TRAFFIC IMPACT AND ACCESS STUDY

HOPETON LANDING MASTER PLAN
LITTLE NECK ROAD
CHATHAM COUNTY, GEORGIA

Prepared for:

Coleman Company, Inc
Savannah, GA

Submitted
August 2021

Prepared by:

EPC, LLC
2404 Taylor Road
Cayce, SC 29033

(803) 794 7018
(803) 794 9216 Fax

EPC, LLC
2404 Taylor Road
Cayce, SC 29033

(803) 794 7018
(803) 794 9216 Fax

August 10, 2021

Mr. Travis Burke
Coleman Company, Inc.
17 Park of Commerce, Suite 201
Savannah, Georgia 31405

Phone: 912 200 3041
Email: tburke@cci-sav.com

RE: Traffic Impact and Access Study
Hopeton Landing Master Plan
Little Neck Road
Chatham County, GA

Dear Travis:

As requested, Encroachment Permit Clearinghouse (EPC) has completed an assessment of the traffic impacts associated with the development of a large-scale mixed-use project referred to as Hopeton Landing which is located on the northeast side of Little Neck Road generally between I 95 and Ogeechee Road (US 17) in Chatham County, GA. The following provides a summary of this study's findings.

PROJECT DESCRIPTION

The project site is bounded by Little Neck Road to the south, I 95 to the north and undeveloped land to the southeast (approximately 4,000-feet to US 17 (Ogeechee Road)). The project site is approximately 478-acres and is expected to be developed as nine parcels/PODs which plan a mix of residential, commercial and institutional uses as identified below:

- POD #1: Assisted Living Facility- 200 beds;
- POD #2: Medical Office – 54,000 square-feet (sf);
- POD #3: Medical Office – 70,000 sf & General Office-70,000 sf;
- POD #4: Shopping Center- 105,000 sf;
- POD #5: Townhomes- 140 units;
- POD #6: Apartment Complex- 594 units;
- POD #7: Single Family Detached- 112 units;
- POD #8: Single Family Detached- 94 units; and
- POD #9: Single Family Detached- 126 units.

Access for this over-all project is planned via four driveways along Little Neck Road which are orientated to service specific development PODs described below:

- Access #1: Located opposite Henderson Oaks Drive: servicing PODs #3, 4, 5 & 6;
- Access #2: Located opposite Henderson Lakes Apartments: servicing PODs #2 & 7;
- Access #3: Located opposite Holy Church of God: servicing PODs #1 & 9; and
- Access #4: Proposed: servicing POD #8.

Each of these access drives are located within the section of Little Neck Road that is the subject of a Chatham County widening project which extends from US 17 to I 95 widening this facility to a multi-lane cross-section with planned access management strategies. The expectation of Chatham County is this widening will be completed by 2037.

Due to wetland and canal issues, interconnectivity is limited within the project. Connectivity is planned between PODs #7 & 9 as well as PODs #8 & 9. Cross-access to the abutting parcel south of the project is also indicated via two roadway extensions which will be constructed to the project's southeastern border.

For or purposes of this report and as coordinated with County staff, build-out of the over-all development is expected by 2030. Initially, due to utility extensions to be completed, the project plans to construct three PODs located in the northern section of the site closest to I 95 (PODs #1, 8 & 9) which will provide a total of 222 single family residential units and the assisted living facility. Development schedule after this area is then dependent on the County's widening project of Little Neck Road.

Figure 1 depicts the site location in relation to the regional roadway system. **Figure 2** depicts the over-all proposed development plan (Figures located at end of report).

EXISTING CONDITIONS

A comprehensive field inventory of the project study area was conducted in May 2021. The field inventory included a collection of traffic volume data, geometric data and traffic control within the study area. The following sections detail the current traffic conditions and include a description of roadways/intersections serving the site and traffic flow in close proximity to the project.

Project Study Area

As identified during a scoping meeting, the following intersections have been required by Chatham County staff to be analyzed in order to determine project impact on the surrounding roadway network.

1. Ogeechee Parkway (US 17) at Little Neck Road;
2. Little Neck Road at Al Henderson Boulevard;
3. Little Neck Road at Zipperer Drive;
4. Little Neck Road at Henderson Oaks Drive; and
5. Little Neck Road at Henderson Lakes Apartment Access.

Figure 3 illustrates the existing geometrics and traffic control for the study area intersections and surrounding roadways.

Traffic Volumes

In order to determine the existing traffic volume flow patterns within the study area, manual turning movement counts were performed for each of the above intersections. Weekday morning (7:00-9:00 AM) and evening (4:00-6:00 PM) peak period turning movement specific counts were conducted. Additional

counts were conducted for Little Neck Road via automatic 24-hour recorders in order to compare daily volumes to GDOT's TADA counts in order to define if Covid-19 impacts are relevant.

Based on the GDOT data, Little Neck Road carries a daily volume of 6,600 vehicles (2019 station # 051-0447). Collected daily volumes in May 2021 indicated a daily volume of 6,750 vehicles. Based on this and approved by County staff, traffic volume data collected no longer require adjustments due to Covid-19 impacts.

Summarized count sheets for the study area intersections are included in the Appendix of this report. **Figures 4** and **5** graphically depict the respective Existing AM and PM peak-hour traffic volumes at the study area intersections to be used for analytical purposes.

FUTURE CONDITIONS

For purposes of this report, full build-out of the project has been assumed to occur in 2030. Traffic analyses for future conditions have been conducted for two separate scenarios: first, 2030 No-Build conditions, which includes an annual normal growth in traffic, all pertinent background development traffic, and any pertinent planned roadway/intersection improvements; and secondly, 2030 Build conditions, which account for all No-Build conditions PLUS traffic generated by the proposed development.

Future No-Build Traffic Conditions

Planned Roadway Improvements

The County has developed a plan to widen Little Neck Road to a multi-laned facility through the study area from US 17 extending to the I 95 over pass. As a four-lane divided/five-lane facility with planned access management strategies, signalization is identified for the Al Henderson Boulevard intersection as well as other area intersections of future development of both the Hopeton and Keller parcels. Included are also additional turning lanes for the US 17 at Little Neck Road intersection.

As indicated by the prepared Traffic study by HGB and County staff, the future design year for this improvement is 2037 which puts its plan beyond the build-out of this project. Based on this and as discussed with staff, these improvements have not been accommodated for in any of the future year analysis. Information/concept plan for the Little Neck Road widening project is included in the Appendix of this report.

It should be noted that based on recent conversations with Chatham County staff, right-of-way acquisition is expected to start next year in 2022 and that project construction will occur over many phases starting from the I 95 over-pass as the two-lane cross-section, expanding to a five-lane section and then a four-lane divided cross-section approximately 1,600-feet south of the over-pass and finishing at the Ogeechee Road (US 17) intersection.

Development by Others

As was discussed with County staff, for the purposes of this report, no specific background developments are to be included. Instead, a compounded growth rate will be utilized to project future traffic volumes which is discussed in the following section.

Annual Growth Rate

Traffic volumes along Little Neck Road have increased moderately over the last few years based on the GDOT TADA information (station #051-0447) which indicates a less than 1-percent growth per year. Per discussions with County staff and knowledge of development to the north of I 95 as well as undeveloped land in the area, it has been decided and approved to utilize a compounded 3-perecnt growth per year which is consistent with work completed along Little Neck Road towards I 16. This annual growth rate (1.30 multiplier) has been assigned to the intersections of Little Neck Road at US 17 and Al Henderson Boulevard and to the north/south through movements of Little Neck Road for Zipperer Drive, Henderson Oaks Drive and Henderson Lake Apartments intersections. Turning movements entering and exiting Zipperer Drive, Henderson Oaks Drive and Henderson Lake Apartments have been increased by a 1-percent per year rates (multiplier of 1.09).

The anticipated 2030 No-Build A and PM peak-hour traffic volumes, which reflect the compounded annual 3-percent growth for US 17, Little Neck Road and Al Henderson Boulevard and the 1-percent growth for the remaining side streets are shown in **Figures 6** & **7**.

SITE-GENERATED TRAFFIC

Traffic volumes expected to be generated by the proposed development were forecasted using the Tenth Edition of the ITE *Trip Generation* manual, as published by the Institute of Transportation Engineers. **Table 1** depicts the anticipated site-generated traffic. For purposes of this analyses, each component or POD of the project has been defined separately in order to correctly assign traffic to the study area intersections and individual site access drives. Additionally, each land-use specific to that access has also been broken out in order to reflect the total sum of the project's traffic generation. This methodology has been shared with staff and approved for use in this report.

