	112	1534
95th Queue (ft)	20	232	2887
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			17
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	407	374	200	355	392	340	1048	475
Average Queue (ft)	235	195	98	219	100	115	559	412
95th Queue (ft)	370	330	207	346	250	238	1313	549
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)							4	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		27	7	5			1	35
Queuing Penalty (veh)		40	23	24			6	95

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	350	532	348	309	258	219	271	835	595
Average Queue (ft)	197	156	106	169	123	101	137	369	266
95th Queue (ft)	356	502	398	261	209	179	290	1074	733
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		0						8	
Queuing Penalty (veh)		1						0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	4	11			6	4	2	30	2
Queuing Penalty (veh)	12	29			28	27	6	93	6

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	R	L	R	R
Maximum Queue (ft)	450	532	529	160	70	194	63
Average Queue (ft)	94	254	217	15	22	61	26
95th Queue (ft)	370	648	608	101	56	187	54
Link Distance (ft)		508	508			380	326
Upstream Blk Time (%)		20	7				
Queuing Penalty (veh)		95	36				
Storage Bay Dist (ft)	350			100	125		
Storage Blk Time (%)		36	4				
Queuing Penalty (veh)		12	6				

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	175	392	146	250	647	323	146	436	411
Average Queue (ft)	167	362	9	89	638	159	59	413	360
95th Queue (ft)	201	461	81	246	645	297	120	435	500
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		39			30			81	31
Queuing Penalty (veh)		168			517			146	56
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	91	14		0	50	1			
Queuing Penalty (veh)	544	21		4	53	1			

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	289	444	250	4551	375	1465	232	6231	250
Average Queue (ft)	178	158	167	4410	317	772	86	4580	249
95th Queue (ft)	306	355	345	5044	476	1545	192	7157	256
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)				88				25	
Queuing Penalty (veh)				0				0	
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	12	1		89	32	62	5	39	96
Queuing Penalty (veh)	83	2		81	54	92	30	183	275

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	WB	SB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	162	458	426	46	90
Average Queue (ft)	119	330	193	2	29
95th Queue (ft)	194	592	512	20	63
Link Distance (ft)	61	415	415	376	854
Upstream Blk Time (%)	57	30	5		
Queuing Penalty (veh)	244	128	23		
Storage Bay Dist (ft)					
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 8: Idlewild Road & Access C

Movement	EB	WB	WB	SB
Directions Served	L	T	R	R
Maximum Queue (ft)	56	1375	200	779
Average Queue (ft)	15	1355	46	490
95th Queue (ft)	43	1382	185	927
Link Distance (ft)		1357		974
Upstream Blk Time (%)		5		4
Queuing Penalty (veh)		85		0
Storage Bay Dist (ft)	400		100	
Storage Blk Time (%)		53		
Queuing Penalty (veh)		26		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	65
Average Queue (ft)	24
95th Queue (ft)	48
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	309	308	119	267
Average Queue (ft)	265	186	32	144
95th Queue (ft)	361	373	98	372
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	83	41		1
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 3352

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	32	291	2728
Average Queue (ft)	6	144	2064
95th Queue (ft)	25	252	3406
Link Distance (ft)	194	725	2704
Upstream Blk Time (%)			47
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R	R
Maximum Queue (ft)	268	279	198	375	767	597	391	364	312
Average Queue (ft)	152	136	67	298	186	102	199	192	196
95th Queue (ft)	241	233	162	414	616	383	307	301	282
Link Distance (ft)	725	725			856	856	1608		
Upstream Blk Time (%)					0				
Queuing Penalty (veh)					0				
Storage Bay Dist (ft)			100	275				400	400
Storage Blk Time (%)		21	3	21	0		0	0	0
Queuing Penalty (veh)		32	11	102	0		0	1	0

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	316	132	123	390	372	225	219	264	226
Average Queue (ft)	180	14	21	239	207	175	106	148	111
95th Queue (ft)	308	70	84	365	345	248	184	231	198
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)				0					
Queuing Penalty (veh)				0					
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	2	0			18	17	1	2	
Queuing Penalty (veh)	6	0			85	121	4	6	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	L	R	R
Maximum Queue (ft)	77	14	52	55	100
Average Queue (ft)	21	1	21	16	34
95th Queue (ft)	57	8	48	40	78
Link Distance (ft)				380	326
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	350	100	125		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	L	T	R
Maximum Queue (ft)	214	173	126	250	600	600	262	196	177	192	72	209
Average Queue (ft)	104	46	46	113	377	388	151	73	89	110	22	99
95th Queue (ft)	188	109	97	250	616	623	245	145	152	171	56	183
Link Distance (ft)		360	360		611	611	2040					362
Upstream Blk Time (%)					1	2						
Queuing Penalty (veh)					12	15						
Storage Bay Dist (ft)	325			150				500	250	250		250
Storage Blk Time (%)				2	36							0
Queuing Penalty (veh)				15	37							0

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	169	488	250	400	419	251	190	154	231	563	250
Average Queue (ft)	79	291	113	267	289	128	78	51	113	258	208
95th Queue (ft)	146	437	231	378	390	226	152	114	210	491	282
Link Distance (ft)		1360		4493			5158			6171	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500		150		500	275		500	135		150
Storage Blk Time (%)		0	3	26		1	0		6	22	32
Queuing Penalty (veh)		0	39	186		2	0		32	101	92

Intersection: 7: Idlewild Road & Access A

Movement	SB
Directions Served	R
Maximum Queue (ft)	92
Average Queue (ft)	31
95th Queue (ft)	68
Link Distance (ft)	842
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	R	R
Maximum Queue (ft)	78	36	34	206	211	88	99
Average Queue (ft)	22	1	2	24	27	3	36
95th Queue (ft)	58	13	16	136	148	41	84
Link Distance (ft)		611	611	1360	1360		962
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	400					100	
Storage Blk Time (%)					2		
Queuing Penalty (veh)					1		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	66
Average Queue (ft)	23
95th Queue (ft)	50
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	51	69	64	46	45
Average Queue (ft)	13	15	10	7	6
95th Queue (ft)	43	49	40	29	28
Link Distance (ft)	270	278	362	362	505
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 901

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	WB	NB
Directions Served	TR	T	L	T	LR
Maximum Queue (ft)	179	392	203	102	2431
Average Queue (ft)	32	43	97	6	1495
95th Queue (ft)	158	333	170	71	2651
Link Distance (ft)	194	1628	738	738	2704
Upstream Blk Time (%)	5				8
Queuing Penalty (veh)	0				0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	723	717	200	356	303	260	1522	475
Average Queue (ft)	422	389	135	203	75	92	970	425
95th Queue (ft)	748	732	258	332	200	188	1877	596
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	5	4					27	
Queuing Penalty (veh)	20	18					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		51	12	4	0		30	35
Queuing Penalty (veh)		75	41	18	0		153	106

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	375	891	892	241	212	200	300	1516	950
Average Queue (ft)	327	698	636	146	112	93	114	1157	670
95th Queue (ft)	490	1129	1099	217	188	167	331	1975	1125
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		21	7					62	
Queuing Penalty (veh)		103	33					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	3	79			5	3	0	89	10
Queuing Penalty (veh)	12	204			24	25	2	289	32

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	450	550	561	200	87	22	359	75
Average Queue (ft)	235	518	482	45	25	1	209	35
95th Queue (ft)	598	590	661	182	65	22	444	66
Link Distance (ft)		508	508			415	380	326
Upstream Blk Time (%)		66	28				26	
Queuing Penalty (veh)		362	153				0	
Storage Bay Dist (ft)	350			100	125			
Storage Blk Time (%)		91	12		0	0		
Queuing Penalty (veh)		52	15		0	0		

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	175	393	209	250	646	274	159	438	418
Average Queue (ft)	173	382	16	96	638	144	69	415	360
95th Queue (ft)	180	394	119	257	645	242	135	433	489
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		55	0		30			83	32
Queuing Penalty (veh)		259	0		544			211	82
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	94	7		0	50				
Queuing Penalty (veh)	578	14		2	53				

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	203	293	250	4558	375	2220	210	6220	250
Average Queue (ft)	110	112	166	4448	365	1334	86	4576	249
95th Queue (ft)	194	231	343	4965	415	2496	194	7377	254
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)				91				32	
Queuing Penalty (veh)				0				0	
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)		1	0	89	90	29	6	35	95
Queuing Penalty (veh)		1	0	81	152	48	32	171	272

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	WB	SB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	158	449	462	29	106
Average Queue (ft)	135	426	299	1	37
95th Queue (ft)	148	440	563	15	77
Link Distance (ft)	61	415	415	376	854
Upstream Blk Time (%)	74	60	11		
Queuing Penalty (veh)	349	286	52		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Idlewild Road & Access C

Movement	EB	WB	WB	SB
Directions Served	L	T	R	R
Maximum Queue (ft)	78	1375	200	993
Average Queue (ft)	18	1355	68	742
95th Queue (ft)	54	1377	223	1186
Link Distance (ft)		1357		974
Upstream Blk Time (%)		5		39
Queuing Penalty (veh)		90		0
Storage Bay Dist (ft)	400		100	
Storage Blk Time (%)		53		
Queuing Penalty (veh)		38		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	64
Average Queue (ft)	29
95th Queue (ft)	52
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	298	313	174	514
Average Queue (ft)	279	272	59	328
95th Queue (ft)	335	378	148	587
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	96	84		25
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 5051

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	36	486	246	2737
Average Queue (ft)	6	186	13	2560
95th Queue (ft)	26	394	167	3112
Link Distance (ft)	194	725	725	2704
Upstream Blk Time (%)			0	75
Queuing Penalty (veh)			1	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R	R
Maximum Queue (ft)	326	310	200	375	794	748	430	413	389
Average Queue (ft)	164	138	73	326	278	148	239	232	231
95th Queue (ft)	278	252	175	425	765	547	373	369	347
Link Distance (ft)	725	725			856	856	1608		
Upstream Blk Time (%)					0	0			
Queuing Penalty (veh)					1	0			
Storage Bay Dist (ft)			100	275				400	400
Storage Blk Time (%)		21	4	29	0		1	0	0
Queuing Penalty (veh)		31	13	146	0		3	1	0

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	317	194	140	495	522	225	236	285	228
Average Queue (ft)	159	17	15	318	313	199	103	164	124
95th Queue (ft)	286	117	78	474	492	268	190	247	212
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)				0	0				
Queuing Penalty (veh)				2	4				
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	2				27	22	1	5	
Queuing Penalty (veh)	7				140	162	3	16	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	TR	R	R
Maximum Queue (ft)	89	4	67	38	95	37	150
Average Queue (ft)	35	0	23	2	5	14	55
95th Queue (ft)	77	5	54	22	40	33	115
Link Distance (ft)				531	531	380	326
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	350	100	125				
Storage Blk Time (%)				0			
Queuing Penalty (veh)				0			

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	UL	T	T	R	L	TR	L	L
Maximum Queue (ft)	161	169	108	111	250	553	554	414	294	164	204	214
Average Queue (ft)	83	86	48	50	128	394	397	101	152	76	110	129
95th Queue (ft)	145	149	92	93	278	607	606	362	247	142	181	200
Link Distance (ft)			360	360		610	610		2034			
Upstream Blk Time (%)						1	1					
Queuing Penalty (veh)						6	8					
Storage Bay Dist (ft)	325	325			150			400		500	250	250
Storage Blk Time (%)					3	37	11				0	0
Queuing Penalty (veh)					24	39	16				0	0

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	71	232
Average Queue (ft)	17	106
95th Queue (ft)	49	194
Link Distance (ft)	344	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		250
Storage Blk Time (%)		0
Queuing Penalty (veh)		1

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	269	508	250	502	486	295	260	124	234	1273	250
Average Queue (ft)	98	284	124	298	328	156	81	51	121	696	239
95th Queue (ft)	192	461	254	447	461	255	182	108	236	1561	285
Link Distance (ft)		1360		4493			5158			6171	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500		150		500	275		500	135		150
Storage Blk Time (%)		0	6	29	1	1	0		4	52	53
Queuing Penalty (veh)		1	78	214	4	2	0		24	254	152

Intersection: 7: Idlewild Road & Access A

Movement	SB
Directions Served	R
Maximum Queue (ft)	103
Average Queue (ft)	44
95th Queue (ft)	87
Link Distance (ft)	836
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	R	R
Maximum Queue (ft)	104	47	42	77	83	47	216
Average Queue (ft)	40	4	3	16	21	2	71
95th Queue (ft)	87	29	23	103	122	29	190
Link Distance (ft)		610	610	1360	1360		962
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	400					100	
Storage Blk Time (%)					1		
Queuing Penalty (veh)					1		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	70	11
Average Queue (ft)	29	0
95th Queue (ft)	55	6
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	76	76	106	86	50
Average Queue (ft)	26	23	29	24	11
95th Queue (ft)	64	61	82	72	39
Link Distance (ft)	270	278	344	344	505
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 1352

Intersection: 1: Stallings Road/Hooks Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LT	R	LTR
Maximum Queue (ft)	575	2503	145	78	2582	275	54
Average Queue (ft)	508	1493	32	8	2360	238	8
95th Queue (ft)	715	2973	104	54	3173	341	34
Link Distance (ft)		2564	443	443	2560		1266
Upstream Blk Time (%)		21			77		
Queuing Penalty (veh)		0			0		
Storage Bay Dist (ft)	475					175	
Storage Blk Time (%)	28	72			79	80	
Queuing Penalty (veh)	170	344			214	109	

Intersection: 2: Idlewild Road & I-485 Southbound Off Ramp

Movement	WB	WB	SB
Directions Served	T	T	R
Maximum Queue (ft)	46	41	196
Average Queue (ft)	8	11	102
95th Queue (ft)	29	35	176
Link Distance (ft)	46	46	777
Upstream Blk Time (%)	2	2	
Queuing Penalty (veh)	10	14	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: I-485 Northbound Off ramp

Movement	WB	WB	WB	NB
Directions Served	T	T	T	L
Maximum Queue (ft)	98	51	111	153
Average Queue (ft)	40	3	79	86
95th Queue (ft)	91	21	106	142
Link Distance (ft)	62	62	62	432
Upstream Blk Time (%)	12	1	40	
Queuing Penalty (veh)	89	4	290	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	R	R
Maximum Queue (ft)	107	74	77	82	168	571	580	580	88	146
Average Queue (ft)	43	30	30	27	58	251	543	550	31	63
95th Queue (ft)	91	63	67	66	141	626	585	569	74	124
Link Distance (ft)		377	377	377		531	531	531	380	194
Upstream Blk Time (%)						5	21	40		0
Queuing Penalty (veh)						44	194	374		0
Storage Bay Dist (ft)	350				300					
Storage Blk Time (%)						1				
Queuing Penalty (veh)						1				

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	L
Maximum Queue (ft)	244	242	224	199	22	400	662	667	657	200	263	353
Average Queue (ft)	157	98	103	102	1	83	600	631	631	174	94	190
95th Queue (ft)	240	200	181	170	10	325	726	674	649	284	305	431
Link Distance (ft)		348	348	348			610	610	610			
Upstream Blk Time (%)		0	0				20	35	55			
Queuing Penalty (veh)		2	0				180	312	494			
Storage Bay Dist (ft)	500				375	300				100	400	400
Storage Blk Time (%)		0					32		86		0	13
Queuing Penalty (veh)		1					8		121		0	12

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	R	R
Maximum Queue (ft)	471	108	229	273	208	222	169
Average Queue (ft)	178	40	125	153	49	83	76
95th Queue (ft)	890	92	235	271	203	197	140
Link Distance (ft)	2015				337		
Upstream Blk Time (%)				2	3	0	
Queuing Penalty (veh)				0	14	0	
Storage Bay Dist (ft)		300	250	250		250	250
Storage Blk Time (%)			2	7	0	0	
Queuing Penalty (veh)			4	15	0	0	

Village at Idlewild
Queuing and Blocking Report

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Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	T	R	L	T	T	T	R	L
Maximum Queue (ft)	150	170	348	377	397	300	525	1546	1548	1550	350	510
Average Queue (ft)	83	96	219	244	254	90	285	1184	1193	1201	283	258
95th Queue (ft)	138	147	305	328	342	244	664	2048	2044	2039	489	559
Link Distance (ft)			1336	1336	1336			1503	1503	1503		
Upstream Blk Time (%)								35	50	64		
Queuing Penalty (veh)								0	0	0		
Storage Bay Dist (ft)	500	500				200	425				250	500
Storage Blk Time (%)					20	0	0	54		73		8
Queuing Penalty (veh)					34	1	0	69		183		8

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	NB	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	L	T	T	R	L	L	T	T	R	R
Maximum Queue (ft)	544	708	271	131	192	192	204	208	212	196
Average Queue (ft)	285	166	75	50	95	104	79	94	95	90
95th Queue (ft)	592	576	185	115	171	171	160	219	207	189
Link Distance (ft)		5114	5114				4821	4821		
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			200	475	475			225	225
Storage Blk Time (%)	18	2	0						4	4
Queuing Penalty (veh)	17	3	0						5	5

Intersection: 7: Idlewild Road & Access A

Movement	EB	WB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	6	373	395	386	868
Average Queue (ft)	0	134	318	346	631
95th Queue (ft)	5	381	446	426	1059
Link Distance (ft)	531	348	348	348	842
Upstream Blk Time (%)		1	5	18	45
Queuing Penalty (veh)		12	45	170	0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	TR	R
Maximum Queue (ft)	102	27	1373	1385	1370	965
Average Queue (ft)	38	1	1206	1248	1250	744
95th Queue (ft)	81	19	1736	1670	1638	1104
Link Distance (ft)		610	1336	1336	1336	957
Upstream Blk Time (%)			12	17	22	31
Queuing Penalty (veh)			105	151	200	0
Storage Bay Dist (ft)	150					
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	48
Average Queue (ft)	29
95th Queue (ft)	44
Link Distance (ft)	1254
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	102	77	86	50	39
Average Queue (ft)	34	21	10	7	12
95th Queue (ft)	106	62	56	31	37
Link Distance (ft)	270	278	337	337	505
Upstream Blk Time (%)	0				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Village at Idlewild
Queuing and Blocking Report

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Intersection: 15: Idlewild Road

Movement	EB	EB
Directions Served	T	TR
Maximum Queue (ft)	389	415
Average Queue (ft)	360	382
95th Queue (ft)	425	402
Link Distance (ft)	315	315
Upstream Blk Time (%)	38	85
Queuing Penalty (veh)	235	522
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: Idlewild Road

Movement	EB	WB	WB	WB	WB
Directions Served	T	R	R	R	R
Maximum Queue (ft)	16	255	458	462	377
Average Queue (ft)	1	31	341	420	344
95th Queue (ft)	10	166	558	475	519
Link Distance (ft)	96	377	377	377	
Upstream Blk Time (%)		1	14	27	3
Queuing Penalty (veh)		6	130	253	0
Storage Bay Dist (ft)					325
Storage Blk Time (%)				39	0
Queuing Penalty (veh)				277	0

Intersection: 22: Idlewild Road

Movement	EB	EB	NB	NB
Directions Served	T	T	T	T
Maximum Queue (ft)	127	152	194	192
Average Queue (ft)	72	127	96	90
95th Queue (ft)	125	143	164	164
Link Distance (ft)	35	35	109	109
Upstream Blk Time (%)	39	58	10	9
Queuing Penalty (veh)	214	318	62	61
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 23: I-485 Northbound Off ramp

Movement

Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 27:

Movement

WB WB

Directions Served T T
Maximum Queue (ft) 151 162
Average Queue (ft) 11 11
95th Queue (ft) 80 82
Link Distance (ft) 407 407
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 28: Idlewild Road

Movement

WB WB WB WB

Directions Served T T T R
Maximum Queue (ft) 188 123 196 29
Average Queue (ft) 68 49 175 1
95th Queue (ft) 175 122 185 17
Link Distance (ft) 115 115 115 115
Upstream Blk Time (%) 6 2 53 0
Queuing Penalty (veh) 45 13 373 0
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Village at Idlewild
Queuing and Blocking Report

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Intersection: 30: Idlewild Road

Movement	EB	EB	EB	EB
Directions Served	L	T	T	T
Maximum Queue (ft)	67	333	343	333
Average Queue (ft)	4	129	130	132
95th Queue (ft)	67	272	277	266
Link Distance (ft)	512	512	512	512
Upstream Blk Time (%)			0	0
Queuing Penalty (veh)			0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 31: Idlewild Road

Movement	EB	EB
Directions Served	T	T
Maximum Queue (ft)	513	533
Average Queue (ft)	486	494
95th Queue (ft)	509	514
Link Distance (ft)	443	443
Upstream Blk Time (%)	54	88
Queuing Penalty (veh)	333	544
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 32: I-485 Southbound On Ramp

Movement	WB	SB
Directions Served	L	R
Maximum Queue (ft)	49	130
Average Queue (ft)	4	27
95th Queue (ft)	25	85
Link Distance (ft)	84	86
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	0	1
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: Idlewild Road

Movement	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T
Maximum Queue (ft)	135	86	167	117	119	118
Average Queue (ft)	113	28	147	99	98	96
95th Queue (ft)	161	78	158	111	108	106
Link Distance (ft)	76	76	76	25	25	25
Upstream Blk Time (%)	25	2	52	51	55	49
Queuing Penalty (veh)	180	12	373	264	284	254
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 34: I-485 Southbound Off Ramp

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 44: I-485 Northbound On Ramp

Movement	NE
Directions Served	T
Maximum Queue (ft)	152
Average Queue (ft)	57
95th Queue (ft)	123
Link Distance (ft)	117
Upstream Blk Time (%)	1
Queuing Penalty (veh)	6
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 222: Idlewild Road & I-485 Southbound Off Ramp

Movement	EB	EB	SB	SB
Directions Served	T	T	L	L
Maximum Queue (ft)	21	57	315	358
Average Queue (ft)	1	27	112	202
95th Queue (ft)	11	49	234	309
Link Distance (ft)	20	20		673
Upstream Blk Time (%)	1	41		
Queuing Penalty (veh)	6	225		
Storage Bay Dist (ft)			500	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 333: I-485 Northbound Off Ramp & Idlewild Road

Movement	EB	EB	EB	NB	NB	NB
Directions Served	T	T	T	R	R	R
Maximum Queue (ft)	82	86	76	188	175	179
Average Queue (ft)	33	31	15	111	97	91
95th Queue (ft)	70	71	56	175	150	151
Link Distance (ft)	80	80	80	296	296	296
Upstream Blk Time (%)	3	3	2			
Queuing Penalty (veh)	16	17	9			
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 9060

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	37	318	150	2751
Average Queue (ft)	7	120	10	2155
95th Queue (ft)	26	255	148	3047
Link Distance (ft)	194	738	738	2704
Upstream Blk Time (%)			0	30
Queuing Penalty (veh)			1	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	342	312	196	308	187	219	345	375
Average Queue (ft)	181	139	56	116	66	81	171	202
95th Queue (ft)	307	256	145	217	140	165	278	319
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		12	0	1			0	0
Queuing Penalty (veh)		16	2	4			0	1

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	189	253	227	250	298	225	299	387	330
Average Queue (ft)	89	111	81	109	107	98	171	217	174
95th Queue (ft)	157	208	172	202	221	207	278	324	277
Link Distance (ft)		856	856	509	509			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)		0			4	6	6	11	
Queuing Penalty (veh)		0			12	20	28	56	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	26	26	41	56
Average Queue (ft)	2	2	10	13
95th Queue (ft)	14	14	34	41
Link Distance (ft)			394	2282
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	350	100		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Rite Aid Driveway & Idlewild Road

Movement	EB	EB	B8	B8	WB	WB	NB
Directions Served	T	R	T	T	UL	T	LR
Maximum Queue (ft)	579	337	202	70	249	480	484
Average Queue (ft)	400	31	30	3	76	258	233
95th Queue (ft)	650	188	134	31	184	431	411
Link Distance (ft)	494	494	411	411		2058	2037
Upstream Blk Time (%)	7	0					
Queuing Penalty (veh)	50	1					
Storage Bay Dist (ft)					150		
Storage Blk Time (%)					0	14	
Queuing Penalty (veh)					4	12	

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	350	1139	249	828	267	491	183	291	243
Average Queue (ft)	214	570	57	498	92	237	58	90	110
95th Queue (ft)	400	1146	191	861	259	460	126	210	204
Link Distance (ft)		2058		4497		5157		6183	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	1	23		37		16	0	3	5
Queuing Penalty (veh)	5	49		16		14	0	7	9

Network Summary

Network wide Queuing Penalty: 308

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B7	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	92	17	340	2744
Average Queue (ft)	11	1	138	2417
95th Queue (ft)	52	12	268	3339
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	0			69
Queuing Penalty (veh)	0			0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	562	574	200	373	486	291	511	423
Average Queue (ft)	261	240	92	230	89	83	258	249
95th Queue (ft)	484	480	215	364	295	204	434	390
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	0	0						
Queuing Penalty (veh)	1	0						
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		34	2	8	0		4	1
Queuing Penalty (veh)		48	8	32	0		14	2

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	359	742	748	255	284	222	295	420	369
Average Queue (ft)	247	375	356	136	142	120	192	233	192
95th Queue (ft)	434	939	916	222	249	216	302	358	311
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		5	4						
Queuing Penalty (veh)		33	24						
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	2	36			8	7	8	16	
Queuing Penalty (veh)	9	95			27	27	49	92	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	280	547	553	200	176	194	280	27
Average Queue (ft)	13	308	294	58	62	18	81	4
95th Queue (ft)	133	709	706	206	142	123	266	18
Link Distance (ft)		508	508			411	380	2282
Upstream Blk Time (%)		18	11				7	
Queuing Penalty (veh)		151	92				0	
Storage Bay Dist (ft)	350			100	125			
Storage Blk Time (%)		43	13		7	0		
Queuing Penalty (veh)		2	20		43	0		

Intersection: 5: Rite Aid Driveway & Idlewild Road

Movement	EB	EB	B8	B8	WB	WB	NB	NB
Directions Served	T	R	T	T	UL	T	L	R
Maximum Queue (ft)	591	491	454	468	248	572	1465	600
Average Queue (ft)	492	158	297	266	145	240	744	489
95th Queue (ft)	732	501	615	586	246	657	1656	707
Link Distance (ft)	494	494	411	411		2046	2039	
Upstream Blk Time (%)	40	2	26	8			2	
Queuing Penalty (veh)	313	13	200	60			0	
Storage Bay Dist (ft)					150			500
Storage Blk Time (%)					32	7	6	42
Queuing Penalty (veh)					323	8	17	113

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	350	2036	250	4548	375	1813	168	263	227
Average Queue (ft)	312	1778	74	3176	350	1131	74	101	132
95th Queue (ft)	425	2229	223	5287	489	1958	139	206	207
Link Distance (ft)		2046		4497		5157		6183	
Upstream Blk Time (%)		1		28					
Queuing Penalty (veh)		10		0					
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	31	34		53		93	2	3	9
Queuing Penalty (veh)	357	86		24		108	5	10	15

Network Summary

Network wide Queuing Penalty: 2430

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	WB	NB
Directions Served	TR	T	L	T	LR
Maximum Queue (ft)	293	1674	263	92	2742
Average Queue (ft)	184	955	81	6	2469
95th Queue (ft)	382	2200	211	90	3319
Link Distance (ft)	194	1628	738	738	2704
Upstream Blk Time (%)	46	42			74
Queuing Penalty (veh)	0	0			0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	764	774	200	349	333	207	1645	475
Average Queue (ft)	595	587	115	178	80	104	1209	216
95th Queue (ft)	980	988	264	290	201	182	2193	534
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	36	32					63	
Queuing Penalty (veh)	207	183					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		70	1	2	0		74	0
Queuing Penalty (veh)		100	6	10	0		245	1

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	375	889	900	200	242	186	300	1511	950
Average Queue (ft)	260	762	754	71	66	63	145	1342	824
95th Queue (ft)	506	1158	1166	148	159	137	381	1891	1116
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		51	36					78	
Queuing Penalty (veh)		343	240					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	0	85			1	2	6	96	31
Queuing Penalty (veh)	1	224			5	7	33	565	184

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	450	546	568	200	145	89	399	34
Average Queue (ft)	25	519	523	39	40	4	235	5
95th Queue (ft)	191	564	608	168	100	37	476	23
Link Distance (ft)		508	508			415	380	326
Upstream Blk Time (%)		73	58				34	
Queuing Penalty (veh)		612	486				0	
Storage Bay Dist (ft)	350			100	125			
Storage Blk Time (%)		93	20		1	0		
Queuing Penalty (veh)		7	31		8	0		

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	174	390	218	250	647	2083	600	165	86
Average Queue (ft)	54	379	18	142	638	1293	535	79	32
95th Queue (ft)	176	387	122	279	646	2482	737	171	73
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		59	0		20	30			
Queuing Penalty (veh)		466	0		235	0			
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	2	81		4	42	5	69		
Queuing Penalty (veh)	19	49		43	50	14	189		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	350	1371	250	1949	375	4382	208	630	250
Average Queue (ft)	348	1352	64	1172	305	2681	88	324	190
95th Queue (ft)	352	1488	191	2616	524	4394	190	737	299
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)		37							
Queuing Penalty (veh)		523							
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	100	3		43		98	3	17	46
Queuing Penalty (veh)	1163	7		19		121	10	50	79

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	165	454	480	52
Average Queue (ft)	137	428	370	13
95th Queue (ft)	152	443	577	41
Link Distance (ft)	61	415	415	867
Upstream Blk Time (%)	82	67	22	
Queuing Penalty (veh)	646	528	171	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	R
Maximum Queue (ft)	159	651	1312	150
Average Queue (ft)	6	594	828	55
95th Queue (ft)	59	817	1341	142
Link Distance (ft)		631	1357	987
Upstream Blk Time (%)		22	0	
Queuing Penalty (veh)		320	1	
Storage Bay Dist (ft)	100			
Storage Blk Time (%)		74		
Queuing Penalty (veh)		5		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	26
Average Queue (ft)	7
95th Queue (ft)	25
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	12	25	18	6
Average Queue (ft)	2	1	1	0
95th Queue (ft)	12	11	11	4
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 8205

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	51	478	89	2740
Average Queue (ft)	13	201	3	2606
95th Queue (ft)	38	398	62	3077
Link Distance (ft)	194	738	738	2704
Upstream Blk Time (%)				81
Queuing Penalty (veh)				0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	322	352	200	371	433	280	465	432
Average Queue (ft)	188	192	82	224	92	99	249	251
95th Queue (ft)	287	305	202	345	268	209	393	370
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		31	2	7	0		1	1
Queuing Penalty (veh)		43	10	26	0		4	4