Table 1
TRIP GENERATION SUMMARY[1]
Hopeton Landing
Chatham County, GA

Access	POD	Land Use	Size	Variable	LUC	Daily Two-Way	AM Peak-Hour Enter	AM Peak-Hour Exit	AM Peak-Hour Total	PM Peak-Hour Enter	PM Peak-Hour Exit	PM Peak-Hour Total
Henderson Oaks Drive/Access #1	3	**Medical Office**	70,000	sf	720	2,600	152	43	195	68	174	242
	3	**General Office**	70,000	sf	710	750	79	13	92	13	68	81
	4	**Shopping Center**	105,000	sf	820	6,220	61	38	99	270	293	563
				10% Int Capture[2]		620	6	4	10	27	29	56
				25% Pass-by[3]		1,400	9	9	18	60	60	120
	5	**Townhomes**	140	Unit	220	1,030	15	51	66	50	30	80
	6	**Apartments**	594	Unit	220	4,450	63	210	273	210	123	333
		TOTAL ACCESS (#3,4,5&6) *TRIPS*[4]				**14,430**	**364**	**351**	**715**	**584**	**659**	**1,243**
		TOTAL ACCESS PASS-BY *TRIPS*				1,400	9	9	18	60	60	120
		TOTAL ACCESS *NEW TRIPS*				**13,030**	**355**	**342**	**697**	**524**	**599**	**1,123**
Henderson Lakes Apt/ Access #2	2	**Medical Office**	54,000	sf	720	1,990	117	33	150	52	135	187
	7	**Single Family**	112	units	210	1,150	21	63	84	71	42	113
		TOTAL ACCESS (#2&7) *TRIPS*				**3,140**	**138**	**96**	**234**	**123**	**177**	**300**
Holy Church of God/ Access #3	1	**Assisted Living**	200	beds	254	520	24	14	38	20	32	52
	9	**Single Family**	126	unit	210	1,290	23	71	94	80	47	127
		TOTAL ACCESS (#1&9) *TRIPS*				**1,810**	**47**	**85**	**132**	**100**	**79**	**179**
Access #4	8	**Single Family**	94	Unit	210	980	18	54	72	60	36	96
		TOTAL ACCESS (#8) *TRIPS*				**980**	**18**	**54**	**72**	**60**	**36**	**96**
HOPETON LANDING TOTALS		**TOTAL PROJECT *TRIPS***				**20,360**	**567**	**586**	**1,153**	**867**	**951**	**1,818**
		TOTAL PROJECT PASS-BY *TRIPS*				1,400	9	9	18	60	60	120
		TOTAL PROJECT *NEW TRIPS*				**18,960**	**558**	**577**	**1,135**	**807**	**891**	**1,698**

[1] ITE *Trip Generation* manual, 10th Ed. 2017.

[2] Internal capture of 10-percent assumed for shopping use only.

[3] Twenty-five percent pass-by assumed for the shopping center.

[4] Total trips exclude internal capture trips as they will not appear at site access.

As shown by the above, each site access and respective PODs that will be served by that specific access has been presented. Individual access drives are the most southern access located opposite Henderson Oaks Drive (Access #1), access opposite Henderson Lakes Apartments (Access #2), access opposite Holy Church of God (Access #3) and Access #4 located farthest to the north.

In total, the Hopeton Landing project can be expected to generate 20,360 two-way daily trips of which a total of 1,153 trips (567 entering and 586 exiting) are expected during the AM peak-hour. During the PM peak-hour, a total of 1,818 trips (867 entering, 951 exiting) are expected. These volumes reflect the conservative 10-percent internal capture expected between the residential and commercial uses of the site (estimated at 620 daily trips, a total of 10 AM peak-hour trips and a total of 56 PM peak-hour trips) between PODs #3-6.

For the commercial component only a 25-percent pass-by percentage has been applied for the shopping center. No pass-by percentage has been assigned for any other proposed uses within the project.

Once the pass-by reduction was applied to the anticipated external trips, the Hopeton Landing project can be expected to generate 18,960 *new* external trips on a weekday daily basis, of which a total of 1,135 *new* trips (558 entering, 577 exiting) can be expected during the AM peak-hour. During the PM peak-hour, 1,698 *new* trips (807 entering, 891 exiting) can be expected.

Trip generation to be assigned to individual access drives summarized below:

- Access #1- Opposite Henderson Oaks Drive:
  - New trips: 13,030 daily
  - AM Peak: 697 veh (355 entering, 342 exiting)
  - PM Peak: 1,123 veh (524 entering, 599 exiting)
  - Retail Pass-by AM Peak: 19 (9 entering & exit), PM Peak 120 (60 enter and exit)

- Access #2- Opposite Henderson Lakes Apartments:
  - New trips: 3,140 daily
  - AM Peak: 234 veh (138 entering, 96 exiting)
  - PM Peak: 300 veh (123 entering, 177 exiting)
  - Retail Pass-by None

- Access #3- Opposite Holy Church of God:
  - New trips: 1,810 daily
  - AM Peak: 132 veh (47 entering, 85 exiting)
  - PM Peak: 179 veh (100 entering, 79 exiting)
  - Retail Pass-by None

- Access #4- Northern Access:
  - New trips: 980 daily
  - AM Peak: 72 veh (18 entering, 54 exiting)
  - PM Peak: 96 veh (60 entering, 36 exiting)
  - Retail Pass-by None

Distribution Pattern

The directional distribution of site-generated traffic on the study area roadways has been based on an evaluation of existing travel patterns within the defined study area. The anticipated patterns for each of the specific land-uses are shown in **Table 2**. This distribution pattern has been applied to the site-generated traffic volumes from Table 1 to develop the site-generated specific volumes for the study area intersections illustrated in **Figures 8** & **9**.

Table 2
TRIP DISTRIBUTION PATTERN
Hopeton Landing
Chatham County, GA

Roadways	Direction To/From	Residential Percent Enter/Exit	Institutional/ Office Percent Enter/Exit	Commercial/ Retail Percent Enter/Exit
US 17	North	25	35	30
	South	60	40	40
Little Neck Road	North	15	20	25
Henderson Oaks and Lakes	South	0	5	5
	Total	**100**	**100**	**100**

Note: Based on multiple factors including existing traffic patterns, proximity to interstate & arterials and densities of both commercial and residential areas.

Future Build Traffic Conditions

The site-generated traffic, as depicted in Figures 8 & 9, has been added to the respective 2030 No-Build traffic volumes shown in Figures 6 & 7. This results in the peak-hour Build traffic volumes, which are graphically depicted in **Figures 10 & 11**. These volumes were used as the basis to determine potential improvement measures necessary to mitigate traffic impacts caused by the project.

TRAFFIC OPERATIONS

Analysis Methodology

A primary result of capacity analysis is the assignment of Level-of-Service (LOS) to traffic facilities under various traffic flow conditions. The concept of Level-of-Service is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A Level-of-Service designation provides an index to the quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six Levels-of-Service are defined for each type of facility (signalized and unsignalized intersections). They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst.

Since the Level-of-Service of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of Levels-of-Service depending on the time of day, day of week, or period of a year.

Analysis Results

As part of this TIAS, capacity analyses have been performed at the study area intersections under both Existing and Future (No-Build & Build) conditions. The results of these analyses are summarized in **Table 3**.

Table 3
LEVEL-OF-SERVICE SUMMARY
Hopeton Landing
Chatham County, GA

	Time	Existing		2030 No-Build		2030 Build	
Signalized Intersection	**Period**	**Delay[a]**	**LOS[b]**	**Delay**	**LOS**	**Delay**	**LOS**
US 17 at Little Neck Road	AM	11.8	B	15.9	B	47.9	D
	PM	13.6	B	36.4	D	**190.2**	**F**
Unsignalized Intersections							
Little Neck Road at Al Henderson Blvd	AM	10.4	B	11.7	B	24.6	C
	PM	9.0	A	11.3	B	**>300.0**	**F**
Little Neck Road at Zipperer Drive	AM	10.3	B	11.0	B	19.7	C
	PM	9.7	A	10.3	B	26.2	D
Little Neck Road at Henderson Oaks Drive/Access #1[3]	AM	9.9	A	10.5	B	**>300.0**	**F**
	PM	9.7	A	10.2	B	**>300.0**	**F**
Little Neck Road at Henderson Lakes Apartments/Access #2[4]	AM	9.8	A	10.3	B	32.5	D
	PM	9.3	A	9.6	A	**234.1**	**F**
Little Neck Road at Holy Church of God/Site Access PODs #1 & 9: Access #3	AM	**To be Developed by Project**				15.8	C
	PM					21.3	C
Little Neck Road at Site Access POD #8: Access #4	AM	**To be Developed by Project**				14.2	B
	PM					17.3	C

a. Delay in seconds-per-vehicle.
b. LOS = Level-of-Service.

GENERAL NOTES:

1. For unsignalized intersections, Delay is representative of critical movement/lane group/approach.
2. For signalized intersections, Delay is representative of the over-all average of each approach.
3. Future site access to align opposite Henderson Oaks serving PODs # 3,4, 5 & 6.
4. Future site access to align opposite Zipperer serving PODs # 2 & 7.

As shown in Table 3, under Existing conditions, the signalized study area intersection of US 17 at Little Neck Road currently operates at a LOS B during both the AM and PM peak hours. Each of the unsignalized intersections of Little Neck Road at Al Henderson Boulevard, Zipperer Drive, Henderson Oaks Drive and the Henderson Lakes Apartments also operate at acceptable service levels during both peak hours.

Under future 2030 No-Build conditions, which include the annual growth of 3-percent, each of the study area intersections is expected to continue to operate at acceptable service levels with an increase in delays. The signalized intersection of US 17 at Little Neck Road declines to a LOS D during the PM peak-hour. The main issue for this intersection is the eastbound left-turn from US 17 to Little Neck Road which is greater 300 vehicles during the PM peak-hour.