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	303	286	274	268	302	222	299	357	311
Average Queue (ft)	145	60	70	115	127	110	172	219	184
95th Queue (ft)	259	199	199	202	239	200	280	317	277
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	1	0			6	7	7	14	
Queuing Penalty (veh)	5	0			23	29	41	80	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	R	L	T	R	R
Maximum Queue (ft)	28	4	35	110	56	55	34
Average Queue (ft)	4	0	2	43	2	18	7
95th Queue (ft)	21	3	15	82	29	39	28
Link Distance (ft)		508			531	380	326
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	350		100	125			
Storage Blk Time (%)				0	0		
Queuing Penalty (veh)				1	0		

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	TR
Maximum Queue (ft)	179	384	381	235	312	311	372	388	121	111
Average Queue (ft)	60	238	251	97	203	220	181	209	53	33
95th Queue (ft)	165	401	411	192	284	288	313	360	99	84
Link Distance (ft)		377	377		631		2040		358	358
Upstream Blk Time (%)		4	5							
Queuing Penalty (veh)		33	36							
Storage Bay Dist (ft)	175			150		350		500		
Storage Blk Time (%)		20		2	12		0	0		
Queuing Penalty (veh)		12		23	76		1	1		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	600	1362	250	3739	371	980	509	215	485	250
Average Queue (ft)	471	1208	72	2254	275	492	200	104	243	166
95th Queue (ft)	768	1624	207	3821	465	1001	593	233	591	278
Link Distance (ft)		1357		4493		5158			6183	
Upstream Blk Time (%)		2		2						
Queuing Penalty (veh)		33		0						
Storage Bay Dist (ft)	500		150		275		500	135		150
Storage Blk Time (%)		38	0	49	5	59		4	33	13
Queuing Penalty (veh)		98	1	22	12	136		11	98	22

Intersection: 7: Idlewild Road & Access A

Movement	EB	EB	SB
Directions Served	T	T	R
Maximum Queue (ft)	142	167	43
Average Queue (ft)	32	40	9
95th Queue (ft)	156	183	32
Link Distance (ft)	531	531	842
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	249	657	667	24
Average Queue (ft)	22	430	427	8
95th Queue (ft)	132	771	775	25
Link Distance (ft)		631	631	974
Upstream Blk Time (%)		2	3	
Queuing Penalty (veh)		17	20	
Storage Bay Dist (ft)	150			
Storage Blk Time (%)		57		
Queuing Penalty (veh)		4		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	32
Average Queue (ft)	8
95th Queue (ft)	28
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	34	36	38	12
Average Queue (ft)	2	3	3	0
95th Queue (ft)	15	19	19	6
Link Distance (ft)	270	278	358	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 924

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	286	1662	333	2742
Average Queue (ft)	206	1124	79	2505
95th Queue (ft)	382	2315	237	3296
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	59	56		75
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	766	776	160	329	216	226	1640	437
Average Queue (ft)	672	663	97	164	88	128	1368	202
95th Queue (ft)	925	931	254	276	175	205	2165	543
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	51	42					73	
Queuing Penalty (veh)	300	250					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		82	1	1	0		84	1
Queuing Penalty (veh)		117	6	4	0		280	5

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	316	883	892	148	139	154	246	1499	950
Average Queue (ft)	231	823	819	68	58	61	115	1417	850
95th Queue (ft)	509	1069	1085	127	121	123	347	1748	1073
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		60	32					87	
Queuing Penalty (veh)		419	224					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	0	93			1	1	1	99	49
Queuing Penalty (veh)	2	244			4	3	6	599	295

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	TR	R	R
Maximum Queue (ft)	360	545	551	160	107	98	20	380	43
Average Queue (ft)	63	525	514	25	35	7	1	297	15
95th Queue (ft)	320	538	605	131	100	62	14	503	41
Link Distance (ft)		508	508			415	415	380	326
Upstream Blk Time (%)		81	62					56	
Queuing Penalty (veh)		718	547					0	
Storage Bay Dist (ft)	350			100	125				
Storage Blk Time (%)		98	35		2	0			
Queuing Penalty (veh)		23	52		15	0			

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	140	313	21	250	647	2068	600	409	355
Average Queue (ft)	69	304	6	136	638	1425	557	339	242
95th Queue (ft)	199	554	22	279	646	2503	738	519	503
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		45			22	41		58	19
Queuing Penalty (veh)		372			267	0		63	21
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	9	65		3	43	7	77		
Queuing Penalty (veh)	98	82		38	52	21	211		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	349	1225	250	3504	375	4687	231	794	250
Average Queue (ft)	299	1133	79	2226	335	2851	98	429	211
95th Queue (ft)	477	1891	219	4077	508	4714	214	1076	295
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)		31		5		2			
Queuing Penalty (veh)		467		0		0			
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	82	3		52	3	98	9	17	55
Queuing Penalty (veh)	988	7		23	7	135	31	52	95

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	WB	SB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	162	451	465	23	58
Average Queue (ft)	135	425	367	1	17
95th Queue (ft)	152	441	546	12	46
Link Distance (ft)	61	415	415	376	854
Upstream Blk Time (%)	86	73	35		
Queuing Penalty (veh)	707	597	286		
Storage Bay Dist (ft)					
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	R
Maximum Queue (ft)	405	522	1300	175	350
Average Queue (ft)	63	488	1040	35	184
95th Queue (ft)	329	912	1589	150	459
Link Distance (ft)		631	1357		974
Upstream Blk Time (%)		20	1		
Queuing Penalty (veh)		300	7		
Storage Bay Dist (ft)	400			75	
Storage Blk Time (%)		60	42		
Queuing Penalty (veh)		13	13		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	35
Average Queue (ft)	16
95th Queue (ft)	38
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	246	177	77	151
Average Queue (ft)	150	63	7	60
95th Queue (ft)	367	185	40	192
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	44	1		
Queuing Penalty (veh)	0	0		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 9064

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	42	343	62	2736
Average Queue (ft)	10	156	2	2529
95th Queue (ft)	33	304	44	3194
Link Distance (ft)	194	738	738	2704
Upstream Blk Time (%)				75
Queuing Penalty (veh)				0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	368	373	200	374	548	426	572	427
Average Queue (ft)	222	218	106	239	130	116	269	247
95th Queue (ft)	337	337	237	381	402	294	491	397
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		34	2	11	0		4	1
Queuing Penalty (veh)		49	12	43	0		13	4

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	336	486	501	264	309	224	299	436	365
Average Queue (ft)	186	143	155	146	164	148	179	237	203
95th Queue (ft)	338	481	495	223	269	226	291	350	310
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		1	1						
Queuing Penalty (veh)		6	7						
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	1	11			12	16	5	17	
Queuing Penalty (veh)	5	28			45	74	32	103	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	449	535	534	200	138	66	263	52
Average Queue (ft)	31	172	175	49	49	2	65	18
95th Queue (ft)	196	547	550	188	101	34	206	44
Link Distance (ft)		508	508			531	380	326
Upstream Blk Time (%)		7	5				1	
Queuing Penalty (veh)		58	48				0	
Storage Bay Dist (ft)	350			100	125			
Storage Blk Time (%)		17	23		1	0		
Queuing Penalty (veh)		4	34		6	0		

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	TR
Maximum Queue (ft)	376	401	402	224	336	344	1096	600	313	245
Average Queue (ft)	127	317	324	96	232	252	426	378	182	108
95th Queue (ft)	300	469	466	184	303	317	955	659	366	291
Link Distance (ft)		377	377		631		2040		358	358
Upstream Blk Time (%)	0	26	27						9	4
Queuing Penalty (veh)	0	211	224						9	4
Storage Bay Dist (ft)	325			150		350		500		
Storage Blk Time (%)	0	34		4	17	0	3	22		
Queuing Penalty (veh)	0	43		39	117	0	9	60		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	600	1364	249	4469	375	1328	511	209	330	250
Average Queue (ft)	515	1283	66	3095	305	707	276	67	135	154
95th Queue (ft)	772	1558	191	4916	454	1638	698	152	281	247
Link Distance (ft)		1357		4493		5158			6183	
Upstream Blk Time (%)		4		16						
Queuing Penalty (veh)		52		0						
Storage Bay Dist (ft)	500		150		275		500	135		150
Storage Blk Time (%)	12	37		49	48	21		2	13	13
Queuing Penalty (veh)	151	100		22	117	51		6	40	23

Intersection: 7: Idlewild Road & Access A

Movement	EB	EB	SB
Directions Served	T	T	R
Maximum Queue (ft)	556	560	63
Average Queue (ft)	266	266	16
95th Queue (ft)	688	684	44
Link Distance (ft)	531	531	842
Upstream Blk Time (%)	15	15	
Queuing Penalty (veh)	123	126	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	500	664	670	59
Average Queue (ft)	119	553	550	21
95th Queue (ft)	459	791	797	49
Link Distance (ft)		631	631	974
Upstream Blk Time (%)		6	7	
Queuing Penalty (veh)		42	50	
Storage Bay Dist (ft)	400			
Storage Blk Time (%)		68		
Queuing Penalty (veh)		15		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	40
Average Queue (ft)	16
95th Queue (ft)	39
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	71	62	74	29
Average Queue (ft)	11	8	7	3
95th Queue (ft)	59	36	37	19
Link Distance (ft)	270	278	358	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 2209

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B7	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	281	1670	359	2748
Average Queue (ft)	132	644	109	2620
95th Queue (ft)	343	1880	246	3097
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	30	24		82
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	763	772	200	322	241	227	1653	475
Average Queue (ft)	552	543	136	164	83	116	1019	267
95th Queue (ft)	933	944	269	273	181	203	2076	582
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	20	19					41	
Queuing Penalty (veh)	115	112					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		66	1	1			59	3
Queuing Penalty (veh)		97	5	5			199	11

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	375	887	908	196	183	176	300	1509	950
Average Queue (ft)	302	700	688	74	61	59	196	1159	760
95th Queue (ft)	508	1187	1192	153	140	139	394	2003	1246
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		32	20					64	
Queuing Penalty (veh)		214	134					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	1	77			1	1	8	83	39
Queuing Penalty (veh)	5	208			4	5	50	495	233

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	449	553	561	200	120	78	267	28
Average Queue (ft)	32	471	469	85	43	3	147	3
95th Queue (ft)	219	728	732	247	97	37	407	16
Link Distance (ft)		508	508			411	380	2282
Upstream Blk Time (%)		56	45				21	
Queuing Penalty (veh)		467	377				0	
Storage Bay Dist (ft)	350			100	125			
Storage Blk Time (%)		82	36		0	0		
Queuing Penalty (veh)		3	54		3	0		

Intersection: 5: Rite Aid Driveway & Idlewild Road

Movement	EB	EB	B8	B8	WB	WB	NB	NB
Directions Served	T	R	T	T	UL	T	L	R
Maximum Queue (ft)	601	555	452	481	175	218	2082	600
Average Queue (ft)	549	135	394	369	94	104	1833	594
95th Queue (ft)	696	480	581	599	159	196	2607	645
Link Distance (ft)	494	494	411	411		400	2038	
Upstream Blk Time (%)	72	4	58	25			76	
Queuing Penalty (veh)	573	33	457	194			0	
Storage Bay Dist (ft)					150			500
Storage Blk Time (%)					4	1	5	96
Queuing Penalty (veh)					36	1	13	264

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	B12	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	T	L	TR	L	TR	L	T	R
Maximum Queue (ft)	350	1706	424	250	1313	375	4477	234	485	250
Average Queue (ft)	349	1663	387	72	830	282	2683	93	216	176
95th Queue (ft)	350	1768	509	198	1475	545	4539	209	478	274
Link Distance (ft)		1591	400		4497		5157		6183	
Upstream Blk Time (%)		83	26							
Queuing Penalty (veh)		1187	372							
Storage Bay Dist (ft)	250			150		275		135		150
Storage Blk Time (%)	100	3			40	0	99	1	14	29
Queuing Penalty (veh)	1174	7			18	1	117	4	42	52

Network Summary

Network wide Queuing Penalty: 7341

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	300	1677	245	2739
Average Queue (ft)	196	1059	62	2631
95th Queue (ft)	384	2309	175	3067
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	53	54		85
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	762	776	200	312	174	232	1642	475
Average Queue (ft)	633	621	121	160	72	117	1260	238
95th Queue (ft)	962	981	268	262	147	204	2218	562
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	43	36					66	
Queuing Penalty (veh)	263	225					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		76	2	1			74	1
Queuing Penalty (veh)		110	12	3			253	3

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	375	891	903	155	147	149	300	1520	950
Average Queue (ft)	293	810	794	74	65	71	198	1452	919
95th Queue (ft)	528	1060	1094	135	129	133	419	1666	1035
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		45	32					89	
Queuing Penalty (veh)		336	235					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	0	93			1	1	3	99	57
Queuing Penalty (veh)	2	250			4	7	19	628	361

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	450	546	565	200	127	96	404	52
Average Queue (ft)	101	524	527	32	44	5	306	20
95th Queue (ft)	406	552	586	152	103	46	516	46
Link Distance (ft)		508	508			415	380	326
Upstream Blk Time (%)		73	55				61	
Queuing Penalty (veh)		689	516				0	
Storage Bay Dist (ft)	350			100	125			
Storage Blk Time (%)		95	23		2	0		
Queuing Penalty (veh)		35	34		16	0		

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	175	390	114	250	647	2085	600	442	415
Average Queue (ft)	103	380	15	138	638	1672	579	390	289
95th Queue (ft)	230	387	98	296	645	2624	682	497	527
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		54			26	47		77	20
Queuing Penalty (veh)		470			342	0		103	27
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	30	75		4	46	2	89		
Queuing Penalty (veh)	342	129		48	57	7	246		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	350	1371	249	4549	375	5156	213	1568	250
Average Queue (ft)	348	1318	106	3389	322	3195	64	833	235
95th Queue (ft)	361	1618	276	5595	520	5432	152	1794	287
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)		36		47		8			
Queuing Penalty (veh)		562		0		0			
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	99	2		62	0	98	3	11	79
Queuing Penalty (veh)	1251	7		29	1	153	11	36	141

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	168	449	487	64
Average Queue (ft)	135	427	379	24
95th Queue (ft)	149	441	563	51
Link Distance (ft)	61	415	415	854
Upstream Blk Time (%)	79	64	17	
Queuing Penalty (veh)	690	555	150	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	R
Maximum Queue (ft)	500	652	1359	200	469
Average Queue (ft)	96	557	1230	54	252
95th Queue (ft)	415	865	1546	201	588
Link Distance (ft)		631	1357		974
Upstream Blk Time (%)		22	1		
Queuing Penalty (veh)		355	17		
Storage Bay Dist (ft)	400			100	
Storage Blk Time (%)		67	48		
Queuing Penalty (veh)		24	22		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	41
Average Queue (ft)	18
95th Queue (ft)	42
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	292	287	105	397
Average Queue (ft)	213	149	20	152
95th Queue (ft)	395	342	78	386
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	66	24		0
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 9771

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	40	728	738	2724
Average Queue (ft)	13	454	201	2628
95th Queue (ft)	35	814	723	3006
Link Distance (ft)	194	725	725	2704
Upstream Blk Time (%)		10	3	69
Queuing Penalty (veh)		61	19	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R	R
Maximum Queue (ft)	481	486	200	369	565	558	1069	438	260
Average Queue (ft)	213	213	77	259	148	139	393	168	144
95th Queue (ft)	387	390	209	390	445	363	926	395	235
Link Distance (ft)	725	725			856	856	1608		
Upstream Blk Time (%)	0	0			0		4		
Queuing Penalty (veh)	0	0			1		0		
Storage Bay Dist (ft)			100	275				400	400
Storage Blk Time (%)		36	2	12	0		13	0	
Queuing Penalty (veh)		53	8	51	2		45	0	

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	357	743	727	318	333	225	299	511	478
Average Queue (ft)	192	236	244	190	207	174	198	272	232
95th Queue (ft)	378	732	730	293	302	247	317	429	377
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		4	3						
Queuing Penalty (veh)		31	26						
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	0	21			22	24	7	24	
Queuing Penalty (veh)	2	56			86	116	47	155	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	TR	R	R
Maximum Queue (ft)	300	428	436	175	129	45	10	314	59
Average Queue (ft)	64	220	220	68	48	2	0	108	21
95th Queue (ft)	293	619	617	222	98	23	5	316	50
Link Distance (ft)		508	508			531	531	380	326
Upstream Blk Time (%)		10	10					7	
Queuing Penalty (veh)		96	96					0	
Storage Bay Dist (ft)	350			100	125				
Storage Blk Time (%)		24	30		0	0			
Queuing Penalty (veh)		9	45		3	0			

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	L	T	R
Maximum Queue (ft)	338	376	381	249	443	450	652	490	184	205	55	132
Average Queue (ft)	161	312	318	135	285	323	262	314	98	120	14	55
95th Queue (ft)	349	468	467	261	415	443	616	549	202	218	43	106
Link Distance (ft)		360	360		611	611	2040				362	
Upstream Blk Time (%)	0	30	32									
Queuing Penalty (veh)	0	264	279									
Storage Bay Dist (ft)	325			150				500	250	250		250
Storage Blk Time (%)	0	38		13	22		1	7	1	2		
Queuing Penalty (veh)	1	66		69	27		3	19	1	2		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	600	1366	216	314	360	375	1673	437	203	358	250
Average Queue (ft)	478	1215	52	179	219	318	844	290	92	152	164
95th Queue (ft)	797	1669	119	279	325	453	2056	705	183	297	248
Link Distance (ft)		1360		4493			5158			6171	
Upstream Blk Time (%)		3									
Queuing Penalty (veh)		46									
Storage Bay Dist (ft)	500		150		500	275		500	135		150
Storage Blk Time (%)		37		11		51	26		5	12	15
Queuing Penalty (veh)		107		72		128	69		18	41	26

Intersection: 7: Idlewild Road & Access A

Movement	EB	EB	SB
Directions Served	T	T	R
Maximum Queue (ft)	444	451	59
Average Queue (ft)	318	322	22
95th Queue (ft)	728	731	49
Link Distance (ft)	531	531	842
Upstream Blk Time (%)	19	19	
Queuing Penalty (veh)	161	167	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	R	R
Maximum Queue (ft)	414	644	653	17	52
Average Queue (ft)	229	524	526	1	22
95th Queue (ft)	630	813	821	6	44
Link Distance (ft)		611	611		962
Upstream Blk Time (%)		8	9		
Queuing Penalty (veh)		66	74		
Storage Bay Dist (ft)	400			100	
Storage Blk Time (%)		69			
Queuing Penalty (veh)		25			

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	48	6
Average Queue (ft)	19	0
95th Queue (ft)	43	4
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	41	55	68	62	42
Average Queue (ft)	8	9	13	11	5
95th Queue (ft)	34	34	46	39	25
Link Distance (ft)	270	278	362	362	505
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 2738

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	291	1669	203	2737
Average Queue (ft)	217	1233	53	2665
95th Queue (ft)	381	2341	173	2945
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	62	64		88
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	759	765	160	258	157	182	1638	380
Average Queue (ft)	686	675	95	134	62	88	1420	198
95th Queue (ft)	906	907	254	267	149	178	2160	544
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	51	26					74	
Queuing Penalty (veh)	325	167					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		81	2	1			84	1
Queuing Penalty (veh)		119	11	3			285	2

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	300	886	895	151	120	134	240	1513	940
Average Queue (ft)	260	848	841	70	54	52	151	1472	877
95th Queue (ft)	532	984	998	154	126	127	391	1557	1076
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		57	40					95	
Queuing Penalty (veh)		440	311					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	1	97			1	1	4	99	40
Queuing Penalty (veh)	4	262			4	5	30	643	261

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	B15	NB	SB
Directions Served	L	T	T	R	L	T	TR	T	R	R
Maximum Queue (ft)	360	549	558	160	117	118	82	23	401	60
Average Queue (ft)	132	524	514	25	71	96	82	23	303	25
95th Queue (ft)	469	541	629	134	196	411	352	97	492	52
Link Distance (ft)		508	508			415	415	61	380	326
Upstream Blk Time (%)		75	53			20	20	20	55	
Queuing Penalty (veh)		743	521			148	148	297	0	
Storage Bay Dist (ft)	350			100	125					
Storage Blk Time (%)		96	35		20					
Queuing Penalty (veh)		52	53		139					

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	140	313	135	200	642	2079	600	426	408
Average Queue (ft)	107	305	11	93	637	1804	485	411	332
95th Queue (ft)	233	556	80	245	645	2586	860	422	522
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		43			43	70		93	41
Queuing Penalty (veh)		395			590	0		181	79
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	44	48		2	59	24	75		
Queuing Penalty (veh)	511	112		19	73	74	207		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	302	1133	210	4546	375	4990	186	2793	239
Average Queue (ft)	279	1050	98	4138	341	3215	61	1799	221
95th Queue (ft)	501	1940	281	5474	501	5494	156	4520	312
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)		26		76		15		8	
Queuing Penalty (veh)		425		0		0		0	
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	79	2		78	25	81	4	27	75
Queuing Penalty (veh)	1030	7		36	63	139	13	96	133

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	WB	SB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	147	443	462	75	230
Average Queue (ft)	132	425	354	75	132
95th Queue (ft)	143	440	563	324	536
Link Distance (ft)	61	415	415	376	854
Upstream Blk Time (%)	78	67	31	20	5
Queuing Penalty (veh)	713	612	282	306	0
Storage Bay Dist (ft)					
Storage Blk Time (%)				20	
Queuing Penalty (veh)				12	

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	R
Maximum Queue (ft)	400	522	1368	160	856
Average Queue (ft)	95	406	1325	40	582
95th Queue (ft)	408	884	1428	171	1046
Link Distance (ft)		631	1357		974
Upstream Blk Time (%)		16	22		9
Queuing Penalty (veh)		264	296		0
Storage Bay Dist (ft)	400			100	
Storage Blk Time (%)		48	60		
Queuing Penalty (veh)		25	37		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	68	6
Average Queue (ft)	24	0
95th Queue (ft)	50	6
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	298	297	228	519
Average Queue (ft)	280	268	71	360
95th Queue (ft)	309	350	212	633
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	98	76	1	40
Queuing Penalty (veh)	0	0	3	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 11708

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	WB	NB
Directions Served	TR	T	L	T	LR
Maximum Queue (ft)	293	1666	610	497	2723
Average Queue (ft)	123	528	327	148	2608
95th Queue (ft)	331	1687	730	616	3074
Link Distance (ft)	194	1623	725	725	2704
Upstream Blk Time (%)	26	21	8	5	85
Queuing Penalty (veh)	0	0	48	30	0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R	R
Maximum Queue (ft)	756	757	200	375	816	793	1651	500	282
Average Queue (ft)	468	466	105	337	508	405	964	248	135
95th Queue (ft)	882	885	251	447	1025	916	1983	578	259
Link Distance (ft)	725	725			856	856	1608		
Upstream Blk Time (%)	19	17			4	2	39		
Queuing Penalty (veh)	119	109			28	12	0		
Storage Bay Dist (ft)			100	275				400	400
Storage Blk Time (%)		64	1	48	4		53		0
Queuing Penalty (veh)		93	5	211	19		181		0

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	375	881	889	410	457	225	300	650	608
Average Queue (ft)	295	571	578	281	297	191	233	351	302
95th Queue (ft)	471	1190	1188	506	523	256	358	577	517
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		19	18	8	8				
Queuing Penalty (veh)		147	137	56	55				
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	1	63			31	26	8	44	
Queuing Penalty (veh)	6	171			132	130	58	285	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	TR	R	R
Maximum Queue (ft)	450	543	550	200	153	241	225	400	184
Average Queue (ft)	139	404	403	116	62	83	86	208	64
95th Queue (ft)	459	751	748	277	163	362	384	460	198
Link Distance (ft)		508	508			531	531	380	326
Upstream Blk Time (%)		26	26			1	1	32	5
Queuing Penalty (veh)		256	253			6	8	0	2
Storage Bay Dist (ft)	350			100	125				
Storage Blk Time (%)		53	57		0	10			
Queuing Penalty (veh)		29	85		3	10			

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	UL	T	T	R	L	TR	L	L
Maximum Queue (ft)	142	360	384	389	249	440	446	178	818	586	253	275
Average Queue (ft)	71	157	365	368	124	248	258	48	367	389	142	164
95th Queue (ft)	130	392	402	388	247	387	391	122	789	656	251	270
Link Distance (ft)			360	360		610	610		2034			
Upstream Blk Time (%)		0	47	49								
Queuing Penalty (veh)		0	427	450								
Storage Bay Dist (ft)	325	325			150			400		500	250	250
Storage Blk Time (%)		0	58		10	19	1		5	18	0	3
Queuing Penalty (veh)		0	136		53	23	2		17	49	0	5

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	108	210
Average Queue (ft)	14	82
95th Queue (ft)	66	162
Link Distance (ft)	344	
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		250
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	600	1370	191	329	364	375	2327	600	219	314	248
Average Queue (ft)	453	1325	51	192	229	344	1284	409	90	144	156
95th Queue (ft)	809	1490	123	293	330	469	2686	830	173	253	241
Link Distance (ft)		1360		4493			5158			6171	
Upstream Blk Time (%)		4									
Queuing Penalty (veh)		70									
Storage Bay Dist (ft)	500		150		500	275		500	135		150
Storage Blk Time (%)		40		13		77	16		5	16	13
Queuing Penalty (veh)		123		87		192	44		19	55	23

Intersection: 7: Idlewild Road & Access A

Movement	EB	EB	WB	WB	WB	SB
Directions Served	T	T	T	T	R	R
Maximum Queue (ft)	570	557	130	142	78	75
Average Queue (ft)	474	474	14	16	3	28
95th Queue (ft)	737	728	104	121	39	59
Link Distance (ft)	531	531	360	360		836
Upstream Blk Time (%)	36	36	0	0		
Queuing Penalty (veh)	325	327	0	0		
Storage Bay Dist (ft)					100	
Storage Blk Time (%)				2		
Queuing Penalty (veh)				1		

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	R	R
Maximum Queue (ft)	500	656	665	4	63
Average Queue (ft)	301	615	621	0	27
95th Queue (ft)	697	684	694	3	52
Link Distance (ft)		610	610		962
Upstream Blk Time (%)		13	16		
Queuing Penalty (veh)		105	131		
Storage Bay Dist (ft)	400			100	
Storage Blk Time (%)		91			
Queuing Penalty (veh)		48			

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	64	6
Average Queue (ft)	25	0
95th Queue (ft)	53	5
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	72	68	115	81	40
Average Queue (ft)	19	15	23	16	8
95th Queue (ft)	55	51	79	55	32
Link Distance (ft)	270	278	344	344	505
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 5395

Intersection: 1: Stallings Road/Hooks Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LT	R	LTR
Maximum Queue (ft)	575	2613	127	83	2590	275	35
Average Queue (ft)	526	1552	18	3	2491	269	4
95th Queue (ft)	688	3062	72	37	2921	282	21
Link Distance (ft)		2564	443	443	2560		1266
Upstream Blk Time (%)		22			87		
Queuing Penalty (veh)		0			0		
Storage Bay Dist (ft)	475					175	
Storage Blk Time (%)	18	71			43	100	
Queuing Penalty (veh)	126	406			148	141	

Intersection: 2: Idlewild Road & I-485 Southbound Off Ramp

Movement	WB	WB	SB
Directions Served	T	T	R
Maximum Queue (ft)	47	63	158
Average Queue (ft)	9	12	64
95th Queue (ft)	31	37	121
Link Distance (ft)	46	46	777
Upstream Blk Time (%)	2	3	
Queuing Penalty (veh)	12	16	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: I-485 Northbound Off ramp

Movement	WB	WB	WB	NB
Directions Served	T	T	T	L
Maximum Queue (ft)	111	38	115	154
Average Queue (ft)	33	3	80	69
95th Queue (ft)	98	21	108	124
Link Distance (ft)	62	62	62	432
Upstream Blk Time (%)	16	0	47	
Queuing Penalty (veh)	91	0	265	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	R	R
Maximum Queue (ft)	130	177	170	179	270	566	587	572	108	133
Average Queue (ft)	47	67	73	76	82	181	517	541	47	47
95th Queue (ft)	104	138	137	148	180	528	639	625	94	101
Link Distance (ft)		377	377	377		531	531	531	380	194
Upstream Blk Time (%)						4	18	42		0
Queuing Penalty (veh)						30	142	328		0
Storage Bay Dist (ft)	350				300					
Storage Blk Time (%)						0				
Queuing Penalty (veh)						0				

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	L	T	T	T	R	L	L
Maximum Queue (ft)	271	282	292	273	17	399	646	669	650	200	189	274
Average Queue (ft)	161	139	147	152	1	49	527	609	622	165	64	145
95th Queue (ft)	244	237	234	230	8	222	756	708	673	287	158	265
Link Distance (ft)		348	348	348			610	610	610			
Upstream Blk Time (%)	0	0	0	0			12	28	53			
Queuing Penalty (veh)	0	2	1	1			90	210	398			
Storage Bay Dist (ft)	500				375	300				100	400	400
Storage Blk Time (%)	0	0		0			20		85			
Queuing Penalty (veh)	0	0		0			5		108			

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	R	R
Maximum Queue (ft)	90	102	188	249	172	200	196
Average Queue (ft)	20	35	97	129	28	63	66
95th Queue (ft)	68	79	173	210	98	148	139
Link Distance (ft)	2015				337		
Upstream Blk Time (%)				0	0		
Queuing Penalty (veh)				0	0		
Storage Bay Dist (ft)		300	250	250		250	250
Storage Blk Time (%)				0		1	0
Queuing Penalty (veh)				0		2	0

Village at Idlewild
Queuing and Blocking Report

2040 Full Build
PM Peak Hour

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	T	R	L	T	T	T	R	L
Maximum Queue (ft)	136	155	402	427	446	300	525	1543	1553	1550	350	549
Average Queue (ft)	78	92	244	265	281	108	256	905	926	941	239	284
95th Queue (ft)	127	137	366	388	414	310	603	1888	1909	1921	472	613
Link Distance (ft)			1336	1336	1336			1503	1503	1503		
Upstream Blk Time (%)								17	30	39		
Queuing Penalty (veh)								0	0	0		
Storage Bay Dist (ft)	500	500				200	425				250	500
Storage Blk Time (%)					23			40		58		15
Queuing Penalty (veh)					34			41		154		19

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	NB	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	L	T	T	R	L	L	T	T	R	R
Maximum Queue (ft)	594	1212	306	107	170	178	154	175	180	163
Average Queue (ft)	319	337	116	45	89	101	63	63	65	61
95th Queue (ft)	661	1095	240	93	152	157	123	132	132	126
Link Distance (ft)		5114	5114				4821	4821		
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			200	475	475			225	225
Storage Blk Time (%)	26	0	0				0	0	1	
Queuing Penalty (veh)	33	1	0				1	0	0	

Intersection: 7: Idlewild Road & Access A

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	T	T	T	T	T	TR	R
Maximum Queue (ft)	30	11	15	350	403	387	798
Average Queue (ft)	2	1	1	69	286	329	454
95th Queue (ft)	18	11	13	265	481	453	866
Link Distance (ft)	531	531	531	348	348	348	842
Upstream Blk Time (%)				1	4	21	6
Queuing Penalty (veh)				6	34	163	0
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	TR	R
Maximum Queue (ft)	104	33	1373	1390	1374	712
Average Queue (ft)	42	2	1038	1099	1113	346
95th Queue (ft)	92	33	1855	1836	1808	703
Link Distance (ft)		610	1336	1336	1336	957
Upstream Blk Time (%)			9	16	24	
Queuing Penalty (veh)			71	124	183	
Storage Bay Dist (ft)	150					
Storage Blk Time (%)	0	0				
Queuing Penalty (veh)	1	0				

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	48	6
Average Queue (ft)	23	0
95th Queue (ft)	46	4
Link Distance (ft)	1254	1995
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	58	74	59	42	43
Average Queue (ft)	16	16	12	8	8
95th Queue (ft)	46	51	42	29	32
Link Distance (ft)	270	278	337	337	505
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Village at Idlewild
Queuing and Blocking Report

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PM Peak Hour

Intersection: 15: Idlewild Road

Movement	EB	EB
Directions Served	T	TR
Maximum Queue (ft)	403	417
Average Queue (ft)	340	382
95th Queue (ft)	446	401
Link Distance (ft)	315	315
Upstream Blk Time (%)	34	80
Queuing Penalty (veh)	253	596
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: Idlewild Road

Movement	EB	EB	WB	WB	WB	WB
Directions Served	T	T	R	R	R	R
Maximum Queue (ft)	28	22	285	457	477	377
Average Queue (ft)	1	1	65	395	425	322
95th Queue (ft)	14	13	226	503	473	540
Link Distance (ft)	96	96	377	377	377	
Upstream Blk Time (%)			0	21	36	3
Queuing Penalty (veh)			1	160	277	0
Storage Bay Dist (ft)						325
Storage Blk Time (%)					50	0
Queuing Penalty (veh)					287	0

Intersection: 22: Idlewild Road

Movement	EB	EB	NB	NB
Directions Served	T	T	T	T
Maximum Queue (ft)	120	147	184	177
Average Queue (ft)	70	129	84	83
95th Queue (ft)	117	137	148	142
Link Distance (ft)	35	35	109	109
Upstream Blk Time (%)	36	51	11	8
Queuing Penalty (veh)	237	340	56	42
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 23: I-485 Northbound Off ramp

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 27:

Movement

WB

WB

Directions Served

T

T

Maximum Queue (ft)

125

118

Average Queue (ft)

10

11

95th Queue (ft)

76

79

Link Distance (ft)

407

407

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 28: Idlewild Road

Movement

WB

WB

WB

WB

Directions Served

T

T

T

R

Maximum Queue (ft)

189

119

203

96

Average Queue (ft)

89

38

176

8

95th Queue (ft)

209

101

190

59

Link Distance (ft)

115

115

115

115

Upstream Blk Time (%)

11

1

63

1

Queuing Penalty (veh)

60

5

358

4

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Village at Idlewild
Queuing and Blocking Report

2040 Full Build
PM Peak Hour

Intersection: 30: Idlewild Road

Movement	EB	EB	EB	EB
Directions Served	L	T	T	T
Maximum Queue (ft)	266	377	354	366
Average Queue (ft)	9	108	108	115
95th Queue (ft)	113	261	253	257
Link Distance (ft)	512	512	512	512
Upstream Blk Time (%)	0	0	0	0
Queuing Penalty (veh)	0	1	0	1
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 31: Idlewild Road

Movement	EB	EB
Directions Served	T	T
Maximum Queue (ft)	518	525
Average Queue (ft)	486	495
95th Queue (ft)	509	514
Link Distance (ft)	443	443
Upstream Blk Time (%)	51	84
Queuing Penalty (veh)	375	624
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 32: I-485 Southbound On Ramp

Movement	WB	SB
Directions Served	L	R
Maximum Queue (ft)	43	84
Average Queue (ft)	2	18
95th Queue (ft)	20	58
Link Distance (ft)	84	86
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: Idlewild Road

Movement	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T
Maximum Queue (ft)	140	83	163	117	118	115
Average Queue (ft)	116	32	147	99	98	96
95th Queue (ft)	159	81	154	107	108	108
Link Distance (ft)	76	76	76	25	25	25
Upstream Blk Time (%)	32	2	60	43	47	41
Queuing Penalty (veh)	178	13	335	256	275	243
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 34: I-485 Southbound Off Ramp

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 44: I-485 Northbound On Ramp

Movement	NE
Directions Served	T
Maximum Queue (ft)	171
Average Queue (ft)	75
95th Queue (ft)	152
Link Distance (ft)	117
Upstream Blk Time (%)	3
Queuing Penalty (veh)	16
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 222: Idlewild Road & I-485 Southbound Off Ramp

Movement	EB	EB	SB	SB
Directions Served	T	T	L	L
Maximum Queue (ft)	13	56	375	403
Average Queue (ft)	1	27	158	256
95th Queue (ft)	7	49	332	380
Link Distance (ft)	20	20		673
Upstream Blk Time (%)	1	38		
Queuing Penalty (veh)	4	252		
Storage Bay Dist (ft)			500	
Storage Blk Time (%)				0
Queuing Penalty (veh)				0

Intersection: 333: I-485 Northbound Off Ramp & Idlewild Road

Movement	EB	EB	EB	NB	NB	NB
Directions Served	T	T	T	R	R	R
Maximum Queue (ft)	65	75	80	236	231	227
Average Queue (ft)	23	24	11	157	143	141
95th Queue (ft)	58	59	47	222	203	205
Link Distance (ft)	80	80	80	296	296	296
Upstream Blk Time (%)	1	1	1			0
Queuing Penalty (veh)	8	7	8			0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 8662

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	40	241	2520
Average Queue (ft)	5	113	1635
95th Queue (ft)	23	202	2769
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			12
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	368	349	200	374	485	344	795	467
Average Queue (ft)	201	167	91	255	172	162	370	383
95th Queue (ft)	321	298	186	391	384	305	990	529
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		24	8	9	0		1	23
Queuing Penalty (veh)		34	22	37	1		3	49

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	299	198	78	312	299	223	204	197	174
Average Queue (ft)	161	13	6	169	132	112	100	109	74
95th Queue (ft)	262	99	34	263	235	207	175	174	145
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	2	0			5	5	1	0	
Queuing Penalty (veh)	4	0			21	31	1	1	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	L	R	R
Maximum Queue (ft)	22	13	64	35	22
Average Queue (ft)	2	1	21	13	3
95th Queue (ft)	12	7	48	30	15
Link Distance (ft)				380	2282
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	350	100	125		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Rite Aid Driveway & Idlewild Road

Movement	EB	EB	WB	WB	B12	NB	NB
Directions Served	T	R	UL	T	T	L	R
Maximum Queue (ft)	279	33	249	459	86	330	124
Average Queue (ft)	96	2	89	254	4	176	52
95th Queue (ft)	227	15	185	418	43	305	107
Link Distance (ft)	494	494		400	1591	2038	
Upstream Blk Time (%)				1			
Queuing Penalty (veh)				22			
Storage Bay Dist (ft)			150				500
Storage Blk Time (%)			1	12		0	
Queuing Penalty (veh)			8	13		0	

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	203	341	250	4554	347	1057	234	5199	250
Average Queue (ft)	73	143	118	3301	251	619	119	3248	247
95th Queue (ft)	150	279	269	5237	483	1243	261	5294	273
Link Distance (ft)		1591		4497		5157		6183	
Upstream Blk Time (%)				29					
Queuing Penalty (veh)				0					
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)		2	0	41		66	5	65	71
Queuing Penalty (veh)		2	5	36		73	27	275	198

Network Summary

Network wide Queuing Penalty: 862

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	32	244	2004
Average Queue (ft)	4	103	1198
95th Queue (ft)	20	192	2208
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			2
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	389	352	199	364	462	354	1075	475
Average Queue (ft)	207	168	83	235	113	118	583	414
95th Queue (ft)	330	285	165	361	281	247	1320	550
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)							0	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		24	7	7	0		1	38
Queuing Penalty (veh)		35	20	29	0		3	85

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	317	226	117	272	277	220	203	209	192
Average Queue (ft)	165	31	16	152	121	102	100	126	84
95th Queue (ft)	281	137	66	241	213	182	171	197	166
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	1	0			6	4	0	1	
Queuing Penalty (veh)	4	0			23	24	1	2	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	L	R	R
Maximum Queue (ft)	34	33	70	46	34
Average Queue (ft)	6	2	18	15	6
95th Queue (ft)	25	15	48	34	26
Link Distance (ft)				380	326
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	350	100	125		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	117	209	31	250	650	291	128	119	145
Average Queue (ft)	39	99	5	87	639	153	53	44	52
95th Queue (ft)	90	189	24	218	646	253	109	89	113
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)					24				
Queuing Penalty (veh)					380				
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	6	12		0	45				
Queuing Penalty (veh)	36	6		6	46				

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	206	316	250	4558	370	1219	234	5522	250
Average Queue (ft)	98	149	139	4197	295	702	115	3395	246
95th Queue (ft)	175	255	312	5404	468	1521	258	5924	281
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)				78				4	
Queuing Penalty (veh)				0				0	
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)		1	0	70	23	48	12	72	78
Queuing Penalty (veh)		1	0	62	38	57	60	309	217

Intersection: 7: Idlewild Road & Access A

Movement	WB	SB
Directions Served	TR	R
Maximum Queue (ft)	6	67
Average Queue (ft)	0	19
95th Queue (ft)	4	52
Link Distance (ft)	376	867
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Idlewild Road & Access C

Movement	EB	WB	SB
Directions Served	L	TR	R
Maximum Queue (ft)	37	1365	237
Average Queue (ft)	4	1305	119
95th Queue (ft)	21	1521	258
Link Distance (ft)		1357	987
Upstream Blk Time (%)		2	
Queuing Penalty (veh)		36	
Storage Bay Dist (ft)	100		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	27
Average Queue (ft)	9
95th Queue (ft)	29
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	19	41	37	12
Average Queue (ft)	1	3	2	0
95th Queue (ft)	12	20	18	6
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 1481

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	34	352	2720
Average Queue (ft)	5	128	1839
95th Queue (ft)	23	259	3197
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			26
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	323	327	200	374	673	545	950	475
Average Queue (ft)	174	159	96	292	203	142	479	416
95th Queue (ft)	280	280	201	420	567	402	1152	532
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)					0	0	3	
Queuing Penalty (veh)					0	0	0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		28	7	20	0		1	30
Queuing Penalty (veh)		40	20	87	0		6	69

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	300	156	116	245	200	182	207	206	183
Average Queue (ft)	158	17	22	112	77	79	97	119	83
95th Queue (ft)	281	103	89	204	148	153	175	187	164
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					300	325		850
Storage Blk Time (%)	1								
Queuing Penalty (veh)	2								

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	L	R	R
Maximum Queue (ft)	32	22	66	44	34
Average Queue (ft)	4	1	18	13	7
95th Queue (ft)	20	9	48	31	27
Link Distance (ft)				380	326
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	150	100	125		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	TR
Maximum Queue (ft)	105	113	129	171	347	370	319	149	129	133
Average Queue (ft)	39	41	53	71	258	267	152	64	51	50
95th Queue (ft)	83	88	106	136	351	352	258	125	102	98
Link Distance (ft)		377	377		631		2040		358	358
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	175			300		350		500		
Storage Blk Time (%)					2	0				
Queuing Penalty (veh)					14	2				

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	149	334	350	4550	314	210	114	307	5208	375
Average Queue (ft)	72	176	141	3702	183	72	37	110	3267	374
95th Queue (ft)	143	299	366	5366	349	171	87	295	5698	382
Link Distance (ft)		1357		4493		5158			6183	
Upstream Blk Time (%)				45						
Queuing Penalty (veh)				0						
Storage Bay Dist (ft)	500		250		500		500	250		275
Storage Blk Time (%)				42	0	0			38	83
Queuing Penalty (veh)				37	0	0			162	233

Intersection: 7: Idlewild Road & Access A

Movement	SB
Directions Served	R
Maximum Queue (ft)	61
Average Queue (ft)	13
95th Queue (ft)	39
Link Distance (ft)	842
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	34	30	37	49
Average Queue (ft)	7	2	2	15
95th Queue (ft)	27	20	24	38
Link Distance (ft)		631	631	974
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	9
95th Queue (ft)	29
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	30	35	18	24
Average Queue (ft)	2	2	1	1
95th Queue (ft)	17	16	9	11
Link Distance (ft)	270	278	358	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 672

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	80	327	217	2530
Average Queue (ft)	43	225	89	1646
95th Queue (ft)	193	1129	189	3068
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	15	12		22
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	471	430	177	362	349	299	1193	475
Average Queue (ft)	312	274	77	224	102	119	746	355
95th Queue (ft)	644	631	185	335	241	236	1565	639
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	12	16					16	
Queuing Penalty (veh)	48	61					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		39	5	5	0		19	32
Queuing Penalty (veh)		56	17	21	0		95	83

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	336	428	299	237	198	204	248	569	342
Average Queue (ft)	151	199	178	139	106	102	94	391	181
95th Queue (ft)	309	739	722	229	197	189	211	1197	433
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		18	17					15	
Queuing Penalty (veh)		80	77					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	2	20			5	5	2	26	
Queuing Penalty (veh)	7	49			23	30	5	76	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	R	L	R	R
Maximum Queue (ft)	125	212	206	54	52	123	58
Average Queue (ft)	28	136	128	2	18	81	19
95th Queue (ft)	160	502	485	29	51	302	49
Link Distance (ft)		508	508			380	326
Upstream Blk Time (%)		22	20			14	
Queuing Penalty (veh)		103	91			0	
Storage Bay Dist (ft)	350			100	125		
Storage Blk Time (%)		24	1				
Queuing Penalty (veh)		7	1				

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	165	314	34	250	646	326	159	429	414
Average Queue (ft)	118	226	3	98	638	157	61	304	248
95th Queue (ft)	229	467	20	251	644	277	120	499	485
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		14			28			36	16
Queuing Penalty (veh)		58			452			45	20
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	63	17		0	47				
Queuing Penalty (veh)	364	21		3	49				

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	196	303	250	4554	375	1623	214	5900	250
Average Queue (ft)	103	132	165	4384	342	921	80	3913	250
95th Queue (ft)	206	232	336	5113	468	1727	197	6632	252
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)				87				15	
Queuing Penalty (veh)				0				0	
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	0	1	0	81	25	74	3	46	91
Queuing Penalty (veh)	1	1	0	71	42	103	18	208	255

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	148	302	232	83
Average Queue (ft)	70	170	111	24
95th Queue (ft)	177	482	407	58
Link Distance (ft)	61	415	415	854
Upstream Blk Time (%)	37	24	20	
Queuing Penalty (veh)	150	99	81	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Idlewild Road & Access C

Movement	EB	WB	WB	SB
Directions Served	L	T	R	R
Maximum Queue (ft)	52	1367	175	548
Average Queue (ft)	12	1316	42	316
95th Queue (ft)	41	1451	165	638
Link Distance (ft)		1357		974
Upstream Blk Time (%)		3		
Queuing Penalty (veh)		52		
Storage Bay Dist (ft)	400		75	
Storage Blk Time (%)		49		
Queuing Penalty (veh)		21		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	55	6
Average Queue (ft)	20	0
95th Queue (ft)	48	4
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	244	126	98	94
Average Queue (ft)	82	28	11	27
95th Queue (ft)	261	95	56	106
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	16			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 3044

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	22	266	2737
Average Queue (ft)	4	121	2191
95th Queue (ft)	19	236	3152
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			41
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	378	393	200	374	682	607	1094	475
Average Queue (ft)	201	181	99	275	191	136	696	425
95th Queue (ft)	323	318	210	404	584	376	1516	546
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)					0	0	7	
Queuing Penalty (veh)					1	0	0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		33	7	18	0		2	41
Queuing Penalty (veh)		48	21	82	0		9	105

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	291	108	129	284	219	233	198	228	200
Average Queue (ft)	179	8	13	134	97	110	98	134	91
95th Queue (ft)	275	61	76	227	174	188	171	201	175
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					300	325		850
Storage Blk Time (%)	1	0			0	0			
Queuing Penalty (veh)	3	0			1	0			

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	L	R	R
Maximum Queue (ft)	50	13	60	50	60
Average Queue (ft)	11	1	19	15	21
95th Queue (ft)	35	6	47	35	51
Link Distance (ft)				380	326
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	150	100	125		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	TR
Maximum Queue (ft)	209	112	130	184	371	372	396	161	248	175
Average Queue (ft)	97	46	58	64	261	268	185	71	106	85
95th Queue (ft)	177	91	108	132	334	332	332	133	204	151
Link Distance (ft)		377	377		631		2040		358	358
Upstream Blk Time (%)									0	
Queuing Penalty (veh)									0	
Storage Bay Dist (ft)	325			300		350		500		
Storage Blk Time (%)					1	0				
Queuing Penalty (veh)					11	1				

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	292	460	350	4553	515	330	114	311	5835	375
Average Queue (ft)	159	144	145	3908	341	112	52	122	3510	375
95th Queue (ft)	370	401	363	5426	545	287	99	314	6046	376
Link Distance (ft)		1357		4493		5158			6183	
Upstream Blk Time (%)				57					6	
Queuing Penalty (veh)				0					0	
Storage Bay Dist (ft)	500		250		500		500	250		275
Storage Blk Time (%)	3	0		42	4	0			27	93
Queuing Penalty (veh)	20	0		37	6	1			121	261

Intersection: 7: Idlewild Road & Access A

Movement	WB	SB
Directions Served	T	R
Maximum Queue (ft)	78	72
Average Queue (ft)	3	23
95th Queue (ft)	55	52
Link Distance (ft)	377	842
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	R	R
Maximum Queue (ft)	74	60	45	27	83
Average Queue (ft)	25	2	2	1	29
95th Queue (ft)	60	23	20	13	65
Link Distance (ft)		631	631		974
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	250			100	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	51
Average Queue (ft)	20
95th Queue (ft)	46
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	58	36	64	30
Average Queue (ft)	8	7	7	3
95th Queue (ft)	36	29	36	18
Link Distance (ft)	270	278	358	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 729

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	30	259	2638
Average Queue (ft)	4	113	1624
95th Queue (ft)	20	212	2793
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			6
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	377	313	200	374	646	556	1299	475
Average Queue (ft)	210	167	91	278	246	220	744	438
95th Queue (ft)	335	281	191	411	653	555	1523	549
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)					1	0	5	
Queuing Penalty (veh)					8	2	0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		25	7	18	0		1	47
Queuing Penalty (veh)		37	19	75	0		5	103

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	359	312	69	346	292	215	219	229	177
Average Queue (ft)	160	23	7	193	154	117	103	118	83
95th Queue (ft)	282	141	39	338	279	209	181	187	159
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)				0	0				
Queuing Penalty (veh)				3	0				
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	2	0			8	4	1	0	
Queuing Penalty (veh)	7	0			35	26	2	1	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	T	R	R
Maximum Queue (ft)	24	13	76	36	42	27
Average Queue (ft)	2	1	26	2	14	3
95th Queue (ft)	14	9	61	28	30	18
Link Distance (ft)				411	380	2282
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	350	100	125			
Storage Blk Time (%)				0		
Queuing Penalty (veh)				0		

Intersection: 5: Rite Aid Driveway & Idlewild Road

Movement	EB	EB	WB	WB	B12	NB	NB
Directions Served	T	R	UL	T	T	L	R
Maximum Queue (ft)	313	26	248	471	80	401	167
Average Queue (ft)	94	2	92	261	4	194	58
95th Queue (ft)	229	15	196	425	39	359	123
Link Distance (ft)	494	494		400	1591	2038	
Upstream Blk Time (%)				2			
Queuing Penalty (veh)				25			
Storage Bay Dist (ft)			150			500	
Storage Blk Time (%)			1	13		1	
Queuing Penalty (veh)			10	14		1	

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	228	378	250	4548	375	1787	235	4616	250
Average Queue (ft)	90	163	120	3706	317	980	144	2904	244
95th Queue (ft)	204	332	269	5620	495	1863	276	5080	287
Link Distance (ft)		1591		4497		5157		6183	
Upstream Blk Time (%)				49					
Queuing Penalty (veh)				0					
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	1	3	1	41	3	93	13	72	73
Queuing Penalty (veh)	4	3	9	37	5	104	64	312	210

Network Summary

Network wide Queuing Penalty: 1122

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	28	290	2484
Average Queue (ft)	5	112	1534
95th Queue (ft)	20	232	2887
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			17
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	407	374	200	355	392	340	1048	475
Average Queue (ft)	235	195	98	219	100	115	559	412
95th Queue (ft)	370	330	207	346	250	238	1313	549
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)							4	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		27	7	5			1	35
Queuing Penalty (veh)		40	23	24			6	95

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	350	532	348	309	258	219	271	835	595
Average Queue (ft)	197	156	106	169	123	101	137	369	266
95th Queue (ft)	356	502	398	261	209	179	290	1074	733
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		0						8	
Queuing Penalty (veh)		1						0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	4	11			6	4	2	30	2
Queuing Penalty (veh)	12	29			28	27	6	93	6

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	R	L	R	R
Maximum Queue (ft)	450	532	529	160	70	194	63
Average Queue (ft)	94	254	217	15	22	61	26
95th Queue (ft)	370	648	608	101	56	187	54
Link Distance (ft)		508	508			380	326
Upstream Blk Time (%)		20	7				
Queuing Penalty (veh)		95	36				
Storage Bay Dist (ft)	350			100	125		
Storage Blk Time (%)		36	4				
Queuing Penalty (veh)		12	6				

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	175	392	146	250	647	323	146	436	411
Average Queue (ft)	167	362	9	89	638	159	59	413	360
95th Queue (ft)	201	461	81	246	645	297	120	435	500
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		39			30			81	31
Queuing Penalty (veh)		168			517			146	56
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	91	14		0	50	1			
Queuing Penalty (veh)	544	21		4	53	1			

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	289	444	250	4551	375	1465	232	6231	250
Average Queue (ft)	178	158	167	4410	317	772	86	4580	249
95th Queue (ft)	306	355	345	5044	476	1545	192	7157	256
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)				88				25	
Queuing Penalty (veh)				0				0	
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	12	1		89	32	62	5	39	96
Queuing Penalty (veh)	83	2		81	54	92	30	183	275

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	WB	SB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	162	458	426	46	90
Average Queue (ft)	119	330	193	2	29
95th Queue (ft)	194	592	512	20	63
Link Distance (ft)	61	415	415	376	854
Upstream Blk Time (%)	57	30	5		
Queuing Penalty (veh)	244	128	23		
Storage Bay Dist (ft)					
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 8: Idlewild Road & Access C

Movement	EB	WB	WB	SB
Directions Served	L	T	R	R
Maximum Queue (ft)	56	1375	200	779
Average Queue (ft)	15	1355	46	490
95th Queue (ft)	43	1382	185	927
Link Distance (ft)		1357		974
Upstream Blk Time (%)		5		4
Queuing Penalty (veh)		85		0
Storage Bay Dist (ft)	400		100	
Storage Blk Time (%)		53		
Queuing Penalty (veh)		26		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	65
Average Queue (ft)	24
95th Queue (ft)	48
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	309	308	119	267
Average Queue (ft)	265	186	32	144
95th Queue (ft)	361	373	98	372
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	83	41		1
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 3352

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	32	352	2748
Average Queue (ft)	7	140	2356
95th Queue (ft)	26	269	3310
Link Distance (ft)	194	725	2704
Upstream Blk Time (%)			58
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R	R
Maximum Queue (ft)	300	312	198	375	777	703	436	421	368
Average Queue (ft)	155	133	58	310	270	147	215	214	213
95th Queue (ft)	257	244	145	425	756	529	358	338	313
Link Distance (ft)	725	725			856	856	1608		
Upstream Blk Time (%)					0	0			
Queuing Penalty (veh)					1	0			
Storage Bay Dist (ft)			100	275				400	400
Storage Blk Time (%)		21	4	26	0		0	0	0
Queuing Penalty (veh)		32	14	123	0		3	1	0

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	320	249	153	360	326	266	224	216	191
Average Queue (ft)	167	28	26	216	164	153	102	139	107
95th Queue (ft)	275	153	107	340	275	233	184	209	185
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					300	325		850
Storage Blk Time (%)	1	0			0	0			
Queuing Penalty (veh)	4	0			1	1			

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	L	R	R
Maximum Queue (ft)	70	13	65	37	92
Average Queue (ft)	21	1	20	15	31
95th Queue (ft)	53	7	51	30	71
Link Distance (ft)				380	326
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	150	100	125		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	L	T	R
Maximum Queue (ft)	198	131	119	399	588	579	246	177	179	192	64	214
Average Queue (ft)	102	46	49	124	352	372	133	77	89	109	18	111
95th Queue (ft)	178	100	101	332	554	563	219	146	161	180	51	211
Link Distance (ft)		360	360		611	611	2040					362
Upstream Blk Time (%)					1	0						
Queuing Penalty (veh)					5	2						
Storage Bay Dist (ft)	325			300				500	250	250		250
Storage Blk Time (%)					15							2
Queuing Penalty (veh)					15							4

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	255	563	277	402	388	245	197	112	246	504	375
Average Queue (ft)	91	282	89	263	292	128	82	45	93	186	237
95th Queue (ft)	184	470	191	364	387	219	153	93	174	398	373
Link Distance (ft)		1360		4493			5158			6171	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500		250		500	500		500	250		275
Storage Blk Time (%)		1		9					0	2	10
Queuing Penalty (veh)		1		69					0	11	29

Intersection: 7: Idlewild Road & Access A

Movement	SB
Directions Served	R
Maximum Queue (ft)	78
Average Queue (ft)	31
95th Queue (ft)	65
Link Distance (ft)	842
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	R	R
Maximum Queue (ft)	72	44	37	85	70	4	78
Average Queue (ft)	24	3	2	9	8	0	32
95th Queue (ft)	57	24	20	72	61	3	65
Link Distance (ft)		611	611	1360	1360		962
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	250					100	
Storage Blk Time (%)					0		
Queuing Penalty (veh)					0		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	63	11
Average Queue (ft)	24	0
95th Queue (ft)	50	6
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	65	50	45	51	54
Average Queue (ft)	19	14	9	7	6
95th Queue (ft)	55	43	35	30	29
Link Distance (ft)	270	278	362	362	505
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 316

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	WB	NB
Directions Served	TR	T	L	T	LR
Maximum Queue (ft)	179	392	203	102	2431
Average Queue (ft)	32	43	97	6	1495
95th Queue (ft)	158	333	170	71	2651
Link Distance (ft)	194	1628	738	738	2704
Upstream Blk Time (%)	5				8
Queuing Penalty (veh)	0				0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	723	717	200	356	303	260	1522	475
Average Queue (ft)	422	389	135	203	75	92	970	425
95th Queue (ft)	748	732	258	332	200	188	1877	596
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	5	4					27	
Queuing Penalty (veh)	20	18					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		51	12	4	0		30	35
Queuing Penalty (veh)		75	41	18	0		153	106

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	375	891	892	241	212	200	300	1516	950
Average Queue (ft)	327	698	636	146	112	93	114	1157	670
95th Queue (ft)	490	1129	1099	217	188	167	331	1975	1125
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		21	7					62	
Queuing Penalty (veh)		103	33					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	3	79			5	3	0	89	10
Queuing Penalty (veh)	12	204			24	25	2	289	32

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	450	550	561	200	87	22	359	75
Average Queue (ft)	235	518	482	45	25	1	209	35
95th Queue (ft)	598	590	661	182	65	22	444	66
Link Distance (ft)		508	508			415	380	326
Upstream Blk Time (%)		66	28				26	
Queuing Penalty (veh)		362	153				0	
Storage Bay Dist (ft)	350			100	125			
Storage Blk Time (%)		91	12		0	0		
Queuing Penalty (veh)		52	15		0	0		

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	175	393	209	250	646	274	159	438	418
Average Queue (ft)	173	382	16	96	638	144	69	415	360
95th Queue (ft)	180	394	119	257	645	242	135	433	489
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		55	0		30			83	32
Queuing Penalty (veh)		259	0		544			211	82
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	94	7		0	50				
Queuing Penalty (veh)	578	14		2	53				

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	203	293	250	4558	375	2220	210	6220	250
Average Queue (ft)	110	112	166	4448	365	1334	86	4576	249
95th Queue (ft)	194	231	343	4965	415	2496	194	7377	254
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)				91				32	
Queuing Penalty (veh)				0				0	
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)		1	0	89	90	29	6	35	95
Queuing Penalty (veh)		1	0	81	152	48	32	171	272

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	WB	SB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	158	449	462	29	106
Average Queue (ft)	135	426	299	1	37
95th Queue (ft)	148	440	563	15	77
Link Distance (ft)	61	415	415	376	854
Upstream Blk Time (%)	74	60	11		
Queuing Penalty (veh)	349	286	52		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Idlewild Road & Access C

Movement	EB	WB	WB	SB
Directions Served	L	T	R	R
Maximum Queue (ft)	78	1375	200	993
Average Queue (ft)	18	1355	68	742
95th Queue (ft)	54	1377	223	1186
Link Distance (ft)		1357		974
Upstream Blk Time (%)		5		39
Queuing Penalty (veh)		90		0
Storage Bay Dist (ft)	400		100	
Storage Blk Time (%)		53		
Queuing Penalty (veh)		38		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	64
Average Queue (ft)	29
95th Queue (ft)	52
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	298	313	174	514
Average Queue (ft)	279	272	59	328
95th Queue (ft)	335	378	148	587
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	96	84		25
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 5051

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	38	400	280	2750
Average Queue (ft)	6	158	9	2453
95th Queue (ft)	25	322	142	3196
Link Distance (ft)	194	725	725	2704
Upstream Blk Time (%)			0	64
Queuing Penalty (veh)			0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R	R
Maximum Queue (ft)	310	312	200	374	736	701	454	422	369
Average Queue (ft)	169	142	67	319	282	150	244	224	225
95th Queue (ft)	271	253	160	423	778	563	387	360	329
Link Distance (ft)	725	725			856	856	1608		
Upstream Blk Time (%)					0	0			
Queuing Penalty (veh)					2	0			
Storage Bay Dist (ft)			100	275				400	400
Storage Blk Time (%)		22	4	29	0		0	0	0
Queuing Penalty (veh)		33	15	142	0		2	1	1