Build 2030 conditions reflect the operations of all land-uses and phases expected within Hopeton Landing (total build-out). Under these conditions, the signalized intersection of US 17 at Little Neck Road will degrade to a poor service level during the PM peak-hour and a LOS D during the AM peak-hour. As under the No-Build scenario, the left-turn from US 17 to Little Neck Road is the greatest capacity issue as now the volume exceeds 600 vehicles. Three unsignalized intersections will operate poorly during one or

more of the peak hours studied: Little Neck Road at Al Henderson Boulevard, Henderson Oaks Drive and Henderson Lakes Apartments. Both the Henderson Oaks Drive and Henderson Lakes Apartments intersections indicate capacity issues due to the addition of a fourth approach leg being site access drives servicing the project. The remaining two site access drives which serve PODS #1 & 9 and POD #8 are expected to operate at acceptable service levels.

Please note that as defined during the scoping session for this project, these presented service levels do not reflect the County's planned improvements along Little Neck Road or US 17 due to the build year of Hopeton being 2030 and the County's schedule of the widening being 2037.

MITIGATION

The final phase of the analysis process is to identify mitigating measures which may either minimize the impact of the project on the transportation system or tend to alleviate poor service levels not caused by the project. Due to the potential seven-year difference of the County project and Hopeton development, improvements have been identified in two parts:

1. Construction/occupancy of only the northern portion of the project located in PODs #1, 8 & 9 which would be accessed by drives #3 & 4. Development These project areas as shown do not depend on the completion of the County's widening project of Little Neck Road or US 17 to maintain acceptable service levels. Recommendations for development of these PODs include access requirements (cross-section turning lanes, etc.) and traffic control.

2. A longer-term development of the retail and higher density residential areas (PODs #2-7, access drives #1 & 2) which will be accessed by construction of a fourth approach leg opposite Henderson Oaks Drive and Henderson Lakes Apartments. These later development areas will require that the County widening project of Little Neck Road and US 17 to be implemented for build-out of the expected uses.

INITIAL DEVELOPMENT PHASE

The below recommendations are planned while Little Neck Road is still a two-lane facility prior to the completion of the 2037 County widening project:

Little Neck Road at Site Access #3 at Holy Church of God

This unsignalized intersection will service the institutional POD #1 and the residential POD #9 of the project site and is to be located opposite the Holy Church of God access. Based on the trip generation projections, this site access is expected to service a two-way total of 132 trips during the AM peak-hour and 179 two-way trips during the PM peak-hour.

- ***Northbound (Little Neck Road) Approach:*** Based on projected peak-hour volumes, a right-turn lane entering the site is recommended based on *Table 4-6 (ref. Regulations for Driveway & Encroachment Control).* Design of this lane must be in accordance with *Table 4-8* which calls out a 250-foot lane length and a 100-foot taper;

- ***Southbound (Little Neck Road) Approach:*** Based on projected peak-hour volumes, a left-turn lane entering the site is recommended based on *Table 4-7a.* Design of this lane must be in accordance with *Table 4-9* which calls out a 235-foot lane length. Based on the current widening concept for Little Neck Road, this turning lane and taper can be accomplished within the raised

median. It should be noted that by design, this added lane will also result in a northbound left-turn lane for traffic entering the Church;

- ***Westbound (Site Access #3 PODs 1 & 9) Approach:*** Access to be constructed opposite the existing access of the Holy Church of God. Construct site access as a three-lane cross-section with a single inbound lane and two lanes exiting the site designated as a separate left-turn lane and a separate right-turn; and

- ***Traffic Control:*** Place intersection under STOP sign control where traffic exiting the site will be required to stop.

Little Neck Road at Northern Site Access #4

This unsignalized intersection will service POD #8 of the project site and is located approximately 2,200-feet south of I 95 and approximately 1,650-feet north of site access #3 (described above). Based on the trip generation projections, this site access is expected to service a two-way total of 72 trips during the AM peak-hour and 96 two-way trips during the PM peak-hour.

- ***Northbound (Little Neck Road) Approach:*** Based on projected peak-hour volumes, a right-turn lane entering the site is recommended based on *Table 4-6 (ref. Regulations for Driveway & Encroachment Control).* Design of this lane must be in accordance with *Table 4-8* which calls out a 250-foot lane length and a 100-foot taper;

- ***Southbound (Little Neck Road) Approach:*** Based on projected peak-hour volumes, a left-turn lane entering the site is recommended based on *Table 4-7a.* Design of this lane must be in accordance with *Table 4-9* which calls out a 235-foot lane length, a 100-foot taper and an approach shift which varies depending on the method chosen to widen Little Neck Road whether it be symmetrical or a-symmetrical;

- ***Westbound (Site Access #4 POD 8) Approach:*** Construct site access as a three-lane cross-section with a single inbound lane and two lanes exiting the site designated as a separate left-turn lane and a separate right-turn; and

- ***Traffic Control:*** Place intersection under STOP sign control where traffic exiting the site will be required to stop.

The design of both above access drives must account for the eventual widening of Little Neck Road to a four-lane with a TWTL along the project frontage. This coordination with Chatham County's staff and design will be needed in order to not impact the ultimate widening of Little Neck Road and minimize "re-work" when the county's project is implemented.

Off-Site Intersections

With development in the time period prior to the County's widening project, the surrounding off-site intersections of Little Neck Road at US 17, Al Henderson Boulevard, Zipperer Drive, Henderson Oaks Drive and Henderson Lakes Apartments are each expected to operate at acceptable service levels.

BUILD-OUT OF DEVELOPMENT

Development of the remaining project area PODS and access drives #1 & 2 will require the County's Little Neck Road widening project to become the multi-laned facility which is anticipated in the year 2037. Below defines the site access geometries for the two additional access drives followed by off-site intersection recommendations:

Little Neck Road at Henderson Oaks Drive/Site Access #1

This intersection will service PODs #3-6 of the project site as it will align with Henderson Oaks Drive on the opposite side of Little Neck Road. With PODs #3 & 4 being commercial, institutional and higher density residential uses, this access at build-out will serve significant volumes of site-generated traffic during the AM peak-hour (697 two-way trips) and PM peak hour (1,123 two-way trips).

- ***Northbound (Little Neck Road) Approach:*** Based on projected peak-hour volumes, a right-turn lane entering the site is recommended based on *Table 4-6 (ref. Regulations for Driveway & Encroachment Control).* Design of this lane must be in accordance with *Table 4-8* which calls out a 250-foot lane length and a 100-foot taper. The design of this access should incorporate a delta median separating the outside through lane from right-turn lane;

- ***Southbound (Little Neck Road) Approach:*** Based on projected peak-hour volumes, a left-turn lane entering the site is recommended based on *Table 4-7a.* Design of this lane must be in accordance with *Table 4-9* which calls out a 235-foot lane length, a 100-foot taper. Based on the current widening concept for Little Neck Road, this turning lane and taper can be accomplished within the planned raised median;

- ***Westbound (Site Access #1 PODs 3-6) Approach:*** Construct site access as a five/six-lane cross-section with two inbound lanes and four lanes exiting the site designated as dual left-turns, a through lane and a separate right-turn lane; and

- ***Traffic Control:*** Based on the current anticipated land uses, associated trip generation and well as the suggested geometry; this intersection would operate under traffic signal control when warranted under *MUTCD* guidelines. Current location provides a separation from the nearest planned traffic signal at Al Henderson Boulevard of approximately 3,400-feet.

Little Neck Road at Henderson Lakes Apartments/Site Access #2

This unsignalized intersection will service PODs #2 & 7 which has a limited institutional use and 112 single family residential units (AM peak-hour: 230 two-way trips, PM peak hour 300 two-way trips). This access will align opposite the Henderson Lakes Apartment drive on the opposite side of Little Neck Road.

- ***Northbound (Little Neck Road) Approach:*** Based on projected peak-hour volumes, a right-turn lane entering the site is recommended based on *Table 4-6 (ref. Regulations for Driveway & Encroachment Control).* Design of this lane must be in accordance with *Table 4-8* which calls out a 250-foot lane length and a 100-foot taper;

- ***Southbound (Little Neck Road) Approach:*** Based on projected peak-hour volumes, a left-turn lane entering the site is recommended based on *Table 4-7a.* Design of this lane must be in accordance with *Table 4-9* which calls out a 235-foot lane length and a 100-foot taper. Based on the current widening concept for Little Neck Road, this turning lane and taper can be accomplished with extension of the planned U-turn-lane lane at this location;

- ***Westbound (Site Access #2 PODs 2 & 7) Approach:*** Construct site access opposite Henderson Lakes Apartments as a three cross-section with a single inbound lane and two lanes exiting the site designated as a left-turn lane and a shared through/right-turn lane; and

- ***Traffic Control:*** Place intersection under STOP sign control where traffic exiting the site will be required to stop.

It should be noted that both access drives identified in the initial phase; Little Neck Road at Site Access #3 at Holy Church of God and Site Access #4 do not require additional geometric or traffic control improvements.