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	300	86	106	443	421	352	218	302	244
Average Queue (ft)	158	9	13	289	229	197	104	169	124
95th Queue (ft)	271	56	68	459	399	331	190	256	219
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)				2	0				
Queuing Penalty (veh)				16	5				
Storage Bay Dist (ft)	275					300	325		850
Storage Blk Time (%)	1				3	0		0	
Queuing Penalty (veh)	2				18	3		0	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	TR	R	R
Maximum Queue (ft)	98	23	93	116	122	51	196
Average Queue (ft)	37	1	29	17	16	15	62
95th Queue (ft)	83	11	89	143	143	34	163
Link Distance (ft)				531	531	380	326
Upstream Blk Time (%)				0	0		
Queuing Penalty (veh)				0	0		
Storage Bay Dist (ft)	150	100	125				
Storage Blk Time (%)				2			
Queuing Penalty (veh)				1			

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	UL	T	T	R	L	TR	L	L
Maximum Queue (ft)	163	171	148	127	399	534	533	262	279	184	211	248
Average Queue (ft)	86	89	55	55	115	318	320	68	152	80	116	138
95th Queue (ft)	153	152	105	104	315	498	496	263	244	148	186	210
Link Distance (ft)			360	360		610	610		2034			
Upstream Blk Time (%)						0	0					
Queuing Penalty (veh)						0	1					
Storage Bay Dist (ft)	325	325			300			400		500	250	250
Storage Blk Time (%)						10	4				0	0
Queuing Penalty (veh)						11	6				0	0

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	69	231
Average Queue (ft)	20	112
95th Queue (ft)	54	192
Link Distance (ft)	344	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		250
Storage Blk Time (%)		0
Queuing Penalty (veh)		1

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	284	554	349	414	425	249	151	120	336	808	375
Average Queue (ft)	102	301	111	284	314	145	72	49	123	386	298
95th Queue (ft)	208	470	247	392	414	245	129	104	263	864	428
Link Distance (ft)		1360		4493			5158			6171	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500		250		500	500		500	250		275
Storage Blk Time (%)		1		13					0	16	27
Queuing Penalty (veh)		1		98					0	77	77

Intersection: 7: Idlewild Road & Access A

Movement	WB	WB	SB
Directions Served	T	T	R
Maximum Queue (ft)	42	40	108
Average Queue (ft)	2	2	38
95th Queue (ft)	31	31	82
Link Distance (ft)	360	360	836
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	R	R
Maximum Queue (ft)	112	55	33	44	44	13	128
Average Queue (ft)	41	4	2	3	3	1	42
95th Queue (ft)	90	27	19	27	31	7	98
Link Distance (ft)		610	610	1360	1360		962
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	250					100	
Storage Blk Time (%)					0		
Queuing Penalty (veh)					0		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	64	11
Average Queue (ft)	25	0
95th Queue (ft)	51	6
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	69	86	117	92	51
Average Queue (ft)	27	27	34	24	13
95th Queue (ft)	63	68	92	71	40
Link Distance (ft)	270	278	344	344	505
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 516

Intersection: 1: Stallings Road/Hooks Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LT	R	LTR
Maximum Queue (ft)	575	2436	152	132	2582	275	31
Average Queue (ft)	518	1445	25	5	2250	259	6
95th Queue (ft)	734	2852	92	57	3308	315	26
Link Distance (ft)		2564	443	443	2560		1266
Upstream Blk Time (%)		19			72		
Queuing Penalty (veh)		0			0		
Storage Bay Dist (ft)	475					175	
Storage Blk Time (%)	32	78			42	93	
Queuing Penalty (veh)	197	372			113	127	

Intersection: 2: Idlewild Road & I-485 Southbound Off Ramp

Movement	WB	WB	SB
Directions Served	T	T	R
Maximum Queue (ft)	44	56	182
Average Queue (ft)	8	12	100
95th Queue (ft)	29	37	163
Link Distance (ft)	46	46	777
Upstream Blk Time (%)	3	3	
Queuing Penalty (veh)	17	17	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: I-485 Northbound Off ramp

Movement	WB	WB	WB	NB
Directions Served	T	T	T	L
Maximum Queue (ft)	100	46	117	172
Average Queue (ft)	37	4	82	87
95th Queue (ft)	90	26	109	143
Link Distance (ft)	62	62	62	432
Upstream Blk Time (%)	12	1	42	
Queuing Penalty (veh)	83	4	304	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	R	R
Maximum Queue (ft)	111	79	76	74	172	562	583	580	90	120
Average Queue (ft)	53	31	31	30	57	199	537	549	39	61
95th Queue (ft)	99	70	67	69	124	532	623	571	83	109
Link Distance (ft)		377	377	377		531	531	531	380	194
Upstream Blk Time (%)						1	21	39		
Queuing Penalty (veh)						14	201	370		
Storage Bay Dist (ft)	350				300					
Storage Blk Time (%)						0				
Queuing Penalty (veh)						0				

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	T	R	L	T	T	T	R	L
Maximum Queue (ft)	178	167	201	216	210	13	400	663	671	652	200	217
Average Queue (ft)	102	87	90	98	101	1	59	570	625	630	185	68
95th Queue (ft)	163	150	162	168	166	6	256	744	690	646	271	167
Link Distance (ft)			348	348	348			610	610	610		
Upstream Blk Time (%)			0	0	0			14	30	55		
Queuing Penalty (veh)			1	2	2			125	266	488		
Storage Bay Dist (ft)	325	325				375	300				100	400
Storage Blk Time (%)			0		0			23		89		
Queuing Penalty (veh)			0		0			6		126		

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	T	R	L	L	T	R	R
Maximum Queue (ft)	266	200	113	244	290	251	253	221
Average Queue (ft)	131	30	44	117	154	58	112	113
95th Queue (ft)	247	102	95	210	255	214	233	213
Link Distance (ft)		2009				332		
Upstream Blk Time (%)					0	2	0	
Queuing Penalty (veh)					0	11	0	
Storage Bay Dist (ft)	400		300	250	250		250	250
Storage Blk Time (%)		0		0	1	0	3	2
Queuing Penalty (veh)		1		0	2	1	10	7

Village at Idlewild
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Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	T	R	L	T	T	T	R	L
Maximum Queue (ft)	170	170	356	380	389	300	525	1542	1553	1549	350	516
Average Queue (ft)	92	108	219	247	251	87	317	1236	1252	1259	299	305
95th Queue (ft)	152	162	312	338	339	240	677	2028	2028	2024	487	587
Link Distance (ft)			1336	1336	1336			1503	1503	1503		
Upstream Blk Time (%)								30	51	68		
Queuing Penalty (veh)								0	0	0		
Storage Bay Dist (ft)	500	500				200	425				250	500
Storage Blk Time (%)					20	0		55		81		14
Queuing Penalty (veh)					34	0		71		201		13

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	NB	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	L	T	T	R	L	L	T	T	R	R
Maximum Queue (ft)	546	728	277	130	180	183	196	344	294	251
Average Queue (ft)	330	216	77	51	100	105	80	97	106	102
95th Queue (ft)	624	749	171	110	164	171	154	233	230	206
Link Distance (ft)		5114	5114				4821	4821		
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			200	475	475			225	225
Storage Blk Time (%)	22		0					1	3	1
Queuing Penalty (veh)	21		0					2	3	2

Intersection: 7: Idlewild Road & Access A

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	T	T	T	T	T	TR	R
Maximum Queue (ft)	32	28	32	355	401	396	855
Average Queue (ft)	1	1	1	108	331	352	714
95th Queue (ft)	23	19	23	338	460	424	1044
Link Distance (ft)	531	531	531	348	348	348	836
Upstream Blk Time (%)				0	4	21	62
Queuing Penalty (veh)				3	43	195	0
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 8: Idlewild Road & Access C

Movement	EB	WB	WB	WB	SB
Directions Served	L	T	T	TR	R
Maximum Queue (ft)	102	1372	1407	1378	918
Average Queue (ft)	42	1234	1283	1283	638
95th Queue (ft)	87	1733	1669	1637	1116
Link Distance (ft)		1336	1336	1336	957
Upstream Blk Time (%)		8	17	30	32
Queuing Penalty (veh)		69	154	269	0
Storage Bay Dist (ft)	150				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	52	12
Average Queue (ft)	28	0
95th Queue (ft)	47	6
Link Distance (ft)	1254	1995
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	113	80	91	71	53
Average Queue (ft)	33	23	29	18	12
95th Queue (ft)	84	62	76	55	40
Link Distance (ft)	270	278	332	332	505
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

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Intersection: 15: Idlewild Road

Movement	EB	EB
Directions Served	T	TR
Maximum Queue (ft)	400	408
Average Queue (ft)	360	380
95th Queue (ft)	434	394
Link Distance (ft)	315	315
Upstream Blk Time (%)	39	83
Queuing Penalty (veh)	239	514
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	WB
Directions Served	T	T	T	R	R	R	R
Maximum Queue (ft)	13	11	15	299	457	466	377
Average Queue (ft)	0	1	0	49	327	416	329
95th Queue (ft)	9	11	8	218	563	481	535
Link Distance (ft)	96	96	96	377	377	377	
Upstream Blk Time (%)				1	12	24	2
Queuing Penalty (veh)				5	115	230	0
Storage Bay Dist (ft)							325
Storage Blk Time (%)						38	0
Queuing Penalty (veh)						265	0

Intersection: 22: Idlewild Road

Movement	EB	EB	NB	NB
Directions Served	T	T	T	T
Maximum Queue (ft)	124	142	171	170
Average Queue (ft)	73	127	95	93
95th Queue (ft)	127	141	155	156
Link Distance (ft)	35	35	109	109
Upstream Blk Time (%)	40	59	11	9
Queuing Penalty (veh)	216	320	69	60
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 23: I-485 Northbound Off ramp

Movement

Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 27:

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	144	140
Average Queue (ft)	10	10
95th Queue (ft)	78	79
Link Distance (ft)	407	407
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 28: Idlewild Road

Movement	WB	WB	WB	WB
Directions Served	T	T	T	R
Maximum Queue (ft)	181	127	196	44
Average Queue (ft)	73	44	175	2
95th Queue (ft)	191	119	186	25
Link Distance (ft)	115	115	115	115
Upstream Blk Time (%)	9	2	52	
Queuing Penalty (veh)	61	12	368	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

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Intersection: 30: Idlewild Road

Movement	EB	EB	EB	EB
Directions Served	L	T	T	T
Maximum Queue (ft)	166	422	409	424
Average Queue (ft)	12	160	156	155
95th Queue (ft)	137	365	362	348
Link Distance (ft)	512	512	512	512
Upstream Blk Time (%)	0	0	0	0
Queuing Penalty (veh)	1	2	1	1
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 31: Idlewild Road

Movement	EB	EB
Directions Served	T	T
Maximum Queue (ft)	515	526
Average Queue (ft)	486	493
95th Queue (ft)	509	510
Link Distance (ft)	443	443
Upstream Blk Time (%)	57	88
Queuing Penalty (veh)	350	542
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 32: I-485 Southbound On Ramp

Movement	WB	SB
Directions Served	L	R
Maximum Queue (ft)	36	139
Average Queue (ft)	2	28
95th Queue (ft)	16	91
Link Distance (ft)	84	86
Upstream Blk Time (%)		1
Queuing Penalty (veh)		1
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: Idlewild Road

Movement	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T
Maximum Queue (ft)	150	82	176	102	119	124
Average Queue (ft)	112	31	148	98	97	97
95th Queue (ft)	161	81	159	104	108	110
Link Distance (ft)	76	76	76	25	25	25
Upstream Blk Time (%)	24	3	52	53	57	51
Queuing Penalty (veh)	175	23	373	276	295	266
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 34: I-485 Southbound Off Ramp

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 44: I-485 Northbound On Ramp

Movement	NE
Directions Served	T
Maximum Queue (ft)	160
Average Queue (ft)	58
95th Queue (ft)	126
Link Distance (ft)	117
Upstream Blk Time (%)	1
Queuing Penalty (veh)	6
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 222: Idlewild Road & I-485 Southbound Off Ramp

Movement	EB	EB	SB	SB
Directions Served	T	T	L	L
Maximum Queue (ft)	7	51	313	359
Average Queue (ft)	0	28	110	215
95th Queue (ft)	3	48	256	331
Link Distance (ft)	20	20		673
Upstream Blk Time (%)	0	44		
Queuing Penalty (veh)	0	239		
Storage Bay Dist (ft)			500	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 333: I-485 Northbound Off Ramp & Idlewild Road

Movement	EB	EB	EB	NB	NB	NB
Directions Served	T	T	T	R	R	R
Maximum Queue (ft)	93	86	94	202	184	187
Average Queue (ft)	33	35	22	118	100	95
95th Queue (ft)	74	77	71	183	160	152
Link Distance (ft)	80	80	80	296	296	296
Upstream Blk Time (%)	2	3	4			
Queuing Penalty (veh)	9	18	23			
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 9021

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	T	T	T	R	T	T	TR	T	R	R	T	R
Maximum Queue (ft)	240	279	270	191	339	344	349	198	128	116	272	259
Average Queue (ft)	136	173	155	72	177	173	192	97	62	59	148	149
95th Queue (ft)	225	253	242	146	294	297	317	167	105	103	252	239
Link Distance (ft)	880	880	880		826	826	826	5115			4838	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				225					250	250		475
Storage Blk Time (%)			1	0								
Queuing Penalty (veh)			3	0								

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	266
Average Queue (ft)	162
95th Queue (ft)	246
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	475
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 61: Westbound U-Turn & Idlewild Road

Movement	EB	EB	EB	WB	WB
Directions Served	T	T	T	U	U
Maximum Queue (ft)	249	311	241	178	201
Average Queue (ft)	140	184	117	104	125
95th Queue (ft)	229	272	208	164	183
Link Distance (ft)	1139	1139	1139		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				350	350
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 62: Idlewild Road & Eastbound U-Turn

Movement	EB	EB	EB	WB	WB	WB
Directions Served	U	U	T	T	T	T
Maximum Queue (ft)	181	188	158	338	326	254
Average Queue (ft)	104	115	5	219	175	132
95th Queue (ft)	161	168	111	318	288	222
Link Distance (ft)		826	826	665	665	665
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	350					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 3

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	37	318	150	2751
Average Queue (ft)	7	120	10	2155
95th Queue (ft)	26	255	148	3047
Link Distance (ft)	194	738	738	2704
Upstream Blk Time (%)			0	30
Queuing Penalty (veh)			1	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	342	312	196	308	187	219	345	375
Average Queue (ft)	181	139	56	116	66	81	171	202
95th Queue (ft)	307	256	145	217	140	165	278	319
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		12	0	1			0	0
Queuing Penalty (veh)		16	2	4			0	1

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	189	253	227	250	298	225	299	387	330
Average Queue (ft)	89	111	81	109	107	98	171	217	174
95th Queue (ft)	157	208	172	202	221	207	278	324	277
Link Distance (ft)		856	856	509	509			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)		0			4	6	6	11	
Queuing Penalty (veh)		0			12	20	28	56	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	26	26	41	56
Average Queue (ft)	2	2	10	13
95th Queue (ft)	14	14	34	41
Link Distance (ft)			394	2282
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	350	100		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Rite Aid Driveway & Idlewild Road

Movement	EB	EB	B8	B8	WB	WB	NB
Directions Served	T	R	T	T	UL	T	LR
Maximum Queue (ft)	579	337	202	70	249	480	484
Average Queue (ft)	400	31	30	3	76	258	233
95th Queue (ft)	650	188	134	31	184	431	411
Link Distance (ft)	494	494	411	411		2058	2037
Upstream Blk Time (%)	7	0					
Queuing Penalty (veh)	50	1					
Storage Bay Dist (ft)					150		
Storage Blk Time (%)					0	14	
Queuing Penalty (veh)					4	12	

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	350	1139	249	828	267	491	183	291	243
Average Queue (ft)	214	570	57	498	92	237	58	90	110
95th Queue (ft)	400	1146	191	861	259	460	126	210	204
Link Distance (ft)		2058		4497		5157		6183	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	1	23		37		16	0	3	5
Queuing Penalty (veh)	5	49		16		14	0	7	9

Network Summary

Network wide Queuing Penalty: 308

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B7	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	92	17	340	2744
Average Queue (ft)	11	1	138	2417
95th Queue (ft)	52	12	268	3339
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	0			69
Queuing Penalty (veh)	0			0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	562	574	200	373	486	291	511	423
Average Queue (ft)	261	240	92	230	89	83	258	249
95th Queue (ft)	484	480	215	364	295	204	434	390
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	0	0						
Queuing Penalty (veh)	1	0						
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		34	2	8	0		4	1
Queuing Penalty (veh)		48	8	32	0		14	2

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	359	742	748	255	284	222	295	420	369
Average Queue (ft)	247	375	356	136	142	120	192	233	192
95th Queue (ft)	434	939	916	222	249	216	302	358	311
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		5	4						
Queuing Penalty (veh)		33	24						
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	2	36			8	7	8	16	
Queuing Penalty (veh)	9	95			27	27	49	92	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	280	547	553	200	176	194	280	27
Average Queue (ft)	13	308	294	58	62	18	81	4
95th Queue (ft)	133	709	706	206	142	123	266	18
Link Distance (ft)		508	508			411	380	2282
Upstream Blk Time (%)		18	11				7	
Queuing Penalty (veh)		151	92				0	
Storage Bay Dist (ft)	350			100	125			
Storage Blk Time (%)		43	13		7	0		
Queuing Penalty (veh)		2	20		43	0		

Intersection: 5: Rite Aid Driveway & Idlewild Road

Movement	EB	EB	B8	B8	WB	WB	NB	NB
Directions Served	T	R	T	T	UL	T	L	R
Maximum Queue (ft)	591	491	454	468	248	572	1465	600
Average Queue (ft)	492	158	297	266	145	240	744	489
95th Queue (ft)	732	501	615	586	246	657	1656	707
Link Distance (ft)	494	494	411	411		2046	2039	
Upstream Blk Time (%)	40	2	26	8			2	
Queuing Penalty (veh)	313	13	200	60			0	
Storage Bay Dist (ft)					150			500
Storage Blk Time (%)					32	7	6	42
Queuing Penalty (veh)					323	8	17	113

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	350	2036	250	4548	375	1813	168	263	227
Average Queue (ft)	312	1778	74	3176	350	1131	74	101	132
95th Queue (ft)	425	2229	223	5287	489	1958	139	206	207
Link Distance (ft)		2046		4497		5157		6183	
Upstream Blk Time (%)		1		28					
Queuing Penalty (veh)		10		0					
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	31	34		53		93	2	3	9
Queuing Penalty (veh)	357	86		24		108	5	10	15

Network Summary

Network wide Queuing Penalty: 2430

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	WB	NB
Directions Served	TR	T	L	T	LR
Maximum Queue (ft)	293	1674	263	92	2742
Average Queue (ft)	184	955	81	6	2469
95th Queue (ft)	382	2200	211	90	3319
Link Distance (ft)	194	1628	738	738	2704
Upstream Blk Time (%)	46	42			74
Queuing Penalty (veh)	0	0			0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	764	774	200	349	333	207	1645	475
Average Queue (ft)	595	587	115	178	80	104	1209	216
95th Queue (ft)	980	988	264	290	201	182	2193	534
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	36	32					63	
Queuing Penalty (veh)	207	183					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		70	1	2	0		74	0
Queuing Penalty (veh)		100	6	10	0		245	1

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	375	889	900	200	242	186	300	1511	950
Average Queue (ft)	260	762	754	71	66	63	145	1342	824
95th Queue (ft)	506	1158	1166	148	159	137	381	1891	1116
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		51	36					78	
Queuing Penalty (veh)		343	240					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	0	85			1	2	6	96	31
Queuing Penalty (veh)	1	224			5	7	33	565	184

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	450	546	568	200	145	89	399	34
Average Queue (ft)	25	519	523	39	40	4	235	5
95th Queue (ft)	191	564	608	168	100	37	476	23
Link Distance (ft)		508	508			415	380	326
Upstream Blk Time (%)		73	58				34	
Queuing Penalty (veh)		612	486				0	
Storage Bay Dist (ft)	350			100	125			
Storage Blk Time (%)		93	20		1	0		
Queuing Penalty (veh)		7	31		8	0		

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	174	390	218	250	647	2083	600	165	86
Average Queue (ft)	54	379	18	142	638	1293	535	79	32
95th Queue (ft)	176	387	122	279	646	2482	737	171	73
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		59	0		20	30			
Queuing Penalty (veh)		466	0		235	0			
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	2	81		4	42	5	69		
Queuing Penalty (veh)	19	49		43	50	14	189		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	350	1371	250	1949	375	4382	208	630	250
Average Queue (ft)	348	1352	64	1172	305	2681	88	324	190
95th Queue (ft)	352	1488	191	2616	524	4394	190	737	299
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)		37							
Queuing Penalty (veh)		523							
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	100	3		43		98	3	17	46
Queuing Penalty (veh)	1163	7		19		121	10	50	79

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	165	454	480	52
Average Queue (ft)	137	428	370	13
95th Queue (ft)	152	443	577	41
Link Distance (ft)	61	415	415	867
Upstream Blk Time (%)	82	67	22	
Queuing Penalty (veh)	646	528	171	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	R
Maximum Queue (ft)	159	651	1312	150
Average Queue (ft)	6	594	828	55
95th Queue (ft)	59	817	1341	142
Link Distance (ft)		631	1357	987
Upstream Blk Time (%)		22	0	
Queuing Penalty (veh)		320	1	
Storage Bay Dist (ft)	100			
Storage Blk Time (%)		74		
Queuing Penalty (veh)		5		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	26
Average Queue (ft)	7
95th Queue (ft)	25
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	12	25	18	6
Average Queue (ft)	2	1	1	0
95th Queue (ft)	12	11	11	4
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 8205

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	59	392	2735
Average Queue (ft)	11	177	2593
95th Queue (ft)	36	331	3106
Link Distance (ft)	194	738	2704
Upstream Blk Time (%)			81
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	331	342	200	373	414	226	445	378
Average Queue (ft)	195	194	86	229	85	90	244	238
95th Queue (ft)	291	298	211	357	254	187	409	362
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		32	2	7	0		1	2
Queuing Penalty (veh)		45	8	28	0		2	7

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	307	262	261	198	186	259	368	349	309
Average Queue (ft)	157	66	77	112	96	108	174	214	186
95th Queue (ft)	286	209	209	176	159	209	294	304	272
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	275					300	325		850
Storage Blk Time (%)	2	0				0	1	0	
Queuing Penalty (veh)	9	0				0	4	1	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	R	L	R	R
Maximum Queue (ft)	35	102	96	64	107	93	34
Average Queue (ft)	4	11	12	6	40	23	7
95th Queue (ft)	20	111	111	52	82	69	27
Link Distance (ft)		508	508			380	326
Upstream Blk Time (%)		0					
Queuing Penalty (veh)		0					
Storage Bay Dist (ft)	150			100	125		
Storage Blk Time (%)		1	1		0		
Queuing Penalty (veh)		0	2		2		

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	TR
Maximum Queue (ft)	199	351	354	178	278	293	337	389	117	106
Average Queue (ft)	61	209	220	85	197	215	181	202	50	36
95th Queue (ft)	162	343	352	156	276	285	287	352	99	83
Link Distance (ft)		377	377		631		2040		358	358
Upstream Blk Time (%)		3	4							
Queuing Penalty (veh)		26	28							
Storage Bay Dist (ft)	175			300		350		500		
Storage Blk Time (%)	0	12			0		0	0		
Queuing Penalty (veh)	1	8			0		0	1		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	600	1285	350	3973	451	714	429	160	220	246
Average Queue (ft)	448	960	112	2597	278	306	116	65	98	136
95th Queue (ft)	746	1584	330	4367	544	686	369	125	191	226
Link Distance (ft)		1357		4493		5158			6183	
Upstream Blk Time (%)		1		11						
Queuing Penalty (veh)		21		0						
Storage Bay Dist (ft)	500		250		500		500	250		275
Storage Blk Time (%)	6	29		51	6	12			0	0
Queuing Penalty (veh)	76	74		23	15	28			1	0

Intersection: 7: Idlewild Road & Access A

Movement	EB	EB	SB
Directions Served	T	T	R
Maximum Queue (ft)	151	144	29
Average Queue (ft)	32	32	7
95th Queue (ft)	226	229	26
Link Distance (ft)	531	531	842
Upstream Blk Time (%)	1	1	
Queuing Penalty (veh)	9	10	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	286	538	565	40
Average Queue (ft)	17	279	282	8
95th Queue (ft)	130	636	643	28
Link Distance (ft)		631	631	974
Upstream Blk Time (%)		1	1	
Queuing Penalty (veh)		7	9	
Storage Bay Dist (ft)	250			
Storage Blk Time (%)		29		
Queuing Penalty (veh)		2		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	26	6
Average Queue (ft)	9	0
95th Queue (ft)	30	6
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	24	30	28	25
Average Queue (ft)	1	2	2	1
95th Queue (ft)	9	17	13	12
Link Distance (ft)	270	278	358	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 445

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	286	1662	333	2742
Average Queue (ft)	206	1124	79	2505
95th Queue (ft)	382	2315	237	3296
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	59	56		75
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	766	776	160	329	216	226	1640	437
Average Queue (ft)	672	663	97	164	88	128	1368	202
95th Queue (ft)	925	931	254	276	175	205	2165	543
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	51	42					73	
Queuing Penalty (veh)	300	250					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		82	1	1	0		84	1
Queuing Penalty (veh)		117	6	4	0		280	5

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	316	883	892	148	139	154	246	1499	950
Average Queue (ft)	231	823	819	68	58	61	115	1417	850
95th Queue (ft)	509	1069	1085	127	121	123	347	1748	1073
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		60	32					87	
Queuing Penalty (veh)		419	224					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	0	93			1	1	1	99	49
Queuing Penalty (veh)	2	244			4	3	6	599	295

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	TR	R	R
Maximum Queue (ft)	360	545	551	160	107	98	20	380	43
Average Queue (ft)	63	525	514	25	35	7	1	297	15
95th Queue (ft)	320	538	605	131	100	62	14	503	41
Link Distance (ft)		508	508			415	415	380	326
Upstream Blk Time (%)		81	62					56	
Queuing Penalty (veh)		718	547					0	
Storage Bay Dist (ft)	350			100	125				
Storage Blk Time (%)		98	35		2	0			
Queuing Penalty (veh)		23	52		15	0			

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	140	313	21	250	647	2068	600	409	355
Average Queue (ft)	69	304	6	136	638	1425	557	339	242
95th Queue (ft)	199	554	22	279	646	2503	738	519	503
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		45			22	41		58	19
Queuing Penalty (veh)		372			267	0		63	21
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	9	65		3	43	7	77		
Queuing Penalty (veh)	98	82		38	52	21	211		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	349	1225	250	3504	375	4687	231	794	250
Average Queue (ft)	299	1133	79	2226	335	2851	98	429	211
95th Queue (ft)	477	1891	219	4077	508	4714	214	1076	295
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)		31		5		2			
Queuing Penalty (veh)		467		0		0			
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	82	3		52	3	98	9	17	55
Queuing Penalty (veh)	988	7		23	7	135	31	52	95

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	WB	SB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	162	451	465	23	58
Average Queue (ft)	135	425	367	1	17
95th Queue (ft)	152	441	546	12	46
Link Distance (ft)	61	415	415	376	854
Upstream Blk Time (%)	86	73	35		
Queuing Penalty (veh)	707	597	286		
Storage Bay Dist (ft)					
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	R
Maximum Queue (ft)	405	522	1300	175	350
Average Queue (ft)	63	488	1040	35	184
95th Queue (ft)	329	912	1589	150	459
Link Distance (ft)		631	1357		974
Upstream Blk Time (%)		20	1		
Queuing Penalty (veh)		300	7		
Storage Bay Dist (ft)	400			75	
Storage Blk Time (%)		60	42		
Queuing Penalty (veh)		13	13		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	35
Average Queue (ft)	16
95th Queue (ft)	38
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	246	177	77	151
Average Queue (ft)	150	63	7	60
95th Queue (ft)	367	185	40	192
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	44	1		
Queuing Penalty (veh)	0	0		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 9064

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	57	547	422	2738
Average Queue (ft)	12	256	37	2603
95th Queue (ft)	38	539	283	3146
Link Distance (ft)	194	738	738	2704
Upstream Blk Time (%)		0	1	84
Queuing Penalty (veh)		0	4	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	362	353	200	373	419	206	527	416
Average Queue (ft)	209	205	90	229	101	100	243	241
95th Queue (ft)	319	318	214	350	278	182	404	368
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		33	2	6	0		2	1
Queuing Penalty (veh)		47	8	26	0		5	3

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	340	567	525	199	205	240	381	432	384
Average Queue (ft)	173	154	160	126	120	149	184	235	203
95th Queue (ft)	327	514	518	194	188	230	316	360	319
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		1	1						
Queuing Penalty (veh)		6	5						
Storage Bay Dist (ft)	275					300	325		850
Storage Blk Time (%)	1	10				0	0	2	
Queuing Penalty (veh)	5	27				0	2	13	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	206	460	462	160	118	95	249	47
Average Queue (ft)	31	212	215	67	46	5	78	16
95th Queue (ft)	149	591	595	222	93	42	249	43
Link Distance (ft)		508	508			531	380	326
Upstream Blk Time (%)		7	7				3	
Queuing Penalty (veh)		58	59				0	
Storage Bay Dist (ft)	150			100	125			
Storage Blk Time (%)		25	28		0	0		
Queuing Penalty (veh)		6	41		2	0		

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	TR
Maximum Queue (ft)	376	401	404	174	319	337	1479	600	313	152
Average Queue (ft)	143	350	353	85	233	255	673	410	166	67
95th Queue (ft)	329	462	463	159	302	319	1714	719	288	118
Link Distance (ft)		377	377		631		2040		358	358
Upstream Blk Time (%)	0	32	34				4		0	
Queuing Penalty (veh)	0	266	280				0		0	
Storage Bay Dist (ft)	325			300		350		500		
Storage Blk Time (%)	0	43			0	0	3	39		
Queuing Penalty (veh)	0	54			3	1	7	106		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	600	1367	349	4005	543	793	335	181	253	304
Average Queue (ft)	524	1262	85	2414	360	316	97	58	108	158
95th Queue (ft)	743	1588	283	4545	591	835	317	132	228	265
Link Distance (ft)		1357		4493		5158			6183	
Upstream Blk Time (%)		4		12						
Queuing Penalty (veh)		57		0						
Storage Bay Dist (ft)	500		250		500		500	250		275
Storage Blk Time (%)	16	34		50	6	11			2	1
Queuing Penalty (veh)	193	93		23	15	27			7	2

Intersection: 7: Idlewild Road & Access A

Movement	EB	EB	SB
Directions Served	T	T	R
Maximum Queue (ft)	562	573	69
Average Queue (ft)	344	346	17
95th Queue (ft)	738	743	46
Link Distance (ft)	531	531	842
Upstream Blk Time (%)	18	19	
Queuing Penalty (veh)	149	156	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	R	R
Maximum Queue (ft)	350	664	666	4	65
Average Queue (ft)	124	598	603	0	22
95th Queue (ft)	391	744	754	3	51
Link Distance (ft)		631	631		974
Upstream Blk Time (%)		5	8		
Queuing Penalty (veh)		39	62		
Storage Bay Dist (ft)	250			100	
Storage Blk Time (%)		84			
Queuing Penalty (veh)		19			

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	41	6
Average Queue (ft)	16	0
95th Queue (ft)	39	4
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	36	45	49	31
Average Queue (ft)	7	8	5	3
95th Queue (ft)	28	31	29	18
Link Distance (ft)	270	278	358	499
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 1873

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B7	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	281	1670	359	2748
Average Queue (ft)	132	644	109	2620
95th Queue (ft)	343	1880	246	3097
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	30	24		82
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	763	772	200	322	241	227	1653	475
Average Queue (ft)	552	543	136	164	83	116	1019	267
95th Queue (ft)	933	944	269	273	181	203	2076	582
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	20	19					41	
Queuing Penalty (veh)	115	112					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		66	1	1			59	3
Queuing Penalty (veh)		97	5	5			199	11

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	375	887	908	196	183	176	300	1509	950
Average Queue (ft)	302	700	688	74	61	59	196	1159	760
95th Queue (ft)	508	1187	1192	153	140	139	394	2003	1246
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		32	20					64	
Queuing Penalty (veh)		214	134					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	1	77			1	1	8	83	39
Queuing Penalty (veh)	5	208			4	5	50	495	233

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	449	553	561	200	120	78	267	28
Average Queue (ft)	32	471	469	85	43	3	147	3
95th Queue (ft)	219	728	732	247	97	37	407	16
Link Distance (ft)		508	508			411	380	2282
Upstream Blk Time (%)		56	45				21	
Queuing Penalty (veh)		467	377				0	
Storage Bay Dist (ft)	350			100	125			
Storage Blk Time (%)		82	36		0	0		
Queuing Penalty (veh)		3	54		3	0		

Intersection: 5: Rite Aid Driveway & Idlewild Road

Movement	EB	EB	B8	B8	WB	WB	NB	NB
Directions Served	T	R	T	T	UL	T	L	R
Maximum Queue (ft)	601	555	452	481	175	218	2082	600
Average Queue (ft)	549	135	394	369	94	104	1833	594
95th Queue (ft)	696	480	581	599	159	196	2607	645
Link Distance (ft)	494	494	411	411		400	2038	
Upstream Blk Time (%)	72	4	58	25			76	
Queuing Penalty (veh)	573	33	457	194			0	
Storage Bay Dist (ft)					150			500
Storage Blk Time (%)					4	1	5	96
Queuing Penalty (veh)					36	1	13	264

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	B12	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	T	L	TR	L	TR	L	T	R
Maximum Queue (ft)	350	1706	424	250	1313	375	4477	234	485	250
Average Queue (ft)	349	1663	387	72	830	282	2683	93	216	176
95th Queue (ft)	350	1768	509	198	1475	545	4539	209	478	274
Link Distance (ft)		1591	400		4497		5157		6183	
Upstream Blk Time (%)		83	26							
Queuing Penalty (veh)		1187	372							
Storage Bay Dist (ft)	250			150		275		135		150
Storage Blk Time (%)	100	3			40	0	99	1	14	29
Queuing Penalty (veh)	1174	7			18	1	117	4	42	52

Network Summary

Network wide Queuing Penalty: 7341

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	300	1677	245	2739
Average Queue (ft)	196	1059	62	2631
95th Queue (ft)	384	2309	175	3067
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	53	54		85
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	762	776	200	312	174	232	1642	475
Average Queue (ft)	633	621	121	160	72	117	1260	238
95th Queue (ft)	962	981	268	262	147	204	2218	562
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	43	36					66	
Queuing Penalty (veh)	263	225					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		76	2	1			74	1
Queuing Penalty (veh)		110	12	3			253	3

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	375	891	903	155	147	149	300	1520	950
Average Queue (ft)	293	810	794	74	65	71	198	1452	919
95th Queue (ft)	528	1060	1094	135	129	133	419	1666	1035
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		45	32					89	
Queuing Penalty (veh)		336	235					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	0	93			1	1	3	99	57
Queuing Penalty (veh)	2	250			4	7	19	628	361

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	R	R
Maximum Queue (ft)	450	546	565	200	127	96	404	52
Average Queue (ft)	101	524	527	32	44	5	306	20
95th Queue (ft)	406	552	586	152	103	46	516	46
Link Distance (ft)		508	508			415	380	326
Upstream Blk Time (%)		73	55				61	
Queuing Penalty (veh)		689	516				0	
Storage Bay Dist (ft)	350			100	125			
Storage Blk Time (%)		95	23		2	0		
Queuing Penalty (veh)		35	34		16	0		

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	175	390	114	250	647	2085	600	442	415
Average Queue (ft)	103	380	15	138	638	1672	579	390	289
95th Queue (ft)	230	387	98	296	645	2624	682	497	527
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		54			26	47		77	20
Queuing Penalty (veh)		470			342	0		103	27
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	30	75		4	46	2	89		
Queuing Penalty (veh)	342	129		48	57	7	246		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	350	1371	249	4549	375	5156	213	1568	250
Average Queue (ft)	348	1318	106	3389	322	3195	64	833	235
95th Queue (ft)	361	1618	276	5595	520	5432	152	1794	287
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)		36		47		8			
Queuing Penalty (veh)		562		0		0			
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	99	2		62	0	98	3	11	79
Queuing Penalty (veh)	1251	7		29	1	153	11	36	141

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	168	449	487	64
Average Queue (ft)	135	427	379	24
95th Queue (ft)	149	441	563	51
Link Distance (ft)	61	415	415	854
Upstream Blk Time (%)	79	64	17	
Queuing Penalty (veh)	690	555	150	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	R
Maximum Queue (ft)	500	652	1359	200	469
Average Queue (ft)	96	557	1230	54	252
95th Queue (ft)	415	865	1546	201	588
Link Distance (ft)		631	1357		974
Upstream Blk Time (%)		22	1		
Queuing Penalty (veh)		355	17		
Storage Bay Dist (ft)	400			100	
Storage Blk Time (%)		67	48		
Queuing Penalty (veh)		24	22		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB
Directions Served	LR
Maximum Queue (ft)	41
Average Queue (ft)	18
95th Queue (ft)	42
Link Distance (ft)	1224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	292	287	105	397
Average Queue (ft)	213	149	20	152
95th Queue (ft)	395	342	78	386
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	66	24		0
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 9771

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	60	601	427	2723
Average Queue (ft)	12	360	155	2618
95th Queue (ft)	37	729	642	3041
Link Distance (ft)	194	725	725	2704
Upstream Blk Time (%)		8	3	84
Queuing Penalty (veh)		49	18	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R	R
Maximum Queue (ft)	356	356	200	375	637	558	864	393	288
Average Queue (ft)	204	202	86	287	188	149	408	161	152
95th Queue (ft)	329	335	220	413	542	427	975	385	265
Link Distance (ft)	725	725			856	856	1608		
Upstream Blk Time (%)					0	0	3		
Queuing Penalty (veh)					1	1	0		
Storage Bay Dist (ft)			100	275				400	400
Storage Blk Time (%)		35	2	17	3		11	1	1
Queuing Penalty (veh)		52	8	71	13		37	5	3

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	374	787	789	326	292	334	404	524	457
Average Queue (ft)	189	252	259	192	174	191	203	264	230
95th Queue (ft)	373	769	768	296	273	285	348	404	354
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		3	3						
Queuing Penalty (veh)		25	23						
Storage Bay Dist (ft)	275					300	325		850
Storage Blk Time (%)	3	22			1	0	1	3	
Queuing Penalty (veh)	17	60			4	2	5	21	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	TR	R	R
Maximum Queue (ft)	249	534	536	200	128	128	23	331	68
Average Queue (ft)	55	258	260	78	47	8	1	118	22
95th Queue (ft)	201	661	661	237	101	59	15	344	53
Link Distance (ft)		508	508			531	531	380	326
Upstream Blk Time (%)		11	11					10	
Queuing Penalty (veh)		104	101					0	
Storage Bay Dist (ft)	150			100	125				
Storage Blk Time (%)		33	34		0	0			
Queuing Penalty (veh)		12	51		2	0			

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	SB
Directions Served	L	T	TR	UL	T	TR	L	TR	L	L	T	R
Maximum Queue (ft)	358	403	393	385	480	505	892	532	190	206	50	115
Average Queue (ft)	184	335	335	133	315	351	314	292	74	97	13	55
95th Queue (ft)	383	459	456	281	451	489	882	527	164	181	39	105
Link Distance (ft)		360	360		611	611	2040				362	
Upstream Blk Time (%)	0	33	34		0	0						
Queuing Penalty (veh)	0	285	300		0	2						
Storage Bay Dist (ft)	325			300				500	250	250		250
Storage Blk Time (%)	0	41		1	6		1	9	1	1		
Queuing Penalty (veh)	1	71		3	8		3	25	1	1		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	600	1367	93	293	378	599	1854	600	145	241	276
Average Queue (ft)	469	1262	44	185	226	557	1026	122	72	116	166
95th Queue (ft)	809	1598	88	271	334	667	2134	372	131	224	253
Link Distance (ft)		1360		4493			5158			6171	
Upstream Blk Time (%)		3									
Queuing Penalty (veh)		52									
Storage Bay Dist (ft)	500		250		500	500		500	250		275
Storage Blk Time (%)		39		1		70	8			1	0
Queuing Penalty (veh)		111		9		174	21			4	1

Intersection: 7: Idlewild Road & Access A

Movement	EB	EB	WB	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	550	559	14	71
Average Queue (ft)	355	359	0	24
95th Queue (ft)	748	750	10	54
Link Distance (ft)	531	531	360	842
Upstream Blk Time (%)	21	22		
Queuing Penalty (veh)	184	192		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	R	R
Maximum Queue (ft)	350	653	657	22	48	8	59
Average Queue (ft)	178	555	558	1	4	0	23
95th Queue (ft)	457	815	819	16	43	7	49
Link Distance (ft)		611	611	1360	1360		962
Upstream Blk Time (%)		9	10				
Queuing Penalty (veh)		68	80				
Storage Bay Dist (ft)	250					100	
Storage Blk Time (%)		72			0		
Queuing Penalty (veh)		26			0		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	51	6
Average Queue (ft)	20	0
95th Queue (ft)	45	4
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	36	62	62	55	42
Average Queue (ft)	7	9	14	11	3
95th Queue (ft)	30	37	47	39	19
Link Distance (ft)	270	278	362	362	505
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 2306

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	NB
Directions Served	TR	T	L	LR
Maximum Queue (ft)	291	1669	203	2737
Average Queue (ft)	217	1233	53	2665
95th Queue (ft)	381	2341	173	2945
Link Distance (ft)	194	1628	738	2704
Upstream Blk Time (%)	62	64		88
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	759	765	160	258	157	182	1638	380
Average Queue (ft)	686	675	95	134	62	88	1420	198
95th Queue (ft)	906	907	254	267	149	178	2160	544
Link Distance (ft)	738	738			856	856	1608	
Upstream Blk Time (%)	51	26					74	
Queuing Penalty (veh)	325	167					0	
Storage Bay Dist (ft)			100	275				375
Storage Blk Time (%)		81	2	1			84	1
Queuing Penalty (veh)		119	11	3			285	2

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	300	886	895	151	120	134	240	1513	940
Average Queue (ft)	260	848	841	70	54	52	151	1472	877
95th Queue (ft)	532	984	998	154	126	127	391	1557	1076
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		57	40					95	
Queuing Penalty (veh)		440	311					0	
Storage Bay Dist (ft)	275					125	200		850
Storage Blk Time (%)	1	97			1	1	4	99	40
Queuing Penalty (veh)	4	262			4	5	30	643	261

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	B15	NB	SB
Directions Served	L	T	T	R	L	T	TR	T	R	R
Maximum Queue (ft)	360	549	558	160	117	118	82	23	401	60
Average Queue (ft)	132	524	514	25	71	96	82	23	303	25
95th Queue (ft)	469	541	629	134	196	411	352	97	492	52
Link Distance (ft)		508	508			415	415	61	380	326
Upstream Blk Time (%)		75	53			20	20	20	55	
Queuing Penalty (veh)		743	521			148	148	297	0	
Storage Bay Dist (ft)	350			100	125					
Storage Blk Time (%)		96	35		20					
Queuing Penalty (veh)		52	53		139					

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	UL	TR	L	TR	L	TR
Maximum Queue (ft)	140	313	135	200	642	2079	600	426	408
Average Queue (ft)	107	305	11	93	637	1804	485	411	332
95th Queue (ft)	233	556	80	245	645	2586	860	422	522
Link Distance (ft)		376	376		631	2039		370	370
Upstream Blk Time (%)		43			43	70		93	41
Queuing Penalty (veh)		395			590	0		181	79
Storage Bay Dist (ft)	75			150			500		
Storage Blk Time (%)	44	48		2	59	24	75		
Queuing Penalty (veh)	511	112		19	73	74	207		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	302	1133	210	4546	375	4990	186	2793	239
Average Queue (ft)	279	1050	98	4138	341	3215	61	1799	221
95th Queue (ft)	501	1940	281	5474	501	5494	156	4520	312
Link Distance (ft)		1357		4497		5158		6183	
Upstream Blk Time (%)		26		76		15		8	
Queuing Penalty (veh)		425		0		0		0	
Storage Bay Dist (ft)	250		150		275		135		150
Storage Blk Time (%)	79	2		78	25	81	4	27	75
Queuing Penalty (veh)	1030	7		36	63	139	13	96	133

Intersection: 7: Idlewild Road & Access A

Movement	EB	B15	B15	WB	SB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	147	443	462	75	230
Average Queue (ft)	132	425	354	75	132
95th Queue (ft)	143	440	563	324	536
Link Distance (ft)	61	415	415	376	854
Upstream Blk Time (%)	78	67	31	20	5
Queuing Penalty (veh)	713	612	282	306	0
Storage Bay Dist (ft)					
Storage Blk Time (%)				20	
Queuing Penalty (veh)				12	

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	R
Maximum Queue (ft)	400	522	1368	160	856
Average Queue (ft)	95	406	1325	40	582
95th Queue (ft)	408	884	1428	171	1046
Link Distance (ft)		631	1357		974
Upstream Blk Time (%)		16	22		9
Queuing Penalty (veh)		264	296		0
Storage Bay Dist (ft)	400			100	
Storage Blk Time (%)		48	60		
Queuing Penalty (veh)		25	37		

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	68	6
Average Queue (ft)	24	0
95th Queue (ft)	50	6
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	298	297	228	519
Average Queue (ft)	280	268	71	360
95th Queue (ft)	309	350	212	633
Link Distance (ft)	270	278	370	499
Upstream Blk Time (%)	98	76	1	40
Queuing Penalty (veh)	0	0	3	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 11708

Intersection: 1: Stallings Road & Idlewild Road

Movement	EB	B14	WB	WB	NB
Directions Served	TR	T	L	T	LR
Maximum Queue (ft)	284	1618	648	556	2728
Average Queue (ft)	114	507	318	133	2654
95th Queue (ft)	320	1659	707	589	2941
Link Distance (ft)	194	1623	725	725	2704
Upstream Blk Time (%)	24	19	8	3	73
Queuing Penalty (veh)	0	0	46	17	0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: I-485 SB Ramp & Idlewild Road

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R	R
Maximum Queue (ft)	754	763	200	375	773	738	1649	500	281
Average Queue (ft)	442	434	105	330	436	329	879	243	140
95th Queue (ft)	861	863	252	446	931	802	1925	569	297
Link Distance (ft)	725	725			856	856	1608		
Upstream Blk Time (%)	17	17			1	1	35		
Queuing Penalty (veh)	107	105			7	4	0		
Storage Bay Dist (ft)			100	275				400	400
Storage Blk Time (%)		59	1	46	3		44	1	2
Queuing Penalty (veh)		86	4	200	12		150	5	10

Intersection: 3: Idlewild Road & I-485 NB Ramp

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R	R
Maximum Queue (ft)	375	876	879	368	364	329	421	564	506
Average Queue (ft)	288	551	558	209	198	207	209	309	273
95th Queue (ft)	480	1169	1161	319	334	314	371	475	426
Link Distance (ft)		856	856	508	508			1469	
Upstream Blk Time (%)		18	16	1	1				
Queuing Penalty (veh)		141	126	4	4				
Storage Bay Dist (ft)	275					300	325		850
Storage Blk Time (%)	1	61			2	2	0	11	
Queuing Penalty (veh)	5	163			8	10	2	71	

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	TR	R	R
Maximum Queue (ft)	250	545	542	200	116	111	52	393	69
Average Queue (ft)	71	389	387	116	45	6	4	224	29
95th Queue (ft)	235	750	746	278	94	55	48	485	61
Link Distance (ft)		508	508			531	531	380	326
Upstream Blk Time (%)		25	23					40	
Queuing Penalty (veh)		251	226					0	
Storage Bay Dist (ft)	150			100	125				
Storage Blk Time (%)		53	53		0	1			
Queuing Penalty (veh)		29	79		2	1			

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	UL	T	T	R	L	TR	L	L
Maximum Queue (ft)	160	359	397	392	329	398	396	102	821	554	260	291
Average Queue (ft)	75	156	359	359	141	241	251	44	361	375	148	168
95th Queue (ft)	141	383	431	424	270	343	350	84	913	626	281	312
Link Distance (ft)			360	360		610	610		2034			
Upstream Blk Time (%)		0	46	48								2
Queuing Penalty (veh)		0	417	434								0
Storage Bay Dist (ft)	325	325			300			400		500	250	250
Storage Blk Time (%)		0	56		1	2	0		2	15	9	14
Queuing Penalty (veh)		0	131		4	2	0		5	43	15	22

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	254	259
Average Queue (ft)	54	83
95th Queue (ft)	245	207
Link Distance (ft)	344	
Upstream Blk Time (%)	2	0
Queuing Penalty (veh)	9	0
Storage Bay Dist (ft)		250
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	600	1368	107	314	351	600	1835	342	189	345	321
Average Queue (ft)	455	1334	45	191	234	521	851	99	78	146	163
95th Queue (ft)	792	1447	89	286	336	721	1904	281	153	289	271
Link Distance (ft)		1360		4493			5158			6171	
Upstream Blk Time (%)		4									
Queuing Penalty (veh)		70									
Storage Bay Dist (ft)	500		250		500	500		500	250		275
Storage Blk Time (%)		40		2		66	3			5	2
Queuing Penalty (veh)		123		11		166	8			19	3

Intersection: 7: Idlewild Road & Access A

Movement	EB	EB	WB	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	558	560	7	62
Average Queue (ft)	457	458	0	24
95th Queue (ft)	751	747	5	49
Link Distance (ft)	531	531	360	836
Upstream Blk Time (%)	35	35		
Queuing Penalty (veh)	318	317		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Idlewild Road & Access C

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	R	R
Maximum Queue (ft)	350	665	657	13	78
Average Queue (ft)	243	620	623	0	29
95th Queue (ft)	502	682	686	5	60
Link Distance (ft)		610	610		962
Upstream Blk Time (%)		13	15		
Queuing Penalty (veh)		108	128		
Storage Bay Dist (ft)	250			100	
Storage Blk Time (%)		84			
Queuing Penalty (veh)		45			

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	56	12
Average Queue (ft)	24	0
95th Queue (ft)	49	6
Link Distance (ft)	1224	1969
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B & Internal Roadway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	76	72	106	98	50
Average Queue (ft)	22	17	25	17	7
95th Queue (ft)	60	52	77	60	32
Link Distance (ft)	270	278	344	344	505
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 4271

Intersection: 1: Stallings Road/Hooks Road & Idlewild Road

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LT	R	LTR
Maximum Queue (ft)	575	2602	90	47	2596	275	41
Average Queue (ft)	524	1671	16	2	2377	245	3
95th Queue (ft)	714	3096	62	24	3194	354	20
Link Distance (ft)		2564	443	443	2560		1266
Upstream Blk Time (%)		18			80		
Queuing Penalty (veh)		0			0		
Storage Bay Dist (ft)	475					175	
Storage Blk Time (%)	25	78			39	88	
Queuing Penalty (veh)	171	442			135	123	

Intersection: 2: Idlewild Road & I-485 Southbound Off Ramp

Movement	WB	WB	SB
Directions Served	T	T	R
Maximum Queue (ft)	42	44	194
Average Queue (ft)	10	11	65
95th Queue (ft)	30	32	136
Link Distance (ft)	46	46	777
Upstream Blk Time (%)	2	1	
Queuing Penalty (veh)	10	4	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: I-485 Northbound Off ramp

Movement	WB	WB	WB	NB
Directions Served	T	T	T	L
Maximum Queue (ft)	97	38	108	180
Average Queue (ft)	20	3	79	77
95th Queue (ft)	74	20	105	139
Link Distance (ft)	62	62	62	432
Upstream Blk Time (%)	9	0	47	
Queuing Penalty (veh)	51	0	264	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Boyd Funderburk Drive/Marshall Hooks Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	R	R
Maximum Queue (ft)	113	154	146	158	290	561	582	570	108	172
Average Queue (ft)	50	64	66	72	75	205	532	547	46	87
95th Queue (ft)	100	126	125	134	169	572	615	563	85	178
Link Distance (ft)		377	377	377		531	531	531	380	194
Upstream Blk Time (%)						4	24	46		6
Queuing Penalty (veh)						28	185	359		3
Storage Bay Dist (ft)	350				300					
Storage Blk Time (%)						0				
Queuing Penalty (veh)						0				

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	T	R	L	T	T	T	R	L
Maximum Queue (ft)	167	175	232	224	234	28	399	647	667	658	200	293
Average Queue (ft)	97	88	128	138	142	2	39	535	612	627	177	81
95th Queue (ft)	164	154	196	196	208	13	182	767	697	654	282	266
Link Distance (ft)			348	348	348			610	610	610		
Upstream Blk Time (%)								13	27	56		
Queuing Penalty (veh)								94	202	423		
Storage Bay Dist (ft)	325	325				375	300				100	400
Storage Blk Time (%)			0					17		91	0	0
Queuing Penalty (veh)			0					4		114	1	0

Intersection: 5: Rite Aid Driveway/Access B & Idlewild Road

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	T	R	L	L	T	R	R
Maximum Queue (ft)	338	270	158	160	227	143	198	190
Average Queue (ft)	179	63	40	81	111	28	77	86
95th Queue (ft)	372	289	113	154	188	115	159	163
Link Distance (ft)		2009				332		
Upstream Blk Time (%)					0	0	0	
Queuing Penalty (veh)					0	2	0	
Storage Bay Dist (ft)	400		300	250	250		250	250
Storage Blk Time (%)	5	1			0	1	0	
Queuing Penalty (veh)	4	1			0	4	0	

Village at Idlewild
Queuing and Blocking Report

2040 Full Build
PM Peak Hour

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	T	R	L	T	T	T	R	L
Maximum Queue (ft)	127	148	345	377	392	300	524	1532	1543	1546	350	550
Average Queue (ft)	73	91	231	254	268	94	261	1004	1045	1059	250	317
95th Queue (ft)	121	137	338	359	379	277	624	1960	2001	2011	483	632
Link Distance (ft)			1336	1336	1336			1503	1503	1503		
Upstream Blk Time (%)								13	35	53		
Queuing Penalty (veh)								0	0	0		
Storage Bay Dist (ft)	500	500				200	425				250	500
Storage Blk Time (%)					23			42		66		20
Queuing Penalty (veh)					35			43		175		25

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	NB	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	L	T	T	R	L	L	T	T	R	R
Maximum Queue (ft)	600	1313	497	118	203	215	120	159	196	190
Average Queue (ft)	352	362	112	51	110	117	57	66	73	68
95th Queue (ft)	689	1133	352	103	198	202	100	127	153	137
Link Distance (ft)		5114	5114				4821	4821		
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			200	475	475			225	225
Storage Blk Time (%)	32	0							0	0
Queuing Penalty (veh)	40	0							0	0

Intersection: 7: Idlewild Road & Access A

Movement	WB	WB	WB	SB
Directions Served	T	T	TR	R
Maximum Queue (ft)	366	397	395	814
Average Queue (ft)	120	315	350	505
95th Queue (ft)	355	468	433	939
Link Distance (ft)	348	348	348	836
Upstream Blk Time (%)	2	8	30	16
Queuing Penalty (veh)	16	63	234	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Idlewild Road & Access C

Movement	EB	WB	WB	WB	SB
Directions Served	L	T	T	TR	R
Maximum Queue (ft)	86	1373	1395	1366	801
Average Queue (ft)	32	1127	1185	1196	435
95th Queue (ft)	72	1781	1766	1728	857
Link Distance (ft)		1336	1336	1336	957
Upstream Blk Time (%)		8	16	28	
Queuing Penalty (veh)		63	124	214	
Storage Bay Dist (ft)	150				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Marshall Hooks Road & Access D

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	82	6
Average Queue (ft)	30	1
95th Queue (ft)	68	7
Link Distance (ft)	1254	1995
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Access B

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	LT	R	LTR
Maximum Queue (ft)	61	54	88	87	56
Average Queue (ft)	17	13	29	20	9
95th Queue (ft)	51	43	78	61	37
Link Distance (ft)	270	278	332	332	505
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 15: Idlewild Road

Movement	EB	EB
Directions Served	T	TR
Maximum Queue (ft)	389	410
Average Queue (ft)	352	380
95th Queue (ft)	416	395
Link Distance (ft)	315	315
Upstream Blk Time (%)	36	80
Queuing Penalty (veh)	268	592
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: Idlewild Road

Movement	EB	WB	WB	WB	WB
Directions Served	T	R	R	R	R
Maximum Queue (ft)	11	276	461	467	377
Average Queue (ft)	0	44	398	430	329
95th Queue (ft)	8	180	528	469	536
Link Distance (ft)	96	377	377	377	
Upstream Blk Time (%)		0	20	38	3
Queuing Penalty (veh)		0	155	294	0
Storage Bay Dist (ft)					325
Storage Blk Time (%)				53	0
Queuing Penalty (veh)				303	0

Intersection: 22: Idlewild Road

Movement	EB	EB	NB	NB
Directions Served	T	T	T	T
Maximum Queue (ft)	126	146	181	169
Average Queue (ft)	82	128	85	88
95th Queue (ft)	129	142	143	143
Link Distance (ft)	35	35	109	109
Upstream Blk Time (%)	38	52	8	9
Queuing Penalty (veh)	256	346	44	47
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 23: I-485 Northbound Off ramp

Movement

Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 27:

Movement

WB WB

Directions Served T T
Maximum Queue (ft) 99 94
Average Queue (ft) 4 3
95th Queue (ft) 48 48
Link Distance (ft) 407 407
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 28: Idlewild Road

Movement

WB WB WB WB

Directions Served T T T R
Maximum Queue (ft) 188 109 202 98
Average Queue (ft) 72 37 176 6
95th Queue (ft) 182 98 189 43
Link Distance (ft) 115 115 115 115
Upstream Blk Time (%) 7 1 62 0
Queuing Penalty (veh) 38 6 355 1
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 30: Idlewild Road

Movement	EB	EB	EB
Directions Served	T	T	T
Maximum Queue (ft)	345	341	358
Average Queue (ft)	113	113	116
95th Queue (ft)	260	249	255
Link Distance (ft)	512	512	512
Upstream Blk Time (%)	0	0	0
Queuing Penalty (veh)	0	0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 31: Idlewild Road

Movement	EB	EB
Directions Served	T	T
Maximum Queue (ft)	523	523
Average Queue (ft)	486	494
95th Queue (ft)	509	508
Link Distance (ft)	443	443
Upstream Blk Time (%)	52	85
Queuing Penalty (veh)	387	629
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 32: I-485 Southbound On Ramp

Movement	WB	SB
Directions Served	L	R
Maximum Queue (ft)	37	66
Average Queue (ft)	2	17
95th Queue (ft)	14	49
Link Distance (ft)	84	86
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: Idlewild Road

Movement	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	T	T
Maximum Queue (ft)	147	87	181	125	112	110
Average Queue (ft)	115	29	148	100	97	95
95th Queue (ft)	154	77	161	113	107	108
Link Distance (ft)	76	76	76	25	25	25
Upstream Blk Time (%)	29	2	60	43	47	40
Queuing Penalty (veh)	160	11	335	256	279	237
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 34: I-485 Southbound Off Ramp

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 44: I-485 Northbound On Ramp

Movement	EB	NE
Directions Served	L	T
Maximum Queue (ft)	8	171
Average Queue (ft)	0	76
95th Queue (ft)	4	155
Link Distance (ft)	322	117
Upstream Blk Time (%)		3
Queuing Penalty (veh)		16
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 222: Idlewild Road & I-485 Southbound Off Ramp

Movement	EB	EB	SB	SB
Directions Served	T	T	L	L
Maximum Queue (ft)	13	55	322	362
Average Queue (ft)	1	28	130	243
95th Queue (ft)	7	49	276	344
Link Distance (ft)	20	20		673
Upstream Blk Time (%)	1	37		
Queuing Penalty (veh)	4	247		
Storage Bay Dist (ft)			500	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 333: I-485 Northbound Off Ramp & Idlewild Road

Movement	EB	EB	EB	NB	NB	NB
Directions Served	T	T	T	R	R	R
Maximum Queue (ft)	63	85	71	228	230	212
Average Queue (ft)	24	24	12	159	141	135
95th Queue (ft)	57	59	48	225	210	199
Link Distance (ft)	80	80	80	296	296	296
Upstream Blk Time (%)	1	2	1			
Queuing Penalty (veh)	7	12	6			
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 8948

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	T	T	T	R	T	T	TR	T	R	R	T	R
Maximum Queue (ft)	133	157	136	103	128	117	202	105	100	90	89	122
Average Queue (ft)	66	80	62	37	59	52	99	50	50	39	37	56
95th Queue (ft)	112	133	112	76	102	93	170	95	88	78	74	99
Link Distance (ft)	880	880	880		826	826	826	5115			4838	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225								250	250		475
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 6: Stevens Mill Road & Idlewild Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	149
Average Queue (ft)	65
95th Queue (ft)	116
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	475
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 61: Westbound U-Turn & Idlewild Road