Off-Site Intersections

Analyses conducted for the study area intersections have been completed assuming completion of the County's widening project of Little Neck Road and US 17. This includes the planned signalization of the Al Henderson Boulevard intersection as planned by the county and signalization of Henderson Oaks Drive/Site Access #2 by the project. **Table 4** illustrates the resultant service levels for the study area intersections:

Table 4
LEVEL-OF-SERVICE SUMMARY
US 17 WIDENING ASSUMED
Hopeton Landing
Chatham County, GA

	Time	2030 Build With County Improvements	
Signalized Intersection	**Period**	**Delay[a]**	**LOS[b]**
US 17 at Little Neck Road	AM	25.5	C
	PM	**122.1**	**F**
Little Neck Road at Al Henderson Blvd	AM	5.0	A
	PM	10.2	B
Little Neck Road at Henderson Oaks Drive/Access #1[3]	AM	14.5	B
	PM	22.1	C
Unsignalized Intersections			
Little Neck Road at Zipperer Drive	AM	14.2	B
	PM	16.0	C
Little Neck Road at Henderson Lakes Apartments/Access #2[4]	AM	20.5	C
	PM	**124.2**	**F**
Little Neck Road at Holy Church of God/Site Access PODs #1 & 9: Access #3	AM	14.2	A
	PM	21.2	C
Little Neck Road at Site Access POD #8: Access #4	AM	12.3	B
	PM	15.5	A

a. Delay in seconds-per-vehicle.

b. LOS = Level-of-Service.

GENERAL NOTES:

1. For unsignalized intersections, Delay is representative of critical movement/lane group/approach.
2. For signalized intersections, Delay is representative of the over-all average of each approach.
3. Future site access to align opposite Henderson Oaks serving PODs # 3,4, 5 & 6.
4. Future site access to align opposite Zipperer serving PODs # 2 & 7.

As shown by Table 4, under future conditions with the defined county's widening project of Little Neck Road and US 17 as well as improvements identified for the project access drives, service levels are poor at total build for the intersection of US 17 at Little Neck Road and Little Neck Road at Henderson Lakes Apartments/Access #2.

Detailed review of the US 17 and Henderson Lakes intersections indicate the following:

- *US 17 at Little Neck Road:* Eastbound left-turn movement and westbound right-turn movement from US 17 onto northbound Little Neck Road exceeds the capacity of the respective single turn lanes; and

- *Little Neck Road at Henderson Lakes Apartments/Site Access #2:* Minor-street left-turn movement from the site access operates with delays; must wait for gaps in mainline Little Neck Road north/south traffic flow. This is typical of unsignalized intersections located along a multi-lane arterial such as Little Neck Road.

As the Hopeton Landing project continues to develop consideration of the following intersection improvements to the US 17 at Little Neck Road intersection should be reviewed:

US 17 at Little Neck Road

- ***Eastbound (US 17) Approach:*** Widening of US 17 in the eastbound direction to create a second left-turn lane onto northbound Little Neck Road. This improvement will necessitate modifications to the traffic signal phasing to implement protected only phasing for this movement; and

- ***Westbound (US 17) Approach:*** Widening of US 17 in the westbound direction to create a second right-turn lane onto northbound Little Neck Road.

It should be noted that both of these improvements had been identified in the prior Hussy Gay Bell study (*Little Neck Road Traffic Study, August 10, 2016*) prepared for Chatham County.

SUMMARY

EPC has completed a Traffic Impact and Access Study relative to the development of Hopeton Landing which is located on the northeast side of Little Neck Road, south of I 95, north of US 17 in Chatham County, GA. As planned, this large-scale development will provide multiple types of residential units, institutional and commercial uses. This facility is expected to be constructed/occupied in 2030.

Project access is planned to/from Little Neck Road via four access drives, three of which will be located opposite existing roadways and/or drives (Henderson Oaks, Henderson Lakes Apartments and Holy Church of God) with the fourth access creating a new intersection.

Chatham County is planning a major widening project of Little Neck Road between US 17 and the I 95 over pass. With a future completion year of 2037, this project will widen Little Neck Road to a 4-lane divided or 5-lane cross-section. Providing planned access management along the corridor will result in spacing of full-movement intersections, U-turn locations, right-in/right-out access and signalization of the Al Henderson Boulevard intersection.

Since this project is beyond the design year of the project, phasing of the development is expected which will begin on the northerly section of the site closest to I 95 with 222 single family residential units and the assisted living facility. Completion of the remainder of the site, which has higher density commercial and residential uses, will be planned later when the County's project is implemented.

Analyses have been conducted for the surrounding roadway network which includes the adjacent intersections of US 17 at Little Neck Road, Little Neck Road at Al Henderson Boulevard, Zipperer Drive Henderson Oaks and Henderson Lakes Apartments. Build conditions, which does not include the Little Neck Road widening, results in each of the off-site intersections operating poorly during one or more of the peak hours studied with exception of the Zipperer Drive intersection. Two of these locations include site access drives (alignments opposite Henderson Oaks Drive and Henderson Lakes Apartments). The two northern site access drives (which serve the less dense residential) are expected to operate at

acceptable conditions. Suggestions for each of these access drives include both left and right-turn deceleration lanes on Little Neck Road as well as approach cross-sections and traffic control.

When the widening of Little Neck Road occurs, the remaining project build-out can be completed. Suggestions for the two site access drives opposite Henderson Oaks Drive and Henderson Lakes Apartments have been identified which include approach cross-sections, traffic control and turning lanes on Little Neck Road. This includes the potential of signalizing the site access drive opposite Henderson Oaks Drive due to a combination of intersection geometry and anticipated traffic demand.

If you have any questions or comments regarding any information contained within this memo, please contact me at (803) 361 3265.

Regards,

Todd E. Salvagin, Principal
EPC, LLC

Attachments

EPC, LLC
COA No. PEF007836
Expires 06-30-2022

N

NOT TO SCALE

Figure 1

SITE LOCATION MAP

Hopeton Master Plan
Chatham County, GA

EPC, LLC

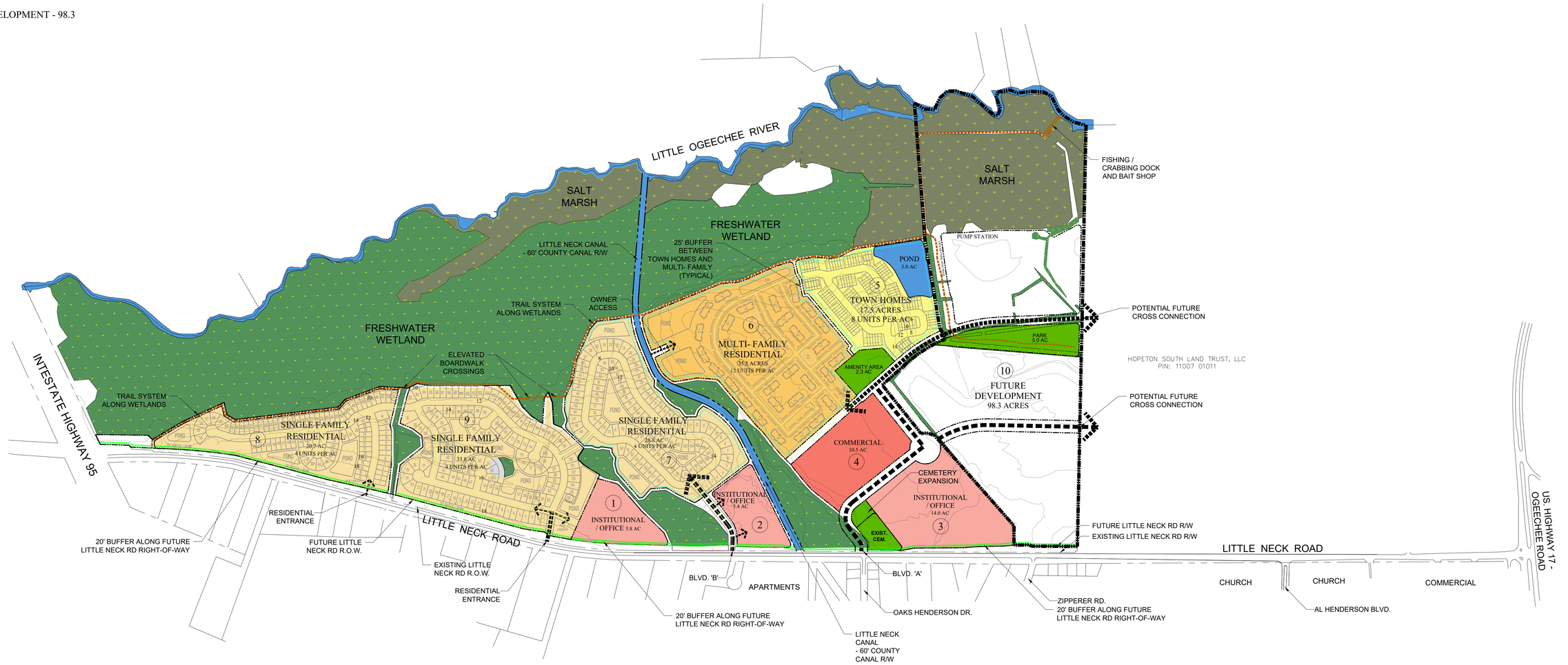
MASTER PLAN

HOPETON LANDING

SAVANNAH, GA

1. INSTITUTIONAL / OFFICE - 5.8 AC
2. INSTITUTIONAL / OFFICE - 5.4 AC
3. INSTITUTIONAL / OFFICE - 14.0 AC
4. COMMERCIAL - 10.5 AC
5. TOWN HOMES RESIDENTIAL - 17.5 AC, 8 UNITS PER AC
6. MULTI-FAMILY RESIDENTIAL - 35.5 AC, 12 UNITS PER AC
7. SINGLE FAMILY RESIDENTIAL - 28.8 AC, 4 UNITS PER AC
8. SINGLE FAMILY RESIDENTIAL - 20.7 AC, 4 UNITS PER AC
9. SINGLE FAMILY RESIDENTIAL - 33.8 AC, 4 UNITS PER AC
10. FUTURE DEVELOPMENT - 98.3

- WETLAND - SALT MARSH - (37.5 AC)
- WETLAND - FRESHWATER - (147.5 AC)
- AMENITY AREA AND PARK - (2.3 AC)
- GREENSPACE AND SPINE ROAD ROW - (10.3 AC)
- TRAILS



SUMMARY

LAND USE	AREA (acres)	UNITS
INSTITUTIONAL/ OFFICE COMMERCIAL	35.7	
FUTURE DEVELOPMENT	98.3	
MULTI-FAMILY RESIDENTIAL	64.3	594
SINGLE FAMILY RESIDENTIAL	54.5	332
TOWNHOMES	17.5	140
AMENITY AREA AND PARK	2.3	
WETLAND - SALT MARSH	37.5	
WETLAND - FRESHWATER	147.9	
GREEN SPACE and SPINE ROAD ROW	10.3	
EX CEMETERY & EXPANSION	2.0	
R.O.W. DEDICATION	7.7	
TOTAL	478.0	1,066

NOTE: For PD zoning, all land uses are accounted for in the Summary Table including the power line easement and lands below 6 ft. elevation.

NOTES

1. TOTAL UNITS BASED ON APPROXIMATE ACREAGE AND MAY VARY BASED ON SURVEY.
2. ACREAGES ARE APPROXIMATE AND NOT BASED ON A SURVEY. ACREAGE MAY VARY BASED ON SURVEY.
3. STORMWATER DETENTION IS REQUIRED FOR EACH DEVELOPMENT POD AS PER REGULATIONS.
4. WETLANDS MAY REQUIRE BUFFERS AS PER REGULATIONS.
5. AREAS UNDER POWER LINES MAY BE USED FOR PARKING, OPEN SPACE AND SOME STORM WATER DETENTION.
6. PASSIVE AND ACTIVE RECREATION AREAS TO BE INCLUDED WITH INDIVIDUAL SUBDIVISION AND MULTI-FAMILY RESIDENTIAL DEVELOPMENTS.
7. BUFFERS: TO BE IN ACCORDANCE WITH ARTICLE 9.5 OF THE CITY OF SAVANNAH ZONING ORDINANCE. BUFFERS MAY BE UNDISTURBED OR PLANTED.
8. TREE PRESERVATION (TREE QUALITY AND LANDSCAPE QUALITY POINT REQUIREMENTS) TO BE MET WITH PRESERVED WETLAND AREAS, AND SUPPLEMENTAL PLANTINGS AS NEEDED.