Movement	EB	EB	EB	WB	WB
Directions Served	T	T	T	U	U
Maximum Queue (ft)	121	154	119	72	78
Average Queue (ft)	61	81	47	30	42
95th Queue (ft)	108	135	94	62	73
Link Distance (ft)	1139	1139	1139		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	350			350	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 62: Idlewild Road & Eastbound U-Turn

Movement	EB	EB	WB	WB	WB
Directions Served	U	U	T	T	T
Maximum Queue (ft)	126	150	179	146	143
Average Queue (ft)	67	88	114	52	70
95th Queue (ft)	105	132	161	104	124
Link Distance (ft)		826	665	665	665
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	350				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

APPENDIX Q

CRASH DATA

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Study Criteria Summary

County: UNION **City:** All and Rural
Date: 06/01/2015 to 05/31/2020 **Study:** 41000061363
Location: Idlewild Rd (SR 3174/SR 1582) from SR 1524 (Stevens Mill Rd) in Union County to SR 3175 (Stallings Rd) in Mecklenburg County *** Includes 150FT Intersections***

Report Details

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
1	104922420	1.365	11/18/2016 16:21	LEFT TURN, DIFFERENT ROADWAYS	\$ 2000	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 5	Alchl/Drugs:	0	Speed: 15 MPH Dir: W		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
2	106062778	1.365	11/13/2019 14:17	SIDESWIPE, SAME DIRECTION	\$ 2000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 32	Alchl/Drugs:	0	Speed: 10 MPH Dir: W		Veh Mnvr/Ped Actn: 5				Obj Strk:						
Unit	2 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn: 1				Obj Strk:						
3	104706194	1.389	04/15/2016 15:23	SIDESWIPE, SAME DIRECTION	\$ 2300	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 5 MPH Dir: W		Veh Mnvr/Ped Actn: 5				Obj Strk:						
Unit	2 : 4	Alchl/Drugs:	0	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
4	105768640	1.389	02/05/2019 07:37	REAR END, SLOW OR STOP	\$ 9000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn: 1				Obj Strk:						
Unit	2 : 32	Alchl/Drugs:	7	Speed: 20 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
5	104404930	1.393	06/09/2015 09:15	REAR END, SLOW OR STOP	\$ 4000	0	0	0	2	2	1	2	3	0	3	1
Unit	1 : 2	Alchl/Drugs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 2	Alchl/Drugs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	3 : 14	Alchl/Drugs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
6	104416633	1.393	06/21/2015 06:54	REAR END, SLOW OR STOP	\$ 6300	0	0	0	1	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	1	Speed: 30 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 2	Alchl/Drugs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn: 1				Obj Strk:						
Unit	3 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn: 1				Obj Strk:						
7	104426931	1.393	07/06/2015 22:51	RAN OFF ROAD - RIGHT	\$ 1000	0	0	0	0	1	5	1	1	0	3	1
Unit	1 : 2	Alchl/Drugs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:			58			

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
8	104741514	1.393	05/21/2016 13:41	REAR END, SLOW OR STOP	\$ 2000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 5 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn: 1				Obj Strk:						
9	104811511	1.393	08/05/2016 16:23	REAR END, SLOW OR STOP	\$ 2500	0	0	0	2	2	1	2	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 5 MPH Dir: S		Veh Mnvr/Ped Actn: 12				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 5 MPH Dir: S		Veh Mnvr/Ped Actn: 1				Obj Strk:						
10	104842422	1.393	09/07/2016 16:51	LEFT TURN, DIFFERENT ROADWAYS	\$ 1000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: N		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 2	Alchl/Drugs:	0	Speed: 20 MPH Dir: S		Veh Mnvr/Ped Actn: 8				Obj Strk:						
11	104884862	1.393	10/19/2016 15:45	ANGLE	\$ 16000	0	0	0	1	1	1	1	1	0	3	1
Unit	1 : 5	Alchl/Drugs:	0	Speed: 15 MPH Dir: W		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	3 : 2	Alchl/Drugs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn: 1				Obj Strk:						
12	104941355	1.393	11/27/2016 18:41	REAR END, SLOW OR STOP	\$ 2500	0	0	0	0	1	5	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 2	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn: 1				Obj Strk:						
13	104938013	1.393	12/05/2016 17:50	ANGLE	\$ 16000	0	0	0	0	2	5	3	1	0	3	1
Unit	1 : 4	Alchl/Drugs:	0	Speed: 20 MPH Dir: N		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
14	105001555	1.393	02/07/2017 13:01	REAR END, SLOW OR STOP	\$ 5500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 10 MPH Dir: NW		Veh Mnvr/Ped Actn: 11				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: NW		Veh Mnvr/Ped Actn: 1				Obj Strk:						
15	105007747	1.393	02/13/2017 19:05	SIDESWIPE, SAME DIRECTION	\$ 8500	0	0	0	0	1	5	1	1	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed: 15 MPH Dir: S		Veh Mnvr/Ped Actn: 6				Obj Strk:						
Unit	2 : 4	Alchl/Drugs:	0	Speed: 5 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
16	105190181	1.393	08/06/2017 16:12	RAN OFF ROAD - RIGHT	\$ 2500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn: 8				Obj Strk:			58			

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
17	105411102	1.393	03/09/2018 13:47	SIDESWIPE, SAME DIRECTION	\$ 5000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drugs: 0	Speed: 10 MPH	Dir: N	Veh Mnvr/Ped Actn: 7		Obj Strk:									
Unit	2 : 2	Alchl/Drugs: 0	Speed: 15 MPH	Dir: N	Veh Mnvr/Ped Actn: 7		Obj Strk:									
18	105644884	1.393	10/21/2018 13:34	REAR END, SLOW OR STOP	\$ 4000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 30 MPH	Dir: W	Veh Mnvr/Ped Actn: 11		Obj Strk:									
Unit	2 : 5	Alchl/Drugs: 0	Speed: 0 MPH	Dir: W	Veh Mnvr/Ped Actn: 1		Obj Strk:									
19	105674834	1.393	11/13/2018 20:17	ANGLE	\$ 2000	0	0	0	0	2	5	2	4	0	3	1
Unit	1 : 1	Alchl/Drugs: 7	Speed: 45 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 10 MPH	Dir: N	Veh Mnvr/Ped Actn: 8		Obj Strk:									
Unit	3 : 1	Alchl/Drugs: 0	Speed: 15 MPH	Dir: S	Veh Mnvr/Ped Actn: 8		Obj Strk:									
20	105803359	1.393	03/16/2019 20:39	ANGLE	\$ 13000	0	0	1	0	1	5	1	4	0	3	1
Unit	1 : 5	Alchl/Drugs: 0	Speed: 35 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 10 MPH	Dir: N	Veh Mnvr/Ped Actn: 8		Obj Strk:									
21	105843367	1.393	04/23/2019 12:28	ANGLE	\$ 18000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 35 MPH	Dir: NW	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 25 MPH	Dir: NW	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	3 : 2	Alchl/Drugs: 0	Speed: 10 MPH	Dir: S	Veh Mnvr/Ped Actn: 4		Obj Strk:									
22	105851756	1.393	05/03/2019 16:06	ANGLE	\$ 5500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 10 MPH	Dir: E	Veh Mnvr/Ped Actn: 7		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 45 MPH	Dir: SE	Veh Mnvr/Ped Actn: 4		Obj Strk:									
23	105931920	1.393	07/21/2019 19:13	ANGLE	\$ 15000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 2	Alchl/Drugs: 0	Speed: 15 MPH	Dir: W	Veh Mnvr/Ped Actn: 8		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 40 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
24	105982790	1.393	09/09/2019 08:44	ANGLE	\$ 9000	0	0	0	1	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 10 MPH	Dir: E	Veh Mnvr/Ped Actn: 8		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 45 MPH	Dir: W	Veh Mnvr/Ped Actn: 4		Obj Strk:								58	
25	106083558	1.393	12/01/2019 17:40	ANGLE	\$ 9500	0	0	1	0	1	2	1	2	0	3	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 40 MPH	Dir: SW	Veh Mnvr/Ped Actn: 8		Obj Strk:									
Unit	2 : 4	Alchl/Drugs: 0	Speed: 50 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
26	106095087	1.393	12/13/2019 18:10	ANGLE	\$ 2000	0	0	0	0	2	6	3	4	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: W		Veh Mnvr/Ped Actn:				7	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk:					
27	106182755	1.393	03/12/2020 06:51	REAR END, SLOW OR STOP	\$ 1100	0	0	0	0	1	4	1	4	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
28	106185001	1.393	03/16/2020 07:20	REAR END, SLOW OR STOP	\$ 1200	0	0	0	0	1	3	1	1	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
29	105706638	1.399	12/11/2018 19:04	LEFT TURN, DIFFERENT ROADWAYS	\$ 2000	0	0	0	0	1	4	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 40 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
30	106110221	1.402	12/24/2019 11:58	REAR END, SLOW OR STOP	\$ 600	0	0	0	1	1	1	1	1	0	13	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 10 MPH Dir: NW		Veh Mnvr/Ped Actn:				15	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					
31	104486431	1.412	09/09/2015 15:39	REAR END, SLOW OR STOP	\$ 8500	0	1	0	0	1	1	1	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 2	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	4 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
32	106012124	1.418	10/04/2019 07:54	SIDESWIPE, SAME DIRECTION	\$ 4800	0	0	0	0	1	1	1	3	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
33	104980920	1.421	01/20/2017 12:22	ANGLE	\$ 21500	0	0	0	0	2	1	2	2	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 12	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
34	105802982	1.421	03/14/2019 07:17	REAR END, SLOW OR STOP	\$ 8500	0	0	2	0	1	1	1	1	0	13	1
Unit	1 : 5	Alchl/Drgs:	0	Speed: 40 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					

07/27/2020

All data presented in this report comes explicitly from the Traffic Engineering Accident Analysis System based upon criteria provided by the report's creator. The onus is strictly upon the user of this report to exercise due diligence in reviewing and further representing this data.

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**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
Unit	2 : 4	Alchl/Drgs:	0	Speed:	5 MPH Dir: W	Veh Mnvr/Ped Actn:				11	Obj Strk:					
35	105495252	1.428	05/30/2018 15:30	REAR END, SLOW OR STOP	\$ 200	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 2	Alchl/Drgs:	0	Speed:	10 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed:	0 MPH Dir: E	Veh Mnvr/Ped Actn:				1	Obj Strk:					
36	105900115	1.433	06/18/2019 07:50	REAR END, SLOW OR STOP	\$ 21500	0	0	1	0	1	1	1		0		
Unit	1 : 1	Alchl/Drgs:	0	Speed:	45 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed:	0 MPH Dir: W	Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 4	Alchl/Drgs:	0	Speed:	0 MPH Dir: W	Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	4 : 4	Alchl/Drgs:	0	Speed:	0 MPH Dir: W	Veh Mnvr/Ped Actn:				1	Obj Strk:					
37	105791332	1.445	03/02/2019 05:10	RAN OFF ROAD - LEFT	\$ 5000	0	0	0	0	2	5	5	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	7	Speed:	40 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
38	105436834	1.446	04/05/2018 12:53	REAR END, SLOW OR STOP	\$ 6200	0	0	0	0	1	1	1	3	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed:	45 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 3	Alchl/Drgs:	0	Speed:	5 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
39	105119057	1.458	06/02/2017 11:49	REAR END, SLOW OR STOP	\$ 300	0	0	0	0	1	1	1	3	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed:	15 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed:	5 MPH Dir: E	Veh Mnvr/Ped Actn:				11	Obj Strk:					
40	106164150	1.458	02/19/2020 17:58	REAR END, SLOW OR STOP	\$ 3500	0	0	0	0	1	1	2	2	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed:	25 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed:	25 MPH Dir: E	Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	3 : 1	Alchl/Drgs:	0	Speed:	0 MPH Dir: E	Veh Mnvr/Ped Actn:				1	Obj Strk:					
41	104850942	1.468	09/18/2016 17:50	SIDESWIPE, SAME DIRECTION	\$ 3500	0	0	0	0	1	1	1	3	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed:	45 MPH Dir: E	Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed:	45 MPH Dir: E	Veh Mnvr/Ped Actn:				1	Obj Strk:					
42	105053434	1.471	03/29/2017 18:34	REAR END, SLOW OR STOP	\$ 0	0	0	0	0	1	1	1	3	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed:	5 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed:	0 MPH Dir: E	Veh Mnvr/Ped Actn:				1	Obj Strk:					

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
43	106140777	1.480	01/28/2020 09:10	REAR END, SLOW OR STOP	\$ 4800	0	0	0	0	1	1	1	2	0	4	1
Unit	1 : 2	Alchl/Drugs: 0	Speed: 25 MPH	Dir: N	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 20 MPH	Dir: N	Veh Mnvr/Ped Actn: 4		Obj Strk:									
44	105802985	1.488	03/14/2019 15:40	REAR END, SLOW OR STOP	\$ 6000	0	0	0	0	1	1	2	1	0	13	
Unit	1 : 1	Alchl/Drugs: 0	Speed: 35 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 4	Alchl/Drugs: 0	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 1		Obj Strk:									
45	104394930	1.493	06/01/2015 18:22	REAR END, SLOW OR STOP	\$ 2000	0	0	0	0	1	1	1	3	0	13	1
Unit	1 : 10	Alchl/Drugs: 0	Speed: 35 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 2	Alchl/Drugs: 0	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 1		Obj Strk:									
46	104854161	1.493	09/20/2016 05:48	ANIMAL	\$ 2000	0	0	0	0	1	4	1	4	0	0	
Unit	1 : 4	Alchl/Drugs: 0	Speed: 30 MPH	Dir: W	Veh Mnvr/Ped Actn: 4		Obj Strk:		17							
47	105405395	1.493	03/08/2018 20:57	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	4	1	1	0	13	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 35 MPH	Dir: W	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 4	Alchl/Drugs: 0	Speed: 0 MPH	Dir: W	Veh Mnvr/Ped Actn: 1		Obj Strk:									
48	104556264	1.498	11/16/2015 16:10	REAR END, SLOW OR STOP	\$ 5000	0	0	0	2	1	1	1	3	0	13	1
Unit	1 : 5	Alchl/Drugs: 0	Speed: 45 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 1		Obj Strk:									
Unit	3 : 1	Alchl/Drugs: 0	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 1		Obj Strk:									
49	104833994	1.498	08/29/2016 19:21	REAR END, SLOW OR STOP	\$ 1	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drugs: 0	Speed: 3 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 2	Alchl/Drugs: 7	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 1		Obj Strk:									
50	104884861	1.498	10/19/2016 19:09	REAR END, SLOW OR STOP	\$ 200	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 1	Alchl/Drugs: 7	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 1		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 5 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
51	104829599	1.503	08/25/2016 13:20	SIDESWIPE, OPPOSITE DIRECTION	\$ 2000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 5	Alchl/Drugs: 0	Speed: 40 MPH	Dir: W	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 35 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
52	104910800	1.503	11/12/2016 19:33	ANIMAL	\$ 2000	0	0	0	0	1	5	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 40 MPH Dir: W		Veh Mnvr/Ped Actn:				4		Obj Strk:		17		
53	106074874	1.503	11/23/2019 19:33	SIDESWIPE, OPPOSITE DIRECTION	\$ 31000	0	0	0	3	2	5	2	2	0	13	2
Unit	1 : 1	Alchl/Drgs:	4	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	3 : 1	Alchl/Drgs:	7	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:				
54	104989647	1.508	01/27/2017 16:40	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	1	1	3	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: SE		Veh Mnvr/Ped Actn:				11		Obj Strk:				
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: SE		Veh Mnvr/Ped Actn:				1		Obj Strk:				
55	105457741	1.508	04/24/2018 07:31	HEAD ON	\$ 20000	0	0	2	1	2	1	2	2	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: W		Veh Mnvr/Ped Actn:				4		Obj Strk:				
56	105828194	1.508	04/09/2019 17:19	REAR END, SLOW OR STOP	\$ 18500	0	0	2	1	1	1	2	3	0	13	1
Unit	1 : 5	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				
Unit	3 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				
Unit	4 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				
Unit	5 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				
Unit	6 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				
57	104857169	1.523	09/23/2016 21:14	ANGLE	\$ 7000	0	0	0	2	1	5	1	3	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 25 MPH Dir: SE		Veh Mnvr/Ped Actn:				8		Obj Strk:				
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: NE		Veh Mnvr/Ped Actn:				4		Obj Strk:				
58	105116296	1.558	05/30/2017 17:56	REAR END, SLOW OR STOP	\$ 4000	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 4	Alchl/Drgs:	7	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				11		Obj Strk:				
Unit	3 : 1	Alchl/Drgs:	7	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				11		Obj Strk:				
59	104619887	1.568	01/20/2016 17:49	REAR END, SLOW OR STOP	\$ 9500	0	0	0	2	2	2	6	3	0	13	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
60	105240290	1.578	10/05/2017 17:28	SIDESWIPE, SAME DIRECTION	\$ 2400	0	0	0	0	1	1	1	3	0	3	1
Unit	1 : 4	Alchl/Drugs: 0	Speed: 15 MPH	Dir: E	Veh Mnvr/Ped Actn: 5		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 1		Obj Strk:									
61	104874995	1.583	10/11/2016 06:53	SIDESWIPE, SAME DIRECTION	\$ 4200	0	0	0	0	1	5	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 50 MPH	Dir: W	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 4	Alchl/Drugs: 0	Speed: 0 MPH	Dir: W	Veh Mnvr/Ped Actn: 1		Obj Strk:									
62	105593063	1.593	09/05/2018 06:55	ANIMAL	\$ 6500	0	0	0	0	1	1	1	3	0	13	1
Unit	1 : 4	Alchl/Drugs: 0	Speed: 35 MPH	Dir: W	Veh Mnvr/Ped Actn: 4		Obj Strk: 17									
63	105881598	1.593	06/01/2019 14:02	REAR END, SLOW OR STOP	\$ 15500	0	0	1	1	1	1	1	2	0	0	
Unit	1 : 4	Alchl/Drugs: 0	Speed: 40 MPH	Dir: W	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 4	Alchl/Drugs: 0	Speed: 0 MPH	Dir: W	Veh Mnvr/Ped Actn: 1		Obj Strk:									
64	105336125	1.598	12/20/2017 17:20	REAR END, SLOW OR STOP	\$ 2500	0	0	0	0	2	5	3	2	0	13	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 15 MPH	Dir: SE	Veh Mnvr/Ped Actn: 11		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 5 MPH	Dir: SE	Veh Mnvr/Ped Actn: 11		Obj Strk:									
65	105330469	1.598	12/20/2017 17:22	REAR END, SLOW OR STOP	\$ 6500	0	0	0	0	2	5	3	2	0	13	1
Unit	1 : 4	Alchl/Drugs: 0	Speed: 15 MPH	Dir: SE	Veh Mnvr/Ped Actn: 11		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 0 MPH	Dir: SE	Veh Mnvr/Ped Actn: 1		Obj Strk:									
66	105464744	1.598	04/30/2018 18:27	REAR END, SLOW OR STOP	\$ 4500	0	0	0	0	1	1	1	2	0	13	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 15 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 4	Alchl/Drugs: 0	Speed: 20 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
67	105287314	1.608	11/14/2017 12:04	REAR END, SLOW OR STOP	\$ 10000	0	0	0	3	1	1	1	2	0	13	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 35 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 2	Alchl/Drugs: 0	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 1		Obj Strk:									
68	105831451	1.618	04/11/2019 15:46	REAR END, SLOW OR STOP	\$ 6000	0	0	0	0	1	1	1	2	0	13	1
Unit	1 : 5	Alchl/Drugs: 0	Speed: 35 MPH	Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:									
Unit	2 : 1	Alchl/Drugs: 0	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 1		Obj Strk:									
Unit	3 : 1	Alchl/Drugs: 0	Speed: 0 MPH	Dir: E	Veh Mnvr/Ped Actn: 1		Obj Strk:									

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
69	105298024	1.628	11/26/2017 05:13	RAN OFF ROAD - RIGHT	\$ 3000	0	0	0	0	1	4	1	3	0	3	1
Unit	1 : 2	Alchl/Drgs:	1	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:		58		
70	105240785	1.633	10/05/2017 16:53	REAR END, SLOW OR STOP	\$ 3500	0	0	0	0	1	1	1	3	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 15 MPH Dir: W		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 2	Alchl/Drgs:	0	Speed: 15 MPH Dir: W		Veh Mnvr/Ped Actn:				1		Obj Strk:				
71	106056677	1.633	11/09/2019 18:30	REAR END, SLOW OR STOP	\$ 14200	0	0	0	0	1	2	1	2	0	3	1
Unit	1 : 5	Alchl/Drgs:	0	Speed: 45 MPH Dir: N		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: N		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	3 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1		Obj Strk:				
72	105272301	1.648	10/31/2017 16:12	REAR END, SLOW OR STOP	\$ 1000	0	0	0	0	1	1	1	3	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 3	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				
73	105315040	1.648	12/08/2017 15:54	REAR END, SLOW OR STOP	\$ 5500	0	0	0	0	6	1	3	3	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				
74	106187462	1.673	03/18/2020 10:08	REAR END, SLOW OR STOP	\$ 13000	0	0	0	0	1	1	1	4	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				1		Obj Strk:				
75	105175784	1.678	07/30/2017 16:50	REAR END, SLOW OR STOP	\$ 7000	0	0	0	1	1	1	1	1	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 4	Alchl/Drgs:	7	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				
76	104938751	1.681	12/06/2016 17:37	REAR END, SLOW OR STOP	\$ 6500	0	0	0	0	1	4	1	3	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 2	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				
77	105490762	1.698	05/25/2018 19:06	REAR END, SLOW OR STOP	\$ 10000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drgs:	7	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	2 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				
Unit	3 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				
Unit	4 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1		Obj Strk:				

07/27/2020

All data presented in this report comes explicitly from the Traffic Engineering Accident Analysis System based upon vi-
criteria provided by the report's creator. The onus is strictly upon the user of this report to exercise due diligence in ir
and further representing this data.

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**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
Unit	5 : 1	Alchl/Drgs:	0	Speed:	0 MPH Dir: E	Veh Mnvr/Ped Actn:				1	Obj Strk:					
78	105672422	1.703	11/04/2018 16:31	ANIMAL	\$ 2500	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed:	45 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
79	104646107	1.718	02/16/2016 06:04	ANIMAL	\$ 5000	0	0	0	0	2	3	3	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed:	45 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
80	105321954	1.728	12/13/2017 17:52	REAR END, SLOW OR STOP	\$ 11000	0	0	0	2	1	5	1	3	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed:	30 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed:	0 MPH Dir: E	Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 1	Alchl/Drgs:	0	Speed:	0 MPH Dir: E	Veh Mnvr/Ped Actn:				1	Obj Strk:					
81	105573062	1.733	08/15/2018 17:34	REAR END, SLOW OR STOP	\$ 1250	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed:	30 MPH Dir: W	Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed:	0 MPH Dir: W	Veh Mnvr/Ped Actn:				1	Obj Strk:					
82	104626289	1.738	01/26/2016 18:02	REAR END, SLOW OR STOP	\$ 5800	0	0	0	0	1	2	2	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed:	30 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed:	0 MPH Dir: E	Veh Mnvr/Ped Actn:				16	Obj Strk:					
83	105267525	1.738	10/26/2017 19:32	REAR END, SLOW OR STOP	\$ 10500	0	0	1	0	1	5	1	3	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed:	45 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed:	0 MPH Dir: E	Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 4	Alchl/Drgs:	0	Speed:	0 MPH Dir: E	Veh Mnvr/Ped Actn:				1	Obj Strk:					
84	104772968	1.743	06/22/2016 18:28	REAR END, SLOW OR STOP	\$ 6000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed:	35 MPH Dir: SE	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed:	15 MPH Dir: SE	Veh Mnvr/Ped Actn:				4	Obj Strk:					
85	105459584	1.743	04/25/2018 07:24	REAR END, SLOW OR STOP	\$ 4500	0	0	0	0	2	1	2	3	0	13	1
Unit	1 : 2	Alchl/Drgs:	0	Speed:	10 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed:	0 MPH Dir: W	Veh Mnvr/Ped Actn:				1	Obj Strk:					
86	104582567	1.748	12/11/2015 17:54	REAR END, SLOW OR STOP	\$ 3500	0	0	0	0	1	2	2	1	0	0	
Unit	1 : 2	Alchl/Drgs:	0	Speed:	35 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed:	25 MPH Dir: W	Veh Mnvr/Ped Actn:				1	Obj Strk:					

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
Unit	3 : 1	Alchl/Drgs:	0	Speed: 25 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					
87	104948453	1.748	12/14/2016 16:44	REAR END, SLOW OR STOP	\$ 600	0	0	0	0	1	5	1	1	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
88	105330471	1.748	12/20/2017 17:50	REAR END, SLOW OR STOP	\$ 1650	0	0	0	0	2	5	3	3	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 3	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
89	105451106	1.748	04/17/2018 15:53	REAR END, SLOW OR STOP	\$ 8500	0	0	0	2	1	1	1	1	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				11	Obj Strk:					
90	106238577	1.748	05/31/2020 03:36	SIDESWIPE, OPPOSITE DIRECTION	\$ 3000	0	0	0	0	1	5	1	1	0	0	
Unit	1 : 32	Alchl/Drgs:	7	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	7	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				2	Obj Strk:					
91	105330473	1.758	12/21/2017 15:10	REAR END, SLOW OR STOP	\$ 4000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
92	105023395	1.768	02/28/2017 07:19	REAR END, SLOW OR STOP	\$ 2400	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 2 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
93	105650583	1.768	10/25/2018 18:20	SIDESWIPE, SAME DIRECTION	\$ 3700	0	0	0	0	1	2	1	1	0	14	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
94	104986060	1.778	01/24/2017 19:02	REAR END, SLOW OR STOP	\$ 1500	0	0	0	0	1	5	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: SE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: SE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
95	105383810	1.798	02/17/2018 14:30	ANGLE	\$ 2000	0	0	0	0	1	1	2	3	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				7	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
96	105452470	1.798	04/19/2018 16:11	SIDESWIPE, SAME DIRECTION	\$ 1500	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 5	Alchl/Drugs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
97	106137574	1.813	01/24/2020 17:13	RAN OFF ROAD - RIGHT	\$ 3500	0	0	0	0	2	1	3	1	0	13	1
Unit	1 : 2	Alchl/Drugs:	0	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk: 33					
98	104860702	1.818	09/26/2016 17:12	REAR END, SLOW OR STOP	\$ 4600	0	0	0	1	1	1	1	3	0	3	1
Unit	1 : 4	Alchl/Drugs:	0	Speed: 25 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
99	105184889	1.818	08/07/2017 19:20	REAR END, SLOW OR STOP	\$ 3500	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
100	105448118	1.838	04/16/2018 16:12	BACKING UP	\$ 2500	0	0	0	1	1	1	1	2	0	0	
Unit	1 : 4	Alchl/Drugs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				16	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 5 MPH Dir: W		Veh Mnvr/Ped Actn:				10	Obj Strk:					
Unit	3 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
101	105883529	1.838	06/03/2019 18:47	REAR END, SLOW OR STOP	\$ 1000	0	0	0	0	1	1	1	3	0	13	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: S		Veh Mnvr/Ped Actn:				1	Obj Strk:					
102	105018858	1.850	02/23/2017 17:25	REAR END, SLOW OR STOP	\$ 3200	0	0	0	0	1	1	1	3	0	0	
Unit	1 : 4	Alchl/Drugs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 32	Alchl/Drugs:	7	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
103	105453068	1.850	04/21/2018 13:36	REAR END, SLOW OR STOP	\$ 4000	0	0	0	2	1	1	1	4	0	3	1
Unit	1 : 2	Alchl/Drugs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
104	104721563	1.858	05/02/2016 11:17	SIDESWIPE, SAME DIRECTION	\$ 3100	0	0	0	0	1	1	2	3	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 15 MPH Dir: E		Veh Mnvr/Ped Actn:				5	Obj Strk:					

07/27/2020

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**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
Unit	2 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
105	105328308	1.858	12/18/2017 20:29	REAR END, SLOW OR STOP	\$ 14000	0	0	0	0	1	4	1	3	0	3	
Unit	1 : 1	Alchl/Drugs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	4 : 5	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
106	105579496	1.858	08/22/2018 18:22	ANGLE	\$ 3000	0	0	0	0	1	1	1	1	0	1	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				7	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 15 MPH Dir: E		Veh Mnvr/Ped Actn:				5	Obj Strk:					
107	106192707	1.878	03/25/2020 15:59	REAR END, SLOW OR STOP	\$ 24500	0	0	0	2	1	1	1	3	0	0	
Unit	1 : 5	Alchl/Drugs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
108	105184888	1.888	08/07/2017 18:07	REAR END, SLOW OR STOP	\$ 2500	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 3 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
109	104683776	1.898	03/23/2016 18:56	REAR END, SLOW OR STOP	\$ 5000	0	0	0	1	1	1	1	3	0	3	1
Unit	1 : 4	Alchl/Drugs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	3 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
110	104731108	1.898	05/11/2016 18:25	SIDESWIPE, SAME DIRECTION	\$ 200	0	0	0	0	1	1	1	3	0	3	1
Unit	1 : 2	Alchl/Drugs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
111	105112589	1.898	05/26/2017 17:51	REAR END, SLOW OR STOP	\$ 6000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
112	105616553	1.900	09/26/2018 07:09	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	3	1	3	0	13	1
Unit	1 : 4	Alchl/Drugs:	0	Speed: 30 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed: 5 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					

07/27/2020

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**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
113	105207150	1.903	08/31/2017 18:41	REAR END, SLOW OR STOP	\$ 4000	0	0	0	1	2	1	3	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: SE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: SE		Veh Mnvr/Ped Actn:				1	Obj Strk:					
114	105122587	1.920	06/05/2017 19:32	SIDESWIPE, SAME DIRECTION	\$ 400	0	0	0	0	1	1	2	1	0	0	
Unit	1 : 2	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 14	Alchl/Drgs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
115	104471390	1.928	08/20/2015 16:37	REAR END, SLOW OR STOP	\$ 7500	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 2	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 3	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
116	104450199	1.933	07/27/2015 17:47	ANGLE	\$ 7000	0	0	0	0	1	1	2	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: S		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
117	105074202	1.933	04/21/2017 16:58	LEFT TURN, DIFFERENT ROADWAYS	\$ 2500	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: SW		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
118	104471397	1.934	08/26/2015 07:50	ANGLE	\$ 6500	0	0	0	1	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: N		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 30 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
119	104548179	1.934	10/30/2015 19:51	REAR END, SLOW OR STOP	\$ 1800	0	0	0	0	1	4	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	7	Speed: 5 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 5 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
120	104602847	1.934	12/31/2015 17:39	REAR END, SLOW OR STOP	\$ 15000	0	0	0	1	2	5	2	1	0	13	1
Unit	1 : 5	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
121	104611137	1.934	01/06/2016 18:47	LEFT TURN, SAME ROADWAY	\$ 4000	0	0	0	0	1	5	1	1	0	0	
Unit	1 : 2	Alchl/Drgs:	0	Speed: 5 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 25 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					