COLEMAN COMPANY
ENGINEERS • SURVEYORS

N

SCALE IN FEET
0 200 400 600 800 1000

JOB NO. 14-391
MAY 25, 2021

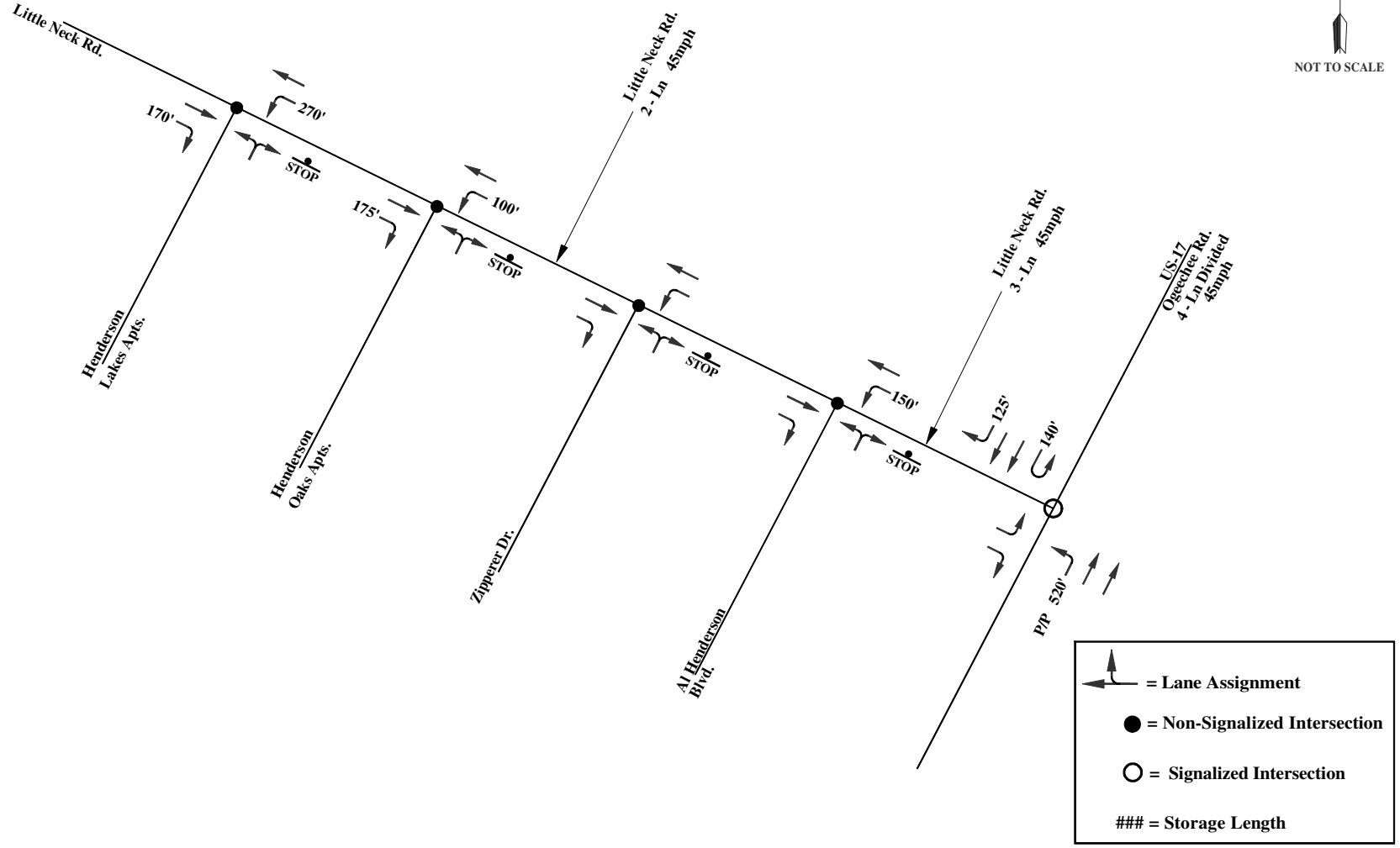


Figure 3

EXISTING GEOMETRICS & TRAFFIC CONTROL

Hopeton Master Plan, Chatham County, Georgia

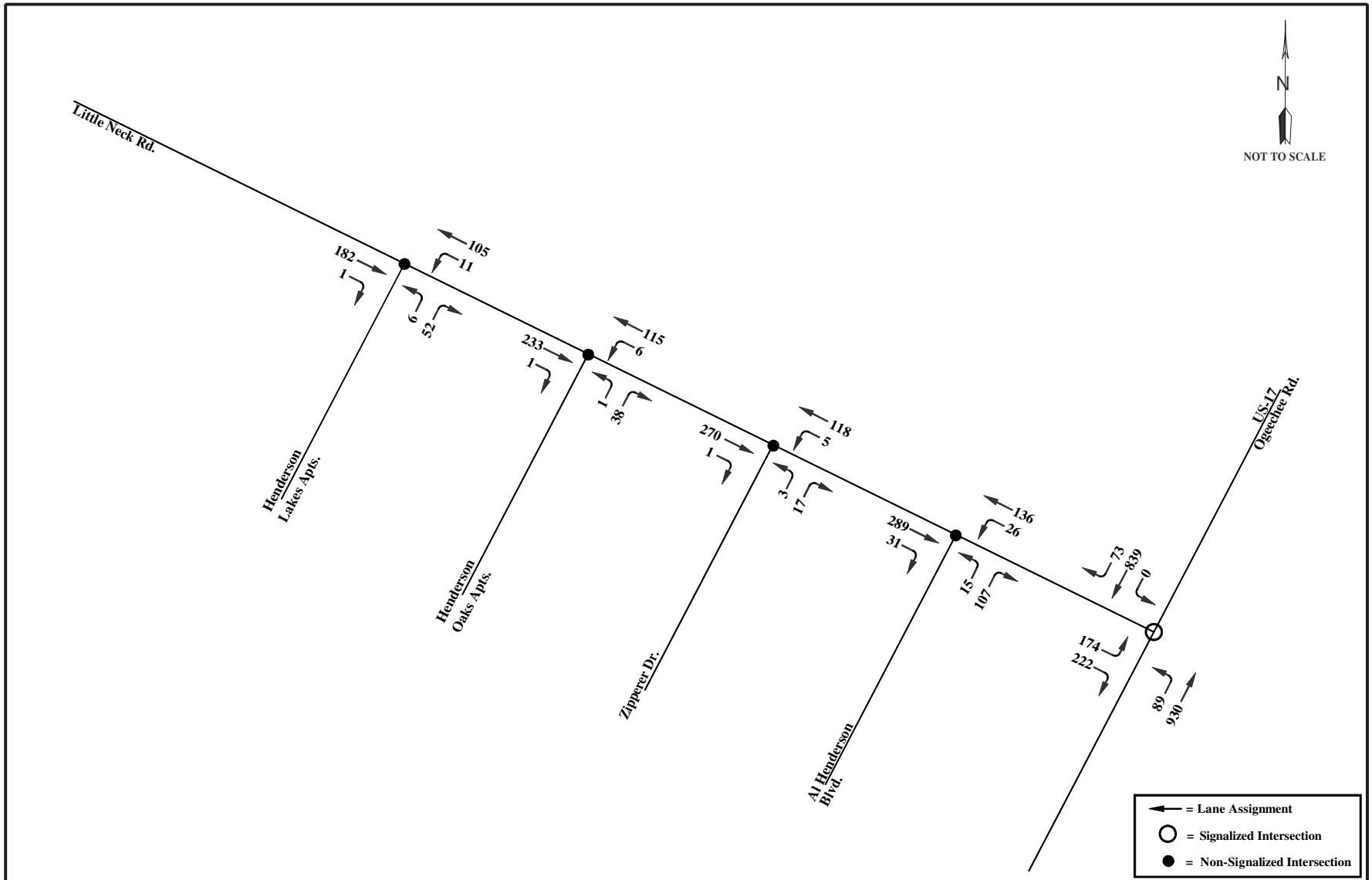


Figure 4

2021 EXISTING TRAFFIC VOLUMES
AM PEAK HOURS

Hopeton Master Plan, Chatham County, Georgia

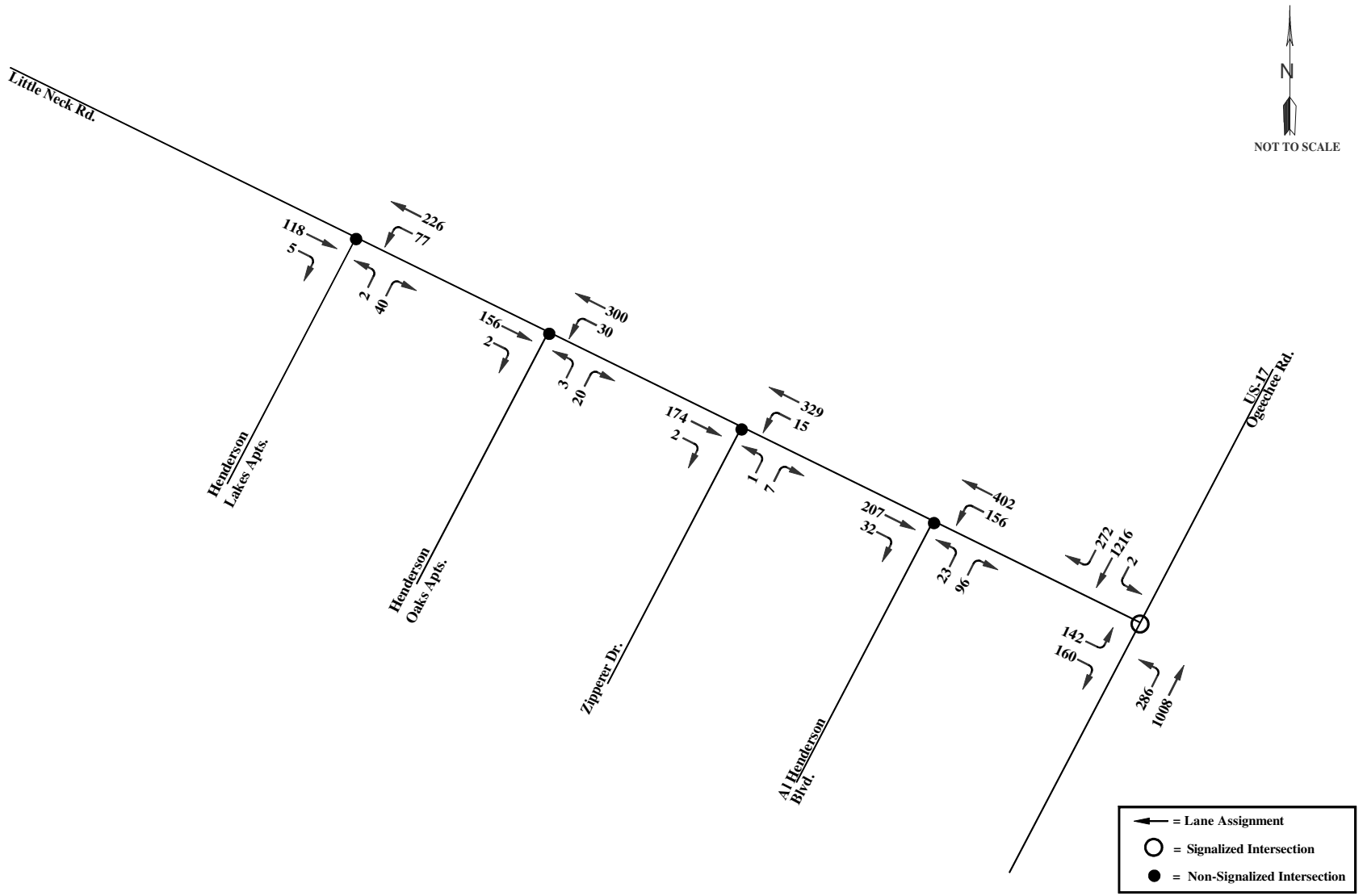


Figure 5

2021 EXISTING TRAFFIC VOLUMES
PM PEAK HOURS

Hopeton Master Plan, Chatham County, Georgia

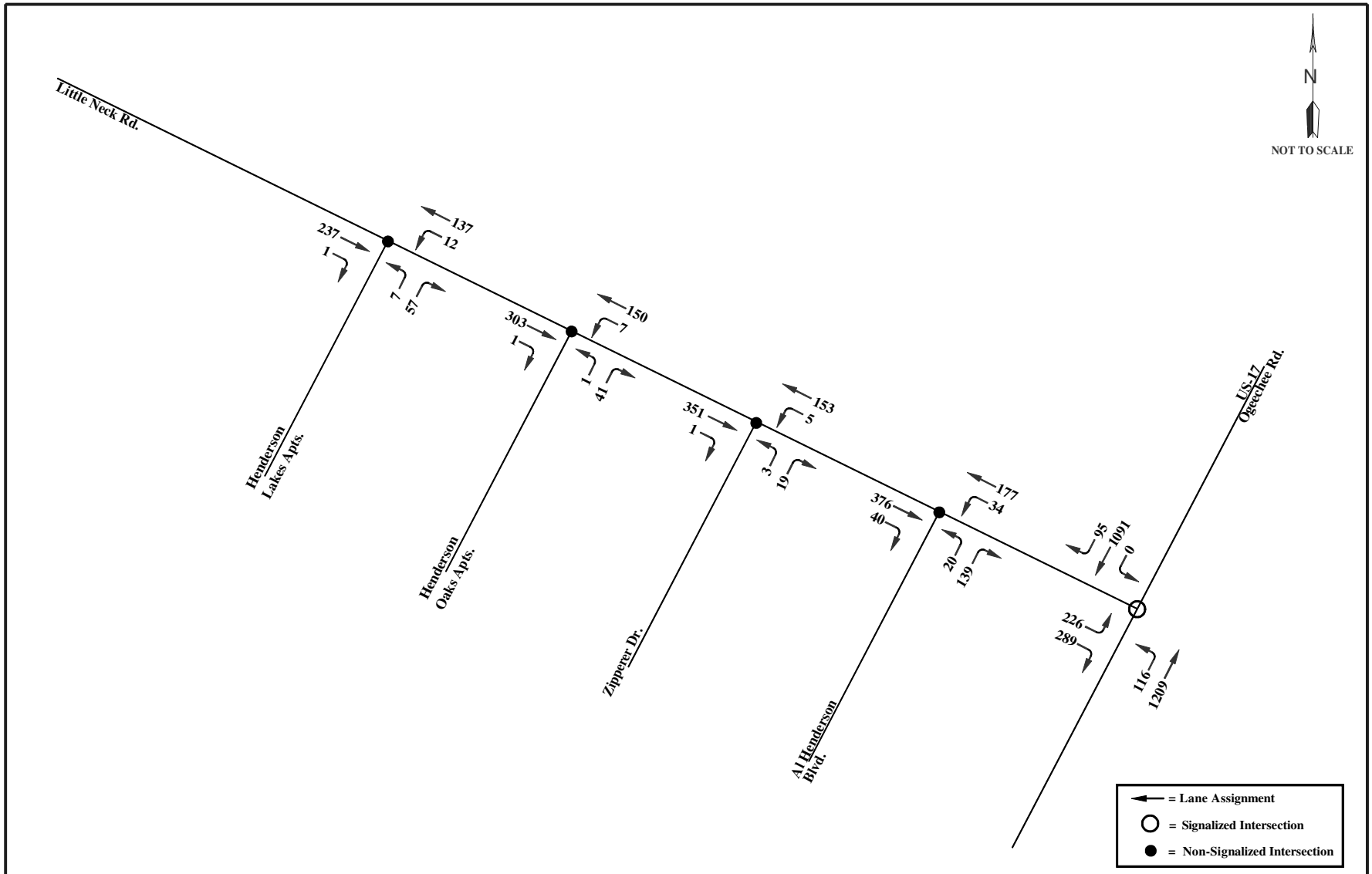


Figure 6

2030 NO-BUILD TRAFFIC VOLUMES
AM PEAK HOURS

Hopeton Master Plan, Chatham County, Georgia