**North Carolina Department of Transportation
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Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
122	104663696	1.934	03/03/2016 17:18	ANGLE	\$ 1500	0	0	0	0	2	2	3	3	0	0	
Unit	1 : 2	Alchl/Drugs:	0	Speed:	5 MPH Dir: SW	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	20 MPH Dir: SE	Veh Mnvr/Ped Actn:				4	Obj Strk:					
123	104669444	1.934	03/07/2016 18:25	ANGLE	\$ 8000	0	0	0	1	1	1	1	3	0	0	
Unit	1 : 4	Alchl/Drugs:	0	Speed:	10 MPH Dir: SW	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	40 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
124	104704121	1.934	04/15/2016 17:07	ANGLE	\$ 7000	0	0	0	0	1	1	1	2	0	3	1
Unit	1 : 2	Alchl/Drugs:	0	Speed:	15 MPH Dir: W	Veh Mnvr/Ped Actn:				8	Obj Strk: 35					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	30 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
125	104712324	1.934	04/21/2016 17:37	RAN OFF ROAD - RIGHT	\$ 700	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed:	10 MPH Dir: W	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	45 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
126	104734006	1.934	05/13/2016 17:22	ANGLE	\$ 3500	0	0	0	1	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed:	10 MPH Dir: N	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	45 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
127	104758914	1.934	06/09/2016 19:46	SIDESWIPE, SAME DIRECTION	\$ 600	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drugs:	0	Speed:	40 MPH Dir: SE	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	7	Speed:	40 MPH Dir: SE	Veh Mnvr/Ped Actn:				4	Obj Strk:					
128	104854162	1.934	09/20/2016 19:22	ANGLE	\$ 1400	0	0	0	0	1	2	1	3	0	0	
Unit	1 : 2	Alchl/Drugs:	0	Speed:	5 MPH Dir: N	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed:	30 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
129	104879734	1.934	10/14/2016 20:10	ANGLE	\$ 23000	0	0	0	0	1	5	1	1	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed:	10 MPH Dir: NE	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed:	45 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
130	104918233	1.934	11/17/2016 17:46	ANGLE	\$ 7000	0	0	0	0	1	5	1	2	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed:	15 MPH Dir: SW	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 2	Alchl/Drugs:	0	Speed:	35 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
131	104954907	1.934	12/20/2016 14:06	ANGLE	\$ 8000	0	0	0	2	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: W		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 2	Alchl/Drgs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
132	105048602	1.934	03/24/2017 18:46	LEFT TURN, SAME ROADWAY	\$ 12000	0	0	0	5	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: W		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: SE		Veh Mnvr/Ped Actn: 4				Obj Strk:						
133	105101919	1.934	05/16/2017 17:34	RIGHT TURN, DIFFERENT ROADWAYS	\$ 3000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: N		Veh Mnvr/Ped Actn: 7				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
134	105179004	1.934	08/02/2017 21:26	SIDESWIPE, OPPOSITE DIRECTION	\$ 8000	0	0	1	1	1	5	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	7	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn: 1				Obj Strk:						
Unit	2 : 20	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
135	105200478	1.934	08/25/2017 18:07	LEFT TURN, SAME ROADWAY	\$ 8000	0	0	0	1	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: N		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 30 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
136	105308898	1.934	12/04/2017 23:48	BACKING UP	\$ 600	0	0	0	0	1	4	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	2	Speed: 5 MPH Dir: S		Veh Mnvr/Ped Actn: 10				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn: 1				Obj Strk:						
137	105421726	1.934	03/20/2018 17:37	ANGLE	\$ 12500	0	0	0	1	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 5 MPH Dir: SW		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
138	105470007	1.934	05/04/2018 18:34	LEFT TURN, DIFFERENT ROADWAYS	\$ 1150	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 2	Alchl/Drgs:	0	Speed: 15 MPH Dir: NW		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: W		Veh Mnvr/Ped Actn: 8				Obj Strk:						
139	105472025	1.934	05/07/2018 19:14	ANGLE	\$ 15000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: N		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						

**North Carolina Department of Transportation
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Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
140	105579500	1.934	08/23/2018 16:58	ANGLE	\$ 7000	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
141	105671300	1.934	11/11/2018 18:27	LEFT TURN, SAME ROADWAY	\$ 4500	0	0	0	0	1	4	1	3	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 15 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
142	105672423	1.934	11/13/2018 17:49	LEFT TURN, DIFFERENT ROADWAYS	\$ 2800	0	0	0	0	2	5	2	1	0		
Unit	1 : 4	Alchl/Drgs:	0	Speed: 15 MPH Dir: SW		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
143	105764126	1.934	02/01/2019 19:50	LEFT TURN, DIFFERENT ROADWAYS	\$ 18000	0	0	0	0	1	5	1	1	0	13	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
144	105835361	1.934	04/16/2019 18:01	LEFT TURN, DIFFERENT ROADWAYS	\$ 10000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 5 MPH Dir: S		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
145	105942161	1.934	07/29/2019 18:22	LEFT TURN, SAME ROADWAY	\$ 5000	0	0	0	1	1	1	1	3	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: NW		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 40 MPH Dir: SE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
146	106008447	1.934	09/30/2019 17:34	ANGLE	\$ 3000	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
147	106021085	1.934	10/10/2019 17:34	LEFT TURN, DIFFERENT ROADWAYS	\$ 6000	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: S		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	3 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
148	106145300	1.934	02/04/2020 18:19	ANGLE	\$ 5000	0	0	0	0	1	2	1	1	0	13	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 5 MPH Dir: SW		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
149	105116294	1.941	05/30/2017 19:48	REAR END, SLOW OR STOP	\$ 1250	0	0	0	0	1	1	1	3	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	7	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
150	105302441	1.941	11/27/2017 17:54	SIDESWIPE, SAME DIRECTION	\$ 11000	0	0	0	0	1	2	1	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 25 MPH Dir: E		Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
151	105666643	1.941	11/06/2018 17:09	REAR END, SLOW OR STOP	\$ 4500	0	0	0	2	1	1	1	1	0	13	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 15 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
152	104502260	1.960	09/25/2015 17:14	REAR END, SLOW OR STOP	\$ 800	0	0	0	0	2	1	3	1	0	0	
Unit	1 : 3	Alchl/Drgs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
153	104618526	1.960	01/19/2016 06:50	SIDESWIPE, SAME DIRECTION	\$ 2500	0	0	0	0	1	3	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 12	Alchl/Drgs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
154	105228044	1.966	09/21/2017 17:18	SIDESWIPE, SAME DIRECTION	\$ 3000	0	0	0	0	1	1	1	3	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
155	104833989	1.970	08/23/2016 14:27	REAR END, SLOW OR STOP	\$ 700	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 2	Alchl/Drgs:	0	Speed: 10 MPH Dir: SE		Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	2 : 12	Alchl/Drgs:	0	Speed: 10 MPH Dir: SE		Veh Mnvr/Ped Actn:				11	Obj Strk:					
156	105325702	1.970	12/13/2017 17:30	REAR END, TURN	\$ 300	0	0	0	0	1	5	1	1	0	13	1
Unit	1 : 32	Alchl/Drgs:	7	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				6	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
157	105390694	1.975	02/22/2018 16:32	REAR END, SLOW OR STOP	\$ 5000	0	0	0	2	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
158	105588464	1.977	08/30/2018 17:40	REAR END, SLOW OR STOP	\$ 800	0	0	0	0	1	1	2	1	0	13	1
Unit	1 : 1	Alchl/Drugs:	7	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed: 7 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
159	105221315	1.978	09/15/2017 10:30	SIDESWIPE, SAME DIRECTION	\$ 200	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 2	Alchl/Drugs:	7	Speed: 50 MPH Dir: E		Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 2	Alchl/Drugs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
160	105236338	1.978	09/30/2017 13:45	REAR END, SLOW OR STOP	\$ 2800	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 25 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
161	105412982	1.978	03/15/2018 22:07	REAR END, SLOW OR STOP	\$ 5500	0	0	0	0	1	5	1	4	0	3	1
Unit	1 : 5	Alchl/Drugs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
162	105413925	1.978	03/18/2018 13:13	REAR END, SLOW OR STOP	\$ 2000	0	0	0	0	1	1	1	3	0	13	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
163	105668828	1.978	11/06/2018 09:24	REAR END, SLOW OR STOP	\$ 5000	0	0	0	0	2	1	3	3	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
164	106140779	1.978	01/28/2020 16:19	ANGLE	\$ 6500	0	0	0	0	1	1	1	3	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 10 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
165	104471396	1.979	08/24/2015 18:08	REAR END, SLOW OR STOP	\$ 10000	0	0	0	0	1	1	1	3	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
166	105878454	1.979	05/30/2019 13:57	SIDESWIPE, SAME DIRECTION	\$ 4500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drugs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
167	104428992	1.989	07/10/2015 07:26	REAR END, SLOW OR STOP	\$ 1500	0	0	0	0	1	1	1	1	0	3	
Unit	1 : 2	Alchl/Drgs:	0	Speed: 25 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					
168	104907224	1.989	11/07/2016 18:13	REAR END, SLOW OR STOP	\$ 125	0	0	0	0	1	4	1	2	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
169	104918234	1.989	11/17/2016 18:53	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	5	1	3	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
170	104971245	1.989	01/01/2017 18:49	BACKING UP	\$ 500	0	0	0	0	2	5	3	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				10	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					
171	105073612	1.989	04/19/2017 15:32	RAN OFF ROAD - RIGHT	\$ 5000	0	0	1	0	2	1	3	1	1	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 15 MPH Dir: E		Veh Mnvr/Ped Actn:				8	Obj Strk:					
172	105348993	1.989	01/12/2018 09:20	REAR END, SLOW OR STOP	\$ 4200	0	0	0	0	2	1	2	1	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 40 MPH Dir: NW		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: NW		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: NW		Veh Mnvr/Ped Actn:				1	Obj Strk:					
173	105397005	1.989	03/02/2018 13:40	REAR END, SLOW OR STOP	\$ 3800	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					
174	105490757	1.989	05/23/2018 22:31	REAR END, SLOW OR STOP	\$ 10000	0	0	0	1	1	4	2	3	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
175	105516557	1.989	06/19/2018 18:04	ANGLE	\$ 5000	0	0	0	2	1	1	1	1	0	13	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 30 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
176	105718597	1.989	12/20/2018 18:49	HEAD ON	\$ 600	0	0	0	0	3	2	3	4	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: N		Veh Mnvr/Ped Actn: 7				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn: 9				Obj Strk:						
177	105829610	1.989	04/10/2019 11:49	REAR END, SLOW OR STOP	\$ 800	0	0	0	0	1	1	1	3	0	3	1
Unit	1 : 32	Alchl/Drgs:	7	Speed: 10 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn: 1				Obj Strk:						
178	105837360	1.989	04/18/2019 18:17	ANGLE	\$ 10000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: S		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
179	105848979	1.989	04/30/2019 18:11	SIDESWIPE, SAME DIRECTION	\$ 2200	0	0	0	0	1	1	1	4	0	3	1
Unit	1 : 5	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn: 5				Obj Strk:						
Unit	2 : 2	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
180	105859778	1.989	05/08/2019 15:15	REAR END, SLOW OR STOP	\$ 8000	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 25 MPH Dir: W		Veh Mnvr/Ped Actn: 1				Obj Strk:						
181	105926924	1.989	07/15/2019 07:36	REAR END, SLOW OR STOP	\$ 4000	0	0	0	0	1	1	1	3	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 30 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 25 MPH Dir: W		Veh Mnvr/Ped Actn: 1				Obj Strk:						
182	106041462	1.989	10/23/2019 22:47	OTHER NON-COLLISION	\$ 500	0	0	0	0	1	4	1	1	0	3	1
Unit	1 : 20	Alchl/Drgs:	1	Speed: 25 MPH Dir: E		Veh Mnvr/Ped Actn: 7				Obj Strk:						
183	106166688	1.989	02/25/2020 09:00	REAR END, SLOW OR STOP	\$ 2000	0	0	0	0	2	1	2	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn: 12				Obj Strk:						
Unit	2 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn: 1				Obj Strk:						
184	106236642	1.989	05/27/2020 22:08	RAN OFF ROAD - LEFT	\$ 2000	0	0	0	0	2	5	1	1	0	13	1
Unit	1 : 1	Alchl/Drgs:	1	Speed: 30 MPH Dir: E		Veh Mnvr/Ped Actn: 7				Obj Strk:			58			
185	105845278	1.998	04/27/2019 19:38	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
Unit	2 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
186	105125191	2.006	06/06/2017 18:47	REAR END, SLOW OR STOP	\$ 2900	0	0	0	1	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 35 MPH Dir: SE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 3 MPH Dir: SE		Veh Mnvr/Ped Actn:				11	Obj Strk:					
187	104509032	2.036	10/05/2015 18:49	REAR END, SLOW OR STOP	\$ 1900	0	0	0	1	2	2	3	3	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 45 MPH Dir: NW		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: NW		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: NW		Veh Mnvr/Ped Actn:				1	Obj Strk:					
188	104462907	2.061	08/16/2015 12:41	REAR END, SLOW OR STOP	\$ 1000	0	0	0	0	1	1	1	3	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
189	104814790	2.072	08/10/2016 15:45	REAR END, SLOW OR STOP	\$ 2000	0	0	0	0	2	1	2	1	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 45 MPH Dir: SE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: SE		Veh Mnvr/Ped Actn:				1	Obj Strk:					
190	105467038	2.081	05/03/2018 18:45	REAR END, SLOW OR STOP	\$ 7500	0	0	0	0	1	1	1	1	0	0	2
Unit	1 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
191	105970897	2.098	08/27/2019 12:02	REAR END, SLOW OR STOP	\$ 1250	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 5	Alchl/Drgs:	0	Speed: 5 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
192	105212698	2.150	09/06/2017 17:34	REAR END, SLOW OR STOP	\$ 1000	0	0	0	0	3	1	3	1	1	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: SE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: SE		Veh Mnvr/Ped Actn:				1	Obj Strk:					
193	104477182	2.159	09/01/2015 16:45	REAR END, SLOW OR STOP	\$ 2000	0	0	0	1	1	1	1	1	0	5	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
194	104509865	2.159	09/22/2015 18:20	REAR END, SLOW OR STOP	\$ 5500	0	0	0	4	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
195	105466832	2.159	05/02/2018 18:34	REAR END, SLOW OR STOP	\$ 2200	0	0	1	0	1	1	1	1	0	0	
Unit	1 : 20	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 25 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
196	105490874	2.172	05/27/2018 23:00	REAR END, SLOW OR STOP	\$ 12000	0	0	0	2	1	4	2	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	4	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn:				11	Obj Strk:					
197	105067605	2.176	04/13/2017 17:53	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
198	104432225	2.178	07/12/2015 15:39	REAR END, SLOW OR STOP	\$ 5500	0	0	0	1	1	1	1	3	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
199	104468000	2.178	08/13/2015 14:34	REAR END, SLOW OR STOP	\$ 375	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: SW		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 3	Alchl/Drgs:	0	Speed: 5 MPH Dir: SW		Veh Mnvr/Ped Actn:				1	Obj Strk:					
200	104481603	2.178	09/07/2015 14:38	LEFT TURN, SAME ROADWAY	\$ 3500	0	0	0	1	1	1	1	1	0	4	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: NW		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 42 MPH Dir: SE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
201	104575061	2.178	11/25/2015 17:03	RIGHT TURN, DIFFERENT ROADWAYS	\$ 1000	0	0	0	0	1	4	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: N		Veh Mnvr/Ped Actn:				7	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
202	104639702	2.178	02/08/2016 16:45	REAR END, SLOW OR STOP	\$ 800	0	0	0	0	1	1	2	1	0	3	1
Unit	1 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				12	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					

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Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
203	104667175	2.178	02/13/2016 15:43	REAR END, SLOW OR STOP	\$ 2700	0	0	0	0	1	1	1	3	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: NE		Veh Mnvr/Ped Actn:				12	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: NE		Veh Mnvr/Ped Actn:				1	Obj Strk:					
204	104707189	2.178	04/17/2016 12:37	REAR END, SLOW OR STOP	\$ 1100	0	0	0	1	1	1	1	3	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 3 MPH Dir: N		Veh Mnvr/Ped Actn:				3	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
205	104706541	2.178	04/18/2016 19:56	REAR END, SLOW OR STOP	\$ 4000	0	0	0	5	1	2	1	7	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 10 MPH Dir: NE		Veh Mnvr/Ped Actn:				7	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 5 MPH Dir: NE		Veh Mnvr/Ped Actn:				7	Obj Strk:					
206	104713269	2.178	04/19/2016 16:11	BACKING UP	\$ 1300	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				10	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					
207	104892153	2.178	10/25/2016 14:57	REAR END, SLOW OR STOP	\$ 2000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 10 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
208	104893363	2.178	10/26/2016 19:13	REAR END, SLOW OR STOP	\$ 2000	0	0	0	0	1	5	1	1	0	3	2
Unit	1 : 4	Alchl/Drgs:	0	Speed: 5 MPH Dir: N		Veh Mnvr/Ped Actn:				7	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				7	Obj Strk:					
209	104909243	2.178	11/10/2016 18:23	LEFT TURN, SAME ROADWAY	\$ 12000	0	0	0	2	1	5	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 20 MPH Dir: N		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
210	104950466	2.178	12/02/2016 12:48	MOVABLE OBJECT	\$ 200	0	0	0	0	1	1	1	5	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:				18	
211	104966344	2.178	12/30/2016 14:38	REAR END, SLOW OR STOP	\$ 1400	0	0	0	0	1	1	1	2	0	1	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				12	Obj Strk:					

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
212	104987318	2.178	01/23/2017 20:40	REAR END, SLOW OR STOP	\$ 11000	0	0	2	2	1	5	2	2	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: NW		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: NW		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: NW		Veh Mnvr/Ped Actn:				1	Obj Strk:					
213	105004766	2.178	02/07/2017 17:39	ANGLE	\$ 2500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				7	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
214	105031560	2.178	03/02/2017 19:37	SIDESWIPE, SAME DIRECTION	\$ 500	0	0	0	0	1	5	1	2	0	0	
Unit	1 : 32	Alchl/Drgs:	7	Speed: 30 MPH Dir: N		Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 25 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
215	105081139	2.178	05/01/2017 07:25	ANGLE	\$ 2300	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 20 MPH Dir: NW		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
216	105105317	2.178	05/20/2017 18:59	REAR END, SLOW OR STOP	\$ 4300	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 70 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 70 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
217	105118140	2.178	05/31/2017 16:14	REAR END, SLOW OR STOP	\$ 6000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 15 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
218	105212475	2.178	09/07/2017 07:07	ANGLE	\$ 13000	0	0	0	3	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: S		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: NW		Veh Mnvr/Ped Actn:				4	Obj Strk:					
219	105447924	2.178	04/13/2018 19:10	REAR END, SLOW OR STOP	\$ 4500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 11	Alchl/Drgs:	0	Speed: 5 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 5 MPH Dir: N		Veh Mnvr/Ped Actn:				11	Obj Strk:					
220	105462097	2.178	04/15/2018 13:51	REAR END, SLOW OR STOP	\$ 100	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
221	105494182	2.178	05/28/2018 16:29	BACKING UP	\$ 1500	0	0	0	0	2	1	2	1	0	3	1
Unit	1 : 32	Alchl/Drgs:	7	Speed: 20 MPH Dir: NW		Veh Mnvr/Ped Actn: 10				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: SE		Veh Mnvr/Ped Actn: 4				Obj Strk:						
222	105519218	2.178	06/22/2018 17:26	ANGLE	\$ 5000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 10 MPH Dir: S		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
223	105531713	2.178	07/05/2018 15:33	ANGLE	\$ 30000	0	0	0	1	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 35 MPH Dir: NW		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 2	Alchl/Drgs:	0	Speed: 35 MPH Dir: NE		Veh Mnvr/Ped Actn: 4				Obj Strk:						
224	105716802	2.178	12/20/2018 16:51	LEFT TURN, SAME ROADWAY	\$ 8000	0	0	0	3	2	4	3	1	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 15 MPH Dir: N		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 40 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
225	105811476	2.178	03/21/2019 11:54	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	1	2	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	7	Speed: 25 MPH Dir: N		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn: 1				Obj Strk:						
226	106023425	2.178	10/15/2019 15:32	REAR END, SLOW OR STOP	\$ 1900	0	0	0	1	1	1	2	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 8 MPH Dir: N		Veh Mnvr/Ped Actn: 11				Obj Strk:						
Unit	2 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn: 1				Obj Strk:						
227	106100631	2.178	12/19/2019 18:55	LEFT TURN, SAME ROADWAY	\$ 3000	0	0	0	0	1	5	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	7	Speed: 25 MPH Dir: SE		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 25 MPH Dir: NW		Veh Mnvr/Ped Actn: 4				Obj Strk:						
228	106104151	2.178	12/22/2019 06:05	RAN OFF ROAD - LEFT	\$ 8000	0	0	1	0	1	5	2	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	1	Speed: 35 MPH Dir: NE		Veh Mnvr/Ped Actn: 7				Obj Strk:			33			
229	106232009	2.178	05/21/2020 18:29	ANGLE	\$ 11000	0	0	1	4	2	1	2	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: NE		Veh Mnvr/Ped Actn: 9				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
230	104632613	2.181	01/11/2016 18:32	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	5	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
231	104665058	2.181	02/15/2016 21:01	FIXED OBJECT	\$ 2000	0	0	0	1	4	5	6	1	1		
Unit	1 : 1	Alchl/Drgs:	0	Speed: 25 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk: 50					
232	104876869	2.181	10/12/2016 18:32	REAR END, SLOW OR STOP	\$ 7000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
233	105626388	2.190	10/05/2018 17:59	REAR END, SLOW OR STOP	\$ 2500	0	0	0	0	1	1	1	1	0	13	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				1	Obj Strk:					
234	104472581	2.195	08/20/2015 17:22	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 25 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 10 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
235	104506045	2.195	09/30/2015 16:45	REAR END, SLOW OR STOP	\$ 1500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 0 MPH Dir: NE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
236	104504926	2.195	10/01/2015 09:27	REAR END, SLOW OR STOP	\$ 1000	0	0	0	0	1	1	2	3	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					
237	104584546	2.195	12/04/2015 16:17	REAR END, SLOW OR STOP	\$ 150	0	0	0	5	1	1	2	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 2 MPH Dir: S		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: S		Veh Mnvr/Ped Actn:				1	Obj Strk:					
238	104705046	2.195	01/02/2016 18:07	ANGLE	\$ 8000	0	0	0	3	1	4	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 30 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
239	104631677	2.195	02/02/2016 19:16	LEFT TURN, SAME ROADWAY	\$ 900	0	0	0	1	1	5	2	1	0	3	2
Unit	1 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: N		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: N		Veh Mnvr/Ped Actn: 4				Obj Strk:						
240	104764026	2.195	06/07/2016 09:49	REAR END, SLOW OR STOP	\$ 1300	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn: 1				Obj Strk:						
241	104822263	2.195	08/16/2016 20:50	REAR END, SLOW OR STOP	\$ 1000	0	0	0	0	1	5	1	2	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn: 12				Obj Strk:						
Unit	2 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn: 1				Obj Strk:						
242	104885000	2.195	10/12/2016 08:35	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 20 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: S		Veh Mnvr/Ped Actn: 1				Obj Strk:						
243	104923348	2.195	11/19/2016 13:51	ANGLE	\$ 2000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn: 5				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
244	104937066	2.195	12/06/2016 18:48	ANGLE	\$ 6000	0	0	0	2	1	5	2	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
245	104947763	2.195	12/09/2016 16:44	ANGLE	\$ 12000	0	0	0	2	1	2	1	3	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 30 MPH Dir: S		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
246	105044098	2.195	03/21/2017 17:17	ANGLE	\$ 4600	0	0	0	0	1	1	1	3	0	3	1
Unit	1 : 11	Alchl/Drgs:	0	Speed: 20 MPH Dir: S		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 40 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
247	105055767	2.195	03/31/2017 16:03	REAR END, SLOW OR STOP	\$ 1500	0	0	0	0	1	1	1	2	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn: 12				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn: 1				Obj Strk:						

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
248	105078963	2.195	04/28/2017 21:09	ANGLE	\$ 13000	0	0	1	0	1	5	1	1	0	0	2
Unit	1 : 1	Alchl/Drugs: 0	Speed: 10 MPH Dir: W	Veh Mnvr/Ped Actn: 4		Obj Strk:										
Unit	2 : 2	Alchl/Drugs: 0	Speed: 35 MPH Dir: S	Veh Mnvr/Ped Actn: 4		Obj Strk:										
249	105095595	2.195	05/10/2017 17:33	ANGLE	\$ 2100	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 35 MPH Dir: W	Veh Mnvr/Ped Actn: 4		Obj Strk:										
Unit	2 : 5	Alchl/Drugs: 0	Speed: 35 MPH Dir: S	Veh Mnvr/Ped Actn: 4		Obj Strk:										
250	105145340	2.195	06/24/2017 13:51	ANGLE	\$ 3000	0	0	1	0	1	1	2	1	0	3	2
Unit	1 : 1	Alchl/Drugs: 0	Speed: 45 MPH Dir: NW	Veh Mnvr/Ped Actn: 8		Obj Strk:										
Unit	2 : 5	Alchl/Drugs: 0	Speed: 35 MPH Dir: SW	Veh Mnvr/Ped Actn: 4		Obj Strk:										
251	105182593	2.195	07/30/2017 15:16	LEFT TURN, DIFFERENT ROADWAYS	\$ 9500	0	0	0	2	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 35 MPH Dir: SE	Veh Mnvr/Ped Actn: 4		Obj Strk:										
Unit	2 : 4	Alchl/Drugs: 0	Speed: 5 MPH Dir: NE	Veh Mnvr/Ped Actn: 8		Obj Strk:										
252	105218768	2.195	09/13/2017 17:37	LEFT TURN, SAME ROADWAY	\$ 5000	0	0	0	1	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 20 MPH Dir: NW	Veh Mnvr/Ped Actn: 8		Obj Strk:										
Unit	2 : 4	Alchl/Drugs: 0	Speed: 45 MPH Dir: SE	Veh Mnvr/Ped Actn: 4		Obj Strk:										
Unit	3 : 1	Alchl/Drugs: 0	Speed: 0 MPH Dir: SE	Veh Mnvr/Ped Actn: 1		Obj Strk:										
253	105297797	2.195	09/19/2017 17:42	ANGLE	\$ 25000	0	0	0	0	1	1	1	2	0	3	1
Unit	1 : 4	Alchl/Drugs: 0	Speed: 15 MPH Dir: SW	Veh Mnvr/Ped Actn: 9		Obj Strk:										
Unit	2 : 1	Alchl/Drugs: 0	Speed: 40 MPH Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:										
254	105228012	2.195	09/21/2017 16:39	ANGLE	\$ 2000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drugs: 0	Speed: 30 MPH Dir: NE	Veh Mnvr/Ped Actn: 8		Obj Strk:										
Unit	2 : 1	Alchl/Drugs: 0	Speed: 40 MPH Dir: SE	Veh Mnvr/Ped Actn: 4		Obj Strk:										
255	105248996	2.195	10/09/2017 16:17	LEFT TURN, DIFFERENT ROADWAYS	\$ 20000	0	0	0	3	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 25 MPH Dir: E	Veh Mnvr/Ped Actn: 8		Obj Strk:										
Unit	2 : 1	Alchl/Drugs: 0	Speed: 45 MPH Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:										
256	105258015	2.195	10/18/2017 17:55	ANGLE	\$ 22000	0	0	0	1	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs: 0	Speed: 15 MPH Dir: S	Veh Mnvr/Ped Actn: 8		Obj Strk:										
Unit	2 : 1	Alchl/Drugs: 0	Speed: 40 MPH Dir: E	Veh Mnvr/Ped Actn: 4		Obj Strk:										

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
257	105304862	2.195	11/30/2017 18:03	ANGLE	\$ 15500	0	0	0	1	1	5	1	1	0	3	2
Unit	1 : 2	Alchl/Drgs:	0	Speed: 45 MPH Dir: S		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 20 MPH Dir: S		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	3 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
258	105321874	2.195	12/13/2017 18:33	ANGLE	\$ 30000	0	0	1	1	1	2	1	1	0	3	2
Unit	1 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: SE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: NW		Veh Mnvr/Ped Actn:				8	Obj Strk:					
259	105323156	2.195	12/14/2017 13:19	ANGLE	\$ 11000	0	0	1	1	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 5 MPH Dir: S		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 45 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
260	105323510	2.195	12/16/2017 18:16	REAR END, SLOW OR STOP	\$ 1600	0	0	0	0	1	4	1	1	0	3	2
Unit	1 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				7	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: W		Veh Mnvr/Ped Actn:				11	Obj Strk:					
261	105342256	2.195	01/02/2018 10:35	REAR END, SLOW OR STOP	\$ 1500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 55 MPH Dir: W		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 55 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					
262	105351751	2.195	01/10/2018 07:19	REAR END, SLOW OR STOP	\$ 1700	0	0	0	0	1	1	2	3	0	3	2
Unit	1 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: S		Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: S		Veh Mnvr/Ped Actn:				7	Obj Strk:					
263	105375190	2.195	02/01/2018 08:16	REAR END, SLOW OR STOP	\$ 2000	0	0	0	1	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: S		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: S		Veh Mnvr/Ped Actn:				4	Obj Strk:					
264	105386820	2.195	02/20/2018 08:39	REAR END, SLOW OR STOP	\$ 1000	0	0	0	0	2	1	5	2	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: S		Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 0 MPH Dir: S		Veh Mnvr/Ped Actn:				1	Obj Strk:					
265	105386994	2.195	02/20/2018 18:12	REAR END, SLOW OR STOP	\$ 5000	0	0	0	0	1	5	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 40 MPH Dir: SE		Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: SE		Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	3 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: SE		Veh Mnvr/Ped Actn:				1	Obj Strk:					

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
266	105390161	2.195	02/22/2018 10:48	ANGLE	\$ 2500	0	0	0	0	1	1	2	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed:	0 MPH Dir: S	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	55 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
267	105402780	2.195	03/07/2018 08:15	ANGLE	\$ 3800	0	0	0	0	1	1	1	3	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed:	40 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 2	Alchl/Drugs:	0	Speed:	15 MPH Dir: S	Veh Mnvr/Ped Actn:				4	Obj Strk:					
268	105421503	2.195	03/15/2018 17:29	ANGLE	\$ 10000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed:	35 MPH Dir: N	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	45 MPH Dir: S	Veh Mnvr/Ped Actn:				4	Obj Strk:					
269	105413831	2.195	03/16/2018 18:00	ANGLE	\$ 7800	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed:	10 MPH Dir: S	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	40 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
270	105468160	2.195	05/04/2018 18:15	LEFT TURN, SAME ROADWAY	\$ 3000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drugs:	0	Speed:	0 MPH Dir: S	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	40 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
271	105505255	2.195	05/31/2018 06:47	REAR END, SLOW OR STOP	\$ 1300	0	0	0	1	1	1	2	1	0	3	1
Unit	1 : 4	Alchl/Drugs:	0	Speed:	0 MPH Dir: S	Veh Mnvr/Ped Actn:				1	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed:	5 MPH Dir: S	Veh Mnvr/Ped Actn:				12	Obj Strk:					
272	105519217	2.195	06/22/2018 17:26	LEFT TURN, SAME ROADWAY	\$ 6500	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 4	Alchl/Drugs:	0	Speed:	20 MPH Dir: S	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	30 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
273	105536310	2.195	07/10/2018 22:20	LEFT TURN, SAME ROADWAY	\$ 7000	0	0	0	2	1	4	1	1	0	12	2
Unit	1 : 1	Alchl/Drugs:	0	Speed:	45 MPH Dir: N	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drugs:	0	Speed:	20 MPH Dir: S	Veh Mnvr/Ped Actn:				8	Obj Strk:					
274	105639209	2.195	10/17/2018 07:55	LEFT TURN, SAME ROADWAY	\$ 3500	0	0	0	0	1	1	2	1	0	0	2
Unit	1 : 1	Alchl/Drugs:	0	Speed:	15 MPH Dir: N	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drugs:	0	Speed:	10 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
275	105663811	2.195	11/01/2018 13:18	RIGHT TURN, DIFFERENT ROADWAYS	\$ 2000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: W		Veh Mnvr/Ped Actn: 7				Obj Strk:						
Unit	2 : 5	Alchl/Drgs:	0	Speed: 20 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
276	105742821	2.195	12/31/2018 13:25	REAR END, SLOW OR STOP	\$ 2000	0	0	0	0	2	1	3	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn: 1				Obj Strk:						
277	105798572	2.195	03/11/2019 15:54	REAR END, SLOW OR STOP	\$ 3500	0	0	0	0	1	1	2	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn: 1				Obj Strk:						
278	105846605	2.195	04/08/2019 17:10	LEFT TURN, DIFFERENT ROADWAYS	\$ 18000	0	0	0	1	2	1	3	1	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 20 MPH Dir: SE		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
279	105832616	2.195	04/11/2019 20:13	REAR END, SLOW OR STOP	\$ 2000	0	0	0	0	1	5	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 70 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 70 MPH Dir: S		Veh Mnvr/Ped Actn: 11				Obj Strk:						
280	105869985	2.195	05/01/2019 16:10	REAR END, SLOW OR STOP	\$ 1300	0	0	0	0	1	1	1	2	0	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: SW		Veh Mnvr/Ped Actn: 1				Obj Strk:						
281	105873037	2.195	05/22/2019 18:26	REAR END, SLOW OR STOP	\$ 1100	0	0	0	0	1	1	1	1	1	3	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 10 MPH Dir: SW		Veh Mnvr/Ped Actn: 7				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: SW		Veh Mnvr/Ped Actn: 1				Obj Strk:						
282	105992718	2.195	09/17/2019 08:23	REAR END, SLOW OR STOP	\$ 4000	0	0	0	0	1	1	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 35 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 4	Alchl/Drgs:	0	Speed: 40 MPH Dir: S		Veh Mnvr/Ped Actn: 1				Obj Strk:						
283	106025053	2.195	10/12/2019 20:27	REAR END, SLOW OR STOP	\$ 1500	0	0	0	0	1	4	1	1	0	0	
Unit	1 : 32	Alchl/Drgs:	7	Speed: 10 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: S		Veh Mnvr/Ped Actn: 11				Obj Strk:						

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
284	106108371	2.195	12/19/2019 18:14	ANGLE	\$ 4000	0	0	0	0	1	2	1	1	0	3	2
Unit	1 : 1	Alchl/Drgs:	0	Speed:	0 MPH Dir: S	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed:	0 MPH Dir: N	Veh Mnvr/Ped Actn:				8	Obj Strk:					
285	106108368	2.195	12/27/2019 18:08	LEFT TURN, DIFFERENT ROADWAYS	\$ 10000	0	0	0	0	1	5	1	1	0	3	1
Unit	1 : 2	Alchl/Drgs:	0	Speed:	45 MPH Dir: S	Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed:	45 MPH Dir: E	Veh Mnvr/Ped Actn:				4	Obj Strk:					
286	106128059	2.195	01/17/2020 18:31	HEAD ON	\$ 5000	0	0	1	2	1	5	1	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	1	Speed:	30 MPH Dir: SE	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed:	5 MPH Dir: NW	Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	3 : 1	Alchl/Drgs:	0	Speed:	5 MPH Dir: W	Veh Mnvr/Ped Actn:				11	Obj Strk:					
287	106178875	2.195	03/09/2020 07:36	REAR END, SLOW OR STOP	\$ 2000	0	0	0	0	1	1	1	2	0	4	1
Unit	1 : 4	Alchl/Drgs:	0	Speed:	10 MPH Dir: W	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed:	5 MPH Dir: W	Veh Mnvr/Ped Actn:				11	Obj Strk:					
288	104694461	2.200	04/07/2016 07:30	ANGLE	\$ 4500	0	0	0	0	1	1	2	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed:	45 MPH Dir: W	Veh Mnvr/Ped Actn:				5	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed:	30 MPH Dir: W	Veh Mnvr/Ped Actn:				5	Obj Strk:					
289	104895093	2.200	10/29/2016 10:24	REAR END, SLOW OR STOP	\$ 7500	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed:	45 MPH Dir: SE	Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed:	45 MPH Dir: SE	Veh Mnvr/Ped Actn:				1	Obj Strk:					
290	104531742	2.214	10/27/2015 06:52	REAR END, SLOW OR STOP	\$ 3500	0	0	0	0	2	3	3	1	0	3	1
Unit	1 : 1	Alchl/Drgs:	0	Speed:	40 MPH Dir: W	Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed:	40 MPH Dir: W	Veh Mnvr/Ped Actn:				1	Obj Strk:					
291	105701571	2.216	12/07/2018 15:24	REAR END, SLOW OR STOP	\$ 600	0	0	0	1	1	1	2	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed:	35 MPH Dir: SE	Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed:	0 MPH Dir: SE	Veh Mnvr/Ped Actn:				12	Obj Strk:					
292	105658968	2.339	10/31/2018 18:35	ANGLE	\$ 9500	0	0	0	2	1	2	1	1	0	0	3
Unit	1 : 4	Alchl/Drgs:	0	Speed:	45 MPH Dir: N	Veh Mnvr/Ped Actn:				9	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed:	45 MPH Dir: S	Veh Mnvr/Ped Actn:				4	Obj Strk:					

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						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
293	105730394	2.413	12/13/2018 06:54	ANIMAL	\$ 2000	0	0	0	0	1	3	1	1	0	0	
Unit	1 : 4	Alchl/Drugs:	0	Speed: 15 MPH Dir: W		Veh Mnvr/Ped Actn:				4		Obj Strk:		17		
294	104513341	2.415	10/09/2015 07:57	REAR END, SLOW OR STOP	\$ 3000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 5	Alchl/Drugs:	0	Speed: 15 MPH Dir: NW		Veh Mnvr/Ped Actn:				11		Obj Strk:				
Unit	2 : 4	Alchl/Drugs:	0	Speed: 5 MPH Dir: NW		Veh Mnvr/Ped Actn:				11		Obj Strk:				
295	104488529	2.424	09/09/2015 14:49	RIGHT TURN, DIFFERENT ROADWAYS	\$ 4300	0	0	0	0	1	1	2	1	11	1	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 35 MPH Dir: E		Veh Mnvr/Ped Actn:				7		Obj Strk:				
Unit	2 : 2	Alchl/Drugs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1		Obj Strk:				
296	104510198	2.424	09/25/2015 16:23	MOVABLE OBJECT	\$ 5250	0	0	0	0	2	1	3	1	0		
Unit	1 : 1	Alchl/Drugs:	0	Speed: 45 MPH Dir: S		Veh Mnvr/Ped Actn:				7		Obj Strk:		18		
297	104518157	2.424	10/06/2015 11:03	REAR END, SLOW OR STOP	\$ 2200	0	0	0	0	1	1	1	3	0	1	1
Unit	1 : 2	Alchl/Drugs:	0	Speed: 0 MPH Dir: NE		Veh Mnvr/Ped Actn:				12		Obj Strk:				
Unit	2 : 4	Alchl/Drugs:	0	Speed: 10 MPH Dir: NE		Veh Mnvr/Ped Actn:				1		Obj Strk:				
298	104539616	2.424	10/18/2015 07:52	SIDESWIPE, SAME DIRECTION	\$ 1000	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed: 40 MPH Dir: W		Veh Mnvr/Ped Actn:				6		Obj Strk:				
Unit	2 : 12	Alchl/Drugs:	0	Speed: 30 MPH Dir: W		Veh Mnvr/Ped Actn:				4		Obj Strk:				
299	104563006	2.424	11/24/2015 18:17	REAR END, SLOW OR STOP	\$ 3000	0	0	0	1	1	5	1	1	0	0	
Unit	1 : 1	Alchl/Drugs:	0	Speed: 45 MPH Dir: NW		Veh Mnvr/Ped Actn:				11		Obj Strk:				
Unit	2 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: NW		Veh Mnvr/Ped Actn:				1		Obj Strk:				
300	104631903	2.424	12/31/2015 09:56	RAN OFF ROAD - RIGHT	\$ 4500	0	0	0	1	2	1	3	1	0		
Unit	1 : 1	Alchl/Drugs:	0	Speed: 40 MPH Dir: N		Veh Mnvr/Ped Actn:				4		Obj Strk:		58		
301	104667718	2.424	02/16/2016 08:05	ANGLE	\$ 13500	0	0	0	2	2	1	2	2	0	1	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 20 MPH Dir: S		Veh Mnvr/Ped Actn:				8		Obj Strk:				
Unit	2 : 4	Alchl/Drugs:	0	Speed: 50 MPH Dir: E		Veh Mnvr/Ped Actn:				4		Obj Strk:				
Unit	3 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1		Obj Strk:				
302	104786430	2.424	06/17/2016 13:20	ANGLE	\$ 12000	0	0	1	5	1	1	2	1	0	1	1
Unit	1 : 4	Alchl/Drugs:	0	Speed: 15 MPH Dir: NW		Veh Mnvr/Ped Actn:				8		Obj Strk:				

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
Unit	2 : 5	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
303	104820625	2.424	08/17/2016 17:08	SIDESWIPE, SAME DIRECTION	\$ 1800	0	0	0	0	1	1	2	1	0	0	
Unit	1 : 2	Alchl/Drgs:	0	Speed: 40 MPH Dir: NW		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: NW		Veh Mnvr/Ped Actn:				8	Obj Strk:					
304	104988476	2.424	01/27/2017 11:41	RAN OFF ROAD - LEFT	\$ 1000	0	0	0	0	1	1	1	2	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: S		Veh Mnvr/Ped Actn:				8	Obj Strk: 37					
305	105079638	2.424	04/30/2017 08:56	REAR END, SLOW OR STOP	\$ 8000	0	0	0	0	1	1	2	1	0	1	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 35 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
306	105079439	2.424	04/30/2017 13:14	REAR END, SLOW OR STOP	\$ 1500	0	0	0	0	1	1	1	1	0	1	2
Unit	1 : 4	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
307	105224359	2.424	09/18/2017 16:46	REAR END, SLOW OR STOP	\$ 700	0	0	0	0	1	1	1	3	0	1	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 30 MPH Dir: N		Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
308	105425104	2.424	03/26/2018 17:20	ANGLE	\$ 13500	0	0	0	1	1	1	1	2	0	1	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 20 MPH Dir: N		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	3 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				1	Obj Strk:					
309	105441887	2.424	04/11/2018 17:59	LEFT TURN, DIFFERENT ROADWAYS	\$ 6000	0	0	0	2	1	1	1	1	0	1	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 15 MPH Dir: NE		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 35 MPH Dir: SE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
310	105443273	2.424	04/12/2018 08:09	SIDESWIPE, OPPOSITE DIRECTION	\$ 4500	0	0	0	0	1	1	1	1	0	1	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 5	Alchl/Drgs:	0	Speed: 0 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
311	105467036	2.424	05/03/2018 17:04	LEFT TURN, SAME ROADWAY	\$ 6000	0	0	0	0	1	1	1	7	0	1	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: N		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	7	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
312	105472866	2.424	05/08/2018 08:03	ANGLE	\$ 8500	0	0	0	1	1	1	1	1	0	1	1
Unit	1 : 5	Alchl/Drugs:	0	Speed: 12 MPH Dir: N		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
313	105518819	2.424	06/22/2018 09:11	LEFT TURN, DIFFERENT ROADWAYS	\$ 2000	0	0	0	0	1	1	1	6	0	1	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 5 MPH Dir: NW		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 40 MPH Dir: E		Veh Mnvr/Ped Actn: 4				Obj Strk:						
314	105564205	2.424	08/07/2018 08:41	RIGHT TURN, DIFFERENT ROADWAYS	\$ 10000	0	0	0	0	1	1	1	1	0	1	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 20 MPH Dir: E		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 40 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						
315	105574634	2.424	08/19/2018 17:09	ANGLE	\$ 1550	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 4	Alchl/Drugs:	0	Speed: 45 MPH Dir: NE		Veh Mnvr/Ped Actn: 4				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 45 MPH Dir: SE		Veh Mnvr/Ped Actn: 4				Obj Strk:						
316	105588550	2.424	08/30/2018 13:23	LEFT TURN, DIFFERENT ROADWAYS	\$ 10000	0	0	0	4	1	1	1	2	0	1	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 45 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
317	105621023	2.424	10/03/2018 13:49	REAR END, SLOW OR STOP	\$ 700	0	0	0	0	1	1	1	1	0	1	1
Unit	1 : 2	Alchl/Drugs:	0	Speed: 5 MPH Dir: N		Veh Mnvr/Ped Actn: 7				Obj Strk:						
Unit	2 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn: 7				Obj Strk:						
318	105634248	2.424	10/14/2018 16:53	LEFT TURN, DIFFERENT ROADWAYS	\$ 30000	0	0	0	5	1	1	2	5	0	1	1
Unit	1 : 1	Alchl/Drugs:	0	Speed: 0 MPH Dir: W		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 2	Alchl/Drugs:	0	Speed: 45 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
319	105658822	2.424	11/01/2018 11:57	ANGLE	\$ 13500	0	0	0	0	1	1	2	6	0	1	1
Unit	1 : 4	Alchl/Drugs:	0	Speed: 15 MPH Dir: E		Veh Mnvr/Ped Actn: 9				Obj Strk:						
Unit	2 : 2	Alchl/Drugs:	0	Speed: 40 MPH Dir: S		Veh Mnvr/Ped Actn: 4				Obj Strk:						
320	105798570	2.424	03/11/2019 07:45	LEFT TURN, DIFFERENT ROADWAYS	\$ 10500	0	0	0	0	1	1	2	1	0	1	1
Unit	1 : 4	Alchl/Drugs:	0	Speed: 0 MPH Dir: NW		Veh Mnvr/Ped Actn: 8				Obj Strk:						
Unit	2 : 1	Alchl/Drugs:	0	Speed: 40 MPH Dir: W		Veh Mnvr/Ped Actn: 4				Obj Strk:						

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
321	105816516	2.424	03/29/2019 15:09	REAR END, SLOW OR STOP	\$ 600	0	0	0	0	1	1	1	3	0	1	1
Unit	1 : 4	Alchl/Drgs:	0	Speed: 5 MPH Dir: N		Veh Mnvr/Ped Actn:				11	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				1	Obj Strk:					
322	105820038	2.424	04/02/2019 16:22	LEFT TURN, DIFFERENT ROADWAYS	\$ 10000	0	0	0	1	1	1	1	1	0	1	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: N		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 2	Alchl/Drgs:	0	Speed: 45 MPH Dir: SE		Veh Mnvr/Ped Actn:				4	Obj Strk:					
323	105836721	2.424	04/19/2019 13:23	REAR END, SLOW OR STOP	\$ 4000	0	0	0	0	2	1	2	4	0	1	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				7	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				7	Obj Strk:					
324	105872651	2.424	05/21/2019 19:31	LEFT TURN, DIFFERENT ROADWAYS	\$ 2700	0	0	0	0	1	2	1	1	0	0	
Unit	1 : 4	Alchl/Drgs:	0	Speed: 20 MPH Dir: N		Veh Mnvr/Ped Actn:				8	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: NW		Veh Mnvr/Ped Actn:				4	Obj Strk:					
325	105974423	2.424	08/30/2019 17:09	REAR END, TURN	\$ 2000	0	0	0	2	1	1	1	1	0	1	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: NE		Veh Mnvr/Ped Actn:				7	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: NE		Veh Mnvr/Ped Actn:				1	Obj Strk:					
326	106043825	2.424	10/30/2019 05:23	RAN OFF ROAD - LEFT	\$ 5000	0	0	0	1	1	5	2	1	0	1	1
Unit	1 : 1	Alchl/Drgs:	5	Speed: 0 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:				33	
327	106134221	2.424	01/23/2020 19:00	SIDESWIPE, SAME DIRECTION	\$ 8000	0	0	0	0	1	5	1	2	0	1	1
Unit	1 : 1	Alchl/Drgs:	0	Speed: 45 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: N		Veh Mnvr/Ped Actn:				4	Obj Strk:					
328	106138471	2.424	01/28/2020 16:36	REAR END, SLOW OR STOP	\$ 1400	0	0	0	0	1	1	1	1	0	0	
Unit	1 : 1	Alchl/Drgs:	0	Speed: 5 MPH Dir: NE		Veh Mnvr/Ped Actn:				7	Obj Strk:					
Unit	2 : 4	Alchl/Drgs:	0	Speed: 0 MPH Dir: NE		Veh Mnvr/Ped Actn:				7	Obj Strk:					
329	106154821	2.424	02/11/2020 14:24	LEFT TURN, DIFFERENT ROADWAYS	\$ 3000	0	0	0	1	1	1	1	3	0	1	1
Unit	1 : 11	Alchl/Drgs:	0	Speed: 45 MPH Dir: E		Veh Mnvr/Ped Actn:				4	Obj Strk:					
Unit	2 : 1	Alchl/Drgs:	0	Speed: 10 MPH Dir: S		Veh Mnvr/Ped Actn:				8	Obj Strk:					

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
330	104704911	2.442	04/18/2016 06:00	ANIMAL	\$ 1500	0	0	0	0	1	3	1	1	0	0	
Unit	1 : 2	Alchl/Drgs:	0	Speed:	45 MPH	Dir:	SE	Veh Mnvr/Ped Actn:				4	Obj Strk:		17	

**Legend for
Report Details:**

Acc No - Accident Number
 Injuries: F - Fatal, A - Class A, B - Class B, C - Class C
 Condition: R - Road Surface, L - Ambient Light, W - Weather
 Rd Ch - Road Character
 Rd Ci - Roadway Contributing Circumstances
 Trfc Ctl - Traffic Control: Dv - Device, Op - Operating
 Alchl/Drgs - Alcohol Drugs Suspected
 Veh Mnvr/Ped Actn - Vehicle Maneuver/Pedestrian Action
 Obj Strk - Object Struck

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Summary Statistics

High Level Crash Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	330	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	97	29.39
Total Injury Crashes	97	29.39
Property Damage Only Crashes	233	70.61
Night Crashes	72	21.82
Wet Crashes	42	12.73
Alcohol/Drugs Involvement Crashes	8	2.42

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	330	100.00
Fatal Crashes	0	0.00
Class A Crashes	1	0.30
Class B Crashes	20	6.06
Class C Crashes	76	23.03
Property Damage Only Crashes	233	70.61

Vehicle Exposure Statistics

Annual ADT = 23300

Total Length = 1.087 (Miles) 1.749 (Kilometers)

Total Vehicle Exposure = 46.27 (MVMT) 74.47 (MVKMT)

Crash Rate	Crashes Per 100 Million Vehicle Miles	Crashes Per 100 Million Vehicle Kilometers
Total Crash Rate	713.16	443.14
Fatal Crash Rate	0.00	0.00
Non Fatal Crash Rate	209.63	130.26
Night Crash Rate	155.60	96.69
Wet Crash Rate	90.77	56.40
EPDO Rate	2412.23	1498.89

**North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report**

Miscellaneous Statistics

Severity Index =	3.38
EPDO Crash Index =	1116.20
Estimated Property Damage Total = \$	1795501.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	65	19.70
ANIMAL	7	2.12
BACKING UP	5	1.52
FIXED OBJECT	1	0.30
HEAD ON	3	0.91
LEFT TURN, DIFFERENT ROADWAYS	21	6.36
LEFT TURN, SAME ROADWAY	16	4.85
MOVABLE OBJECT	2	0.61
OTHER NON-COLLISION	1	0.30
RAN OFF ROAD - LEFT	5	1.52
RAN OFF ROAD - RIGHT	7	2.12
REAR END, SLOW OR STOP	161	48.79
REAR END, TURN	2	0.61
RIGHT TURN, DIFFERENT ROADWAYS	5	1.52
SIDESWIPE, OPPOSITE DIRECTION	5	1.52
SIDESWIPE, SAME DIRECTION	24	7.27

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	1	0.56
Class B Injuries	24	13.56
Class C Injuries	152	85.88
Total Non-Fatal Injuries	177	100.00
Total Injuries	177	100.00

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	21	6.36
Feb	23	6.97
Mar	31	9.39
Apr	38	11.52
May	34	10.30
Jun	18	5.45
Jul	11	3.33
Aug	28	8.48
Sep	28	8.48
Oct	35	10.61
Nov	26	7.88
Dec	37	11.21

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	45	13.64
Tue	67	20.30
Wed	58	17.58
Thu	62	18.79
Fri	53	16.06
Sat	19	5.76
Sun	26	7.88

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Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	0	0.00
0300-0359	1	0.30
0400-0459	0	0.00
0500-0559	4	1.21
0600-0659	11	3.33
0700-0759	21	6.36
0800-0859	11	3.33
0900-0959	9	2.73
1000-1059	5	1.52
1100-1159	8	2.42
1200-1259	8	2.42
1300-1359	21	6.36
1400-1459	11	3.33
1500-1559	21	6.36
1600-1659	37	11.21
1700-1759	58	17.58
1800-1859	57	17.27
1900-1959	26	7.88
2000-2059	9	2.73
2100-2159	4	1.21
2200-2259	6	1.82
2300-2359	2	0.61

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Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	209	23	1	233
Dark	58	13	1	72
Other	19	6	0	25
Total	286	42	2	330

Object Struck Summary

Object Type	Times Struck	Percent of Total
ANIMAL	7	33.33
BRIDGE RAIL FACE	1	4.76
DITCH	6	28.57
LUMINAIRE POLE NON-BREAKAWAY	1	4.76
MOVABLE OBJECT	2	9.52
OFFICIAL HIGHWAY SIGN NON-BREAKAWAY	1	4.76
TREE	3	14.29

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
LIGHT TRUCK (MINI-VAN, PANEL)	6	0.87
MOTORCYCLE	3	0.44
PASSENGER CAR	344	50.15
PICKUP	83	12.10
SINGLE UNIT TRUCK (2-AXLE, 6-TIRE)	1	0.15
SINGLE UNIT TRUCK (3 OR MORE AXLES)	3	0.44
SPORT UTILITY	187	27.26
TRACTOR/SEMI-TRAILER	2	0.29
TRUCK/TRAILER	4	0.58
UNKNOWN	9	1.31
VAN	44	6.41

North Carolina Department of Transportation
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Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2015	35	0	14	21
2016	69	0	19	50
2017	73	0	21	52
2018	80	0	23	57
2019	55	0	16	39
2020	18	0	4	14
Total	330	0	97	233

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2015	0	23
2016	0	38
2017	0	39
2018	0	43
2019	0	23
2020	0	11
Total	0	177

Miscellaneous Totals

Year	Property Damage	EPDO Index
2015	\$ 133575	207.00
2016	\$ 299026	209.60
2017	\$ 433000	228.40
2018	\$ 441450	250.20
2019	\$ 387950	173.40
2020	\$ 100500	47.60
Total	\$ 1795501	1116.20

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road &			
				Fixed Object	Angle	Side Swipe	Other
2015	1	2	26	2	2	1	1
2016	5	0	29	2	18	9	6

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Run Off Road &							
Year	Left Turn	Right Turn	Rear End	Fixed Object	Angle	Side Swipe	Other
2017	6	1	38	4	14	8	2
2018	14	2	35	0	18	4	7
2019	10	0	26	3	10	5	1
2020	1	0	9	2	3	2	1
Total	37	5	163	13	65	29	18

**North Carolina Department of Transportation
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Strip Analysis Report**

Strip Diagram

Features	Milepost	Crash IDs
150FT EAST SR1524	1.37	104922420 106062778
	1.38	
STEVENS MILL SR 1524 FAIR OAKS	1.39	104706194 105768640 104404930 104416633 104426931 104741514 104811511 104842422 104884862 104941355 104938013 105001555 105007747 105190181 105411102 105644884 105674834 105803359 105843367 105851756 105931920 105982790 106083558 106095087 106182755 106185001
	1.40	105706638 106110221
ML-STALLINGS ML-HEMBY BRIDGE	1.41	104486431
	1.42	106012124 104980920 105802982
	1.43	105495252 105900115
	1.44	
	1.45	105791332 105436834
	1.46	105119057 106164150
	1.47	104850942 105053434
	1.48	106140777
	1.49	105802985 104394930 104854161 105405395
	1.50	104556264 104833994 104884861 104829599 104910800 106074874
	1.51	104989647 105457741 105828194
	1.52	104857169
	1.53	
	1.54	
	1.55	
	1.56	105116296
	1.57	104619887
	1.58	105240290 104874995
	1.59	105593063 105881598
	1.60	105336125 105330469 105464744
ML-STALLINGS	1.61	105287314
	1.62	105831451
	1.63	105298024 105240785 106056677
	1.64	
	1.65	105272301 105315040
	1.66	
	1.67	106187462
	1.68	105175784 104938751
	1.69	

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Features	Milepost	Crash IDs
PVA	1.70	105490762 105672422
	1.71	
	1.72	104646107
	1.73	105321954 105573062
	1.74	104626289 105267525 104772968 105459584
	1.75	104582567 104948453 105330471 105451106 106238577
	1.76	105330473
	1.77	105023395 105650583
	1.78	104986060
	1.79	
	1.80	105383810 105452470
	1.81	106137574
	1.82	104860702 105184889
	1.83	
	1.84	105448118 105883529
	1.85	105018858 105453068
	1.86	104721563 105328308 105579496
	1.87	
	1.88	106192707
	1.89	105184888
	1.90	104683776 104731108 105112589 105616553 105207150
	1.91	
	1.92	105122587
ML-STALLINGS PVA	1.93	104471390 104450199 105074202 104471397 104548179 104602847 104611137 104663696 104669444 104704121 104712324 104734006 104758914 104854162 104879734 104918233 104954907 105048602 105101919 105179004 105200478 105308898 105421726 105470007 105472025 105579500 105671300 105672423 105764126 105835361 105942161 106008447 106021085 106145300
	1.94	105116294 105302441 105666643
	1.95	
	1.96	104502260 104618526
	1.97	105228044 104833989 105325702
	1.98	105390694 105588464 105221315 105236338 105412982 105413925 105668828 106140779 104471396 105878454
PVA	1.99	104428992 104907224 104918234 104971245

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Features	Milepost	Crash IDs
		105073612 105348993 105397005 105490757
		105516557 105718597 105829610 105837360
		105848979 105859778 105926924 106041462
		106166688 106236642
SR 5231 SR 5230 MARSHALL HOOKS	2.00	105845278
CL-UNION CL-MECKLENBURG BOYD		
FUNDERBURK		
	2.01	105125191
	2.02	
	2.03	
	2.04	104509032
	2.05	
	2.06	104462907
	2.07	104814790
	2.08	105467038
	2.09	
	2.10	105970897
	2.11	
	2.12	
	2.13	
	2.14	
	2.15	105212698
	2.16	104477182 104509865 105466832
	2.17	105490874
I 485 RAMP STRUCTURE I 485	2.18	105067605 104432225 104468000 104481603
		104575061 104639702 104667175 104707189
		104706541 104713269 104892153 104893363
		104909243 104950466 104966344 104987318
		105004766 105031560 105081139 105105317
		105118140 105212475 105447924 105462097
		105494182 105519218 105531713 105716802
		105811476 106023425 106100631 106104151
		106232009 104632613 104665058 104876869
I 485 RAMP	2.19	105626388 104472581 104506045 104504926
		104584546 104705046 104631677 104764026
		104822263 104885000 104923348 104937066
		104947763 105044098 105055767 105078963
		105095595 105145340 105182593 105218768
		105297797 105228012 105248996 105258015
		105304862 105321874 105323156 105323510
		105342256 105351751 105375190 105386820
		105386994 105390161 105402780 105421503

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Features	Milepost	Crash IDs
SR 5233 SR 5232		105413831 105468160 105505255 105519217
		105536310 105639209 105663811 105742821
		105798572 105846605 105832616 105869985
		105873037 105992718 106025053 106108371
		106108368 106128059 106178875
	2.20	104694461 104895093
	2.21	104531742
	2.22	105701571
	2.23	
	2.24	
	2.25	
	2.26	
	2.27	
	2.28	
	2.29	
	2.30	
	2.31	
	2.32	
	2.33	
	2.34	105658968
	2.35	
	2.36	
	2.37	
	2.38	
	2.39	
	2.40	
	2.41	105730394 104513341
STALLING SR 3175	2.42	104488529 104510198 104518157 104539616
		104563006 104631903 104667718 104786430
		104820625 104988476 105079638 105079439
		105224359 105425104 105441887 105443273
		105467036 105472866 105518819 105564205
		105574634 105588550 105621023 105634248
		105658822 105798570 105816516 105820038
		105836721 105872651 105974423 106043825
		106134221 106138471 106154821
	2.43	
	2.44	104704911
150FT WES SR3175	2.45	