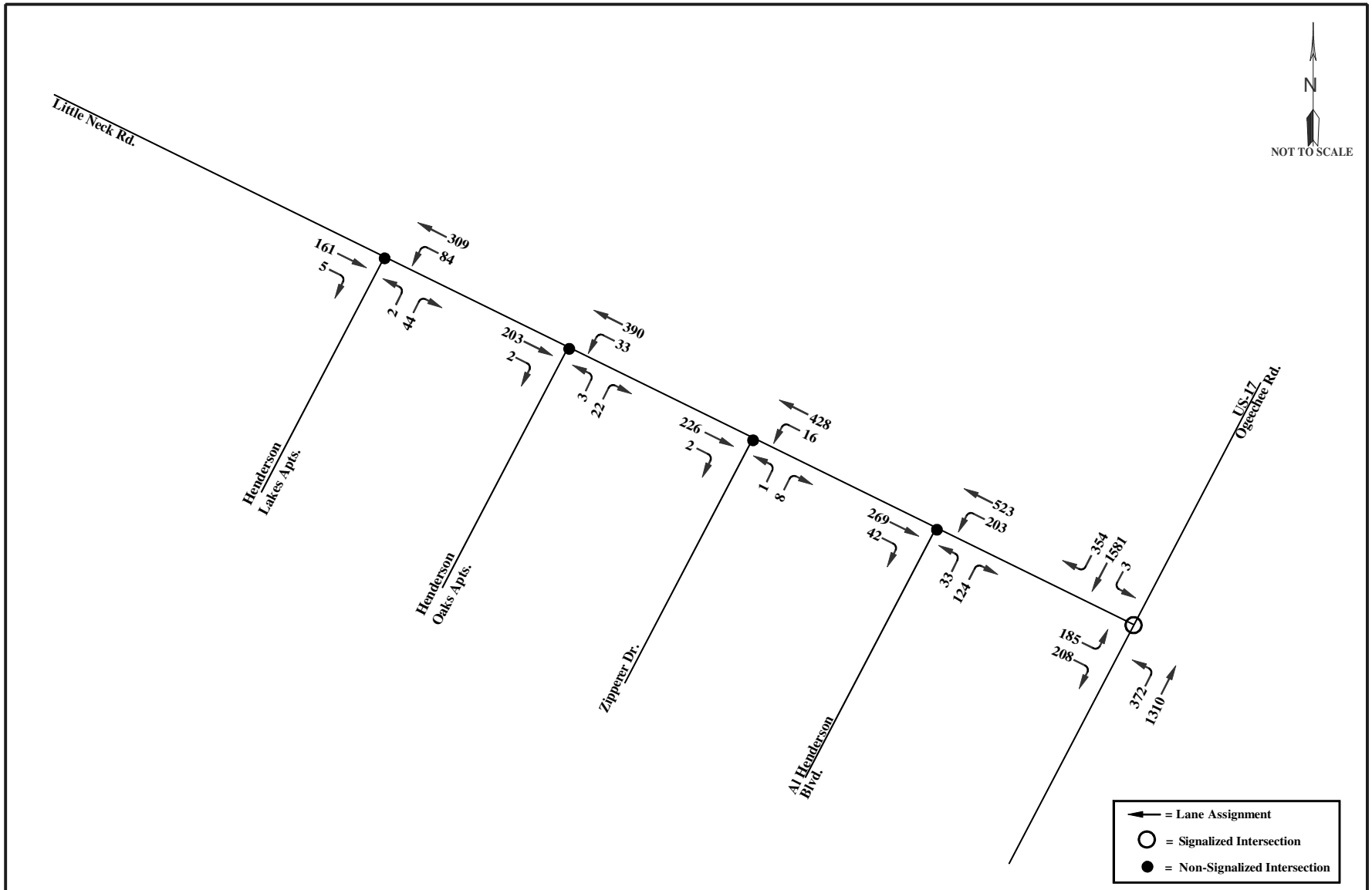


Figure 7

2030 NO-BUILD TRAFFIC VOLUMES
PM PEAK HOURS

Hopeton Master Plan, Chatham County, Georgia

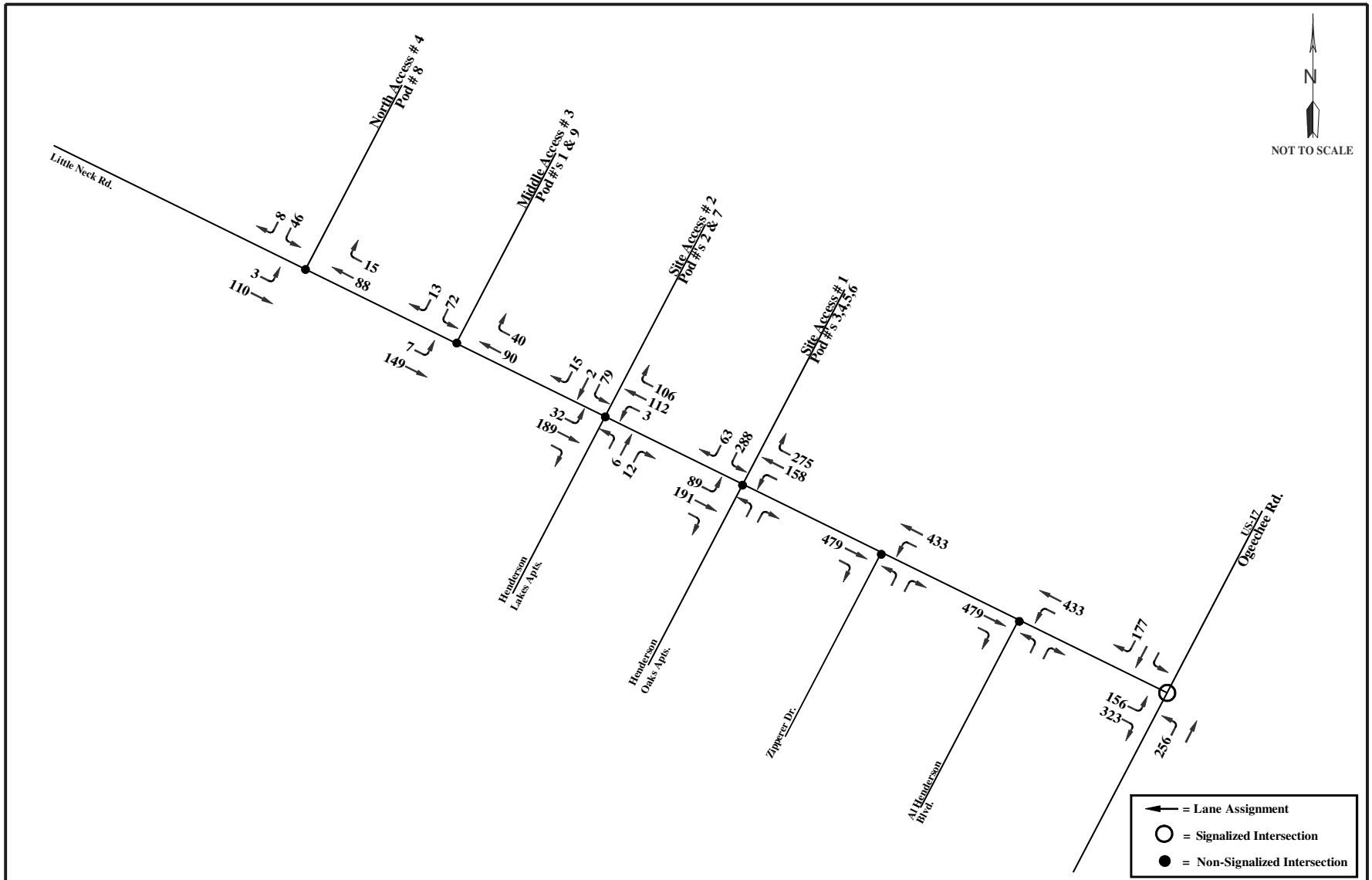


Figure 8

SITE-GENERATED TRAFFIC VOLUMES
AM PEAK HOURS

Hopeton Master Plan, Chatham County, Georgia

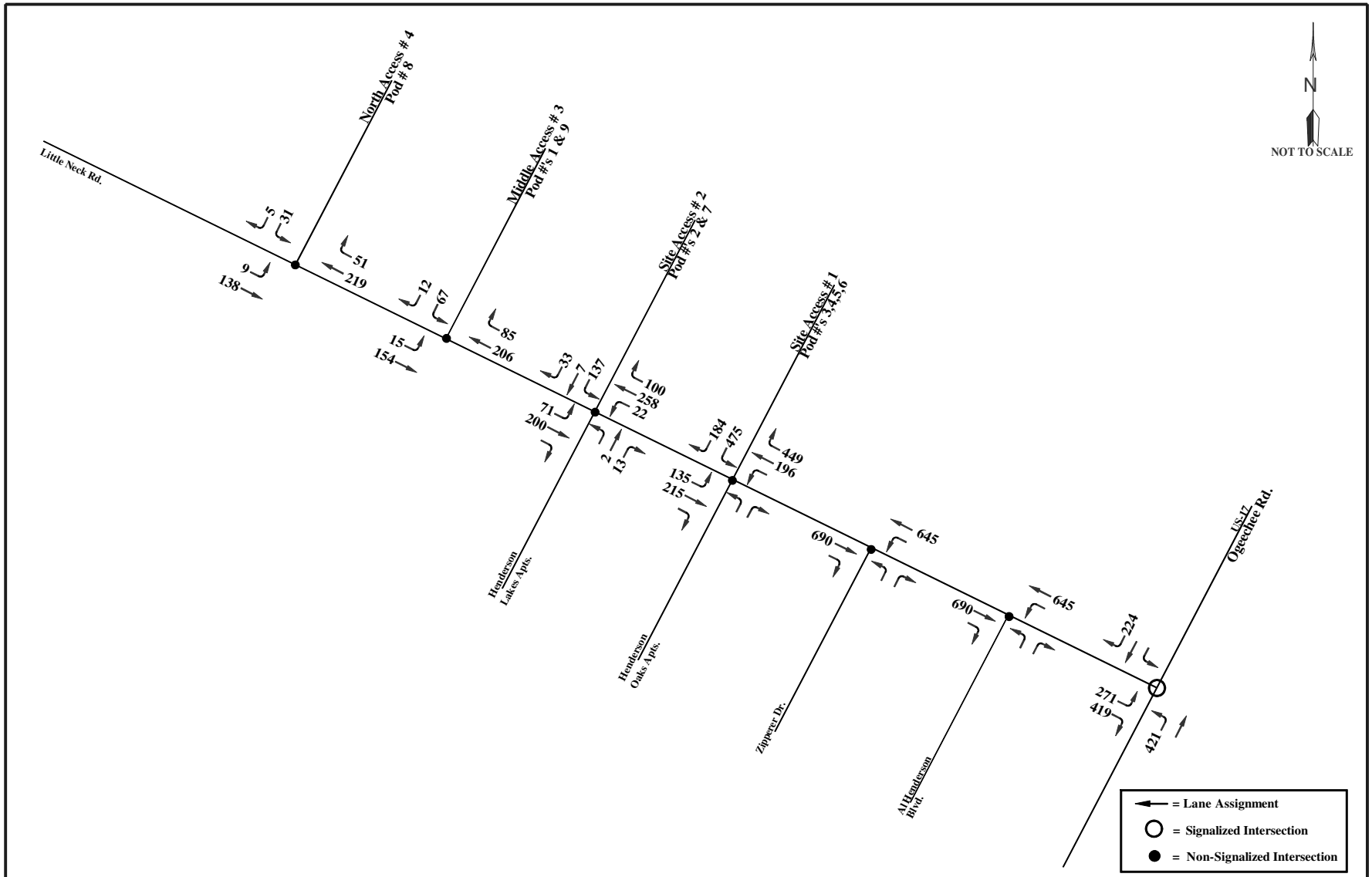


Figure 9

SITE-GENERATED TRAFFIC VOLUMES
PM PEAK HOURS

Hopeton Master Plan, Chatham County, Georgia

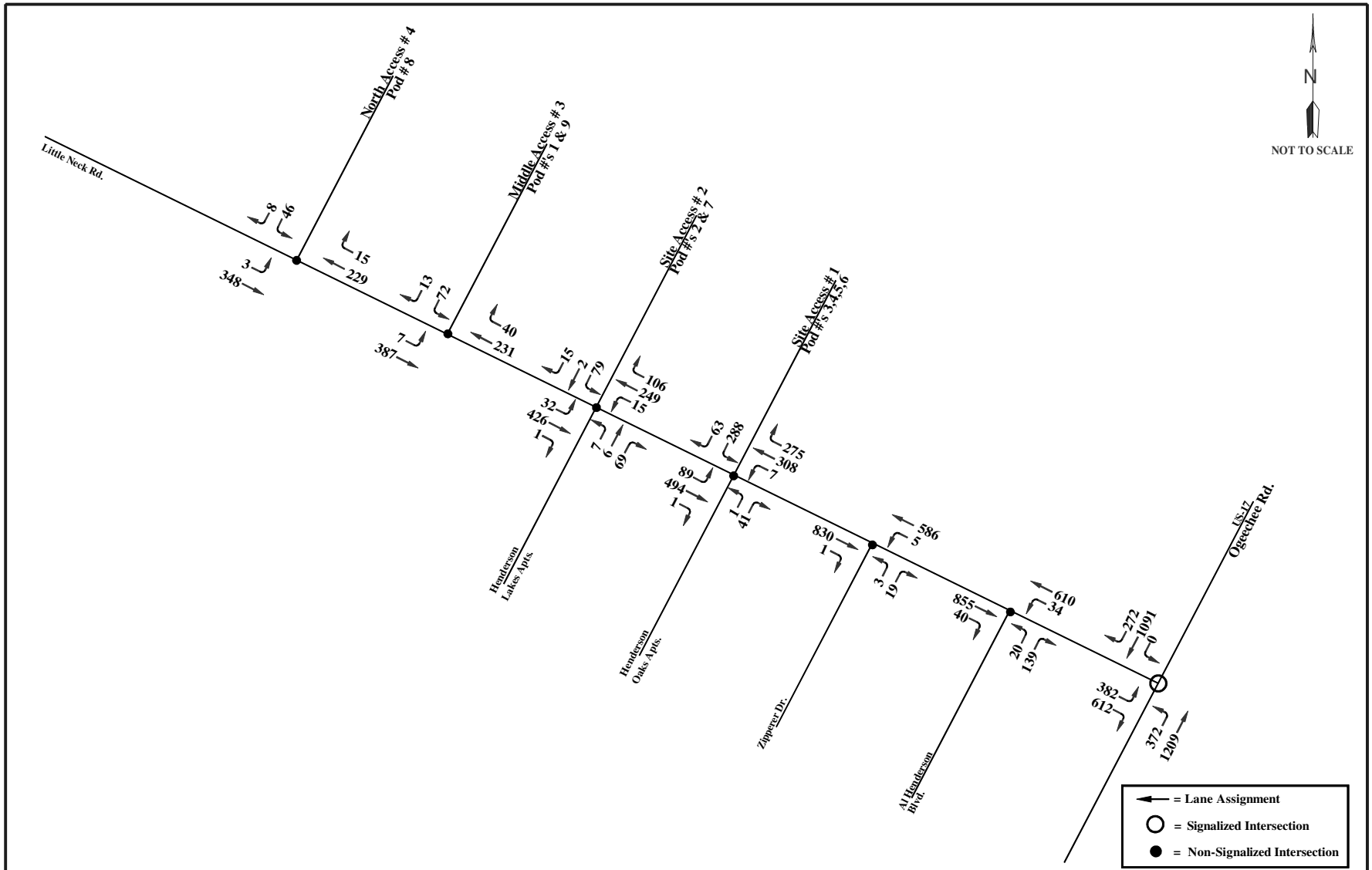


Figure 10

2030 BUILD TRAFFIC VOLUMES
AM PEAK HOURS

Hopeton Master Plan, Chatham County, Georgia

COUNT DATA

SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Ogeechee Rd
Site Code :
Start Date : 05/27/2021
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Little Neck Rd Southbound				Ogeechee Rd Westbound				Northbound				Ogeechee Rd Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	31	0	41	0	0	182	22	0	0	0	0	0	19	207	0	0	502
07:15	41	0	63	0	0	230	24	0	0	0	0	0	16	258	0	0	632
07:30	51	0	66	0	0	231	14	0	0	0	0	0	25	222	0	0	609
07:45	51	0	52	0	0	196	13	0	0	0	0	0	29	243	0	0	584
Total	174	0	222	0	0	839	73	0	0	0	0	0	89	930	0	0	2327
08:00	29	0	40	0	0	196	19	0	0	0	0	0	22	188	0	0	494
08:15	30	0	60	0	0	247	25	0	0	0	0	0	32	166	0	0	560
08:30	36	0	45	0	0	201	28	0	0	0	0	0	28	191	0	0	529
08:45	24	0	50	0	2	214	17	0	0	0	0	0	33	190	0	0	530
Total	119	0	195	0	2	858	89	0	0	0	0	0	115	735	0	0	2113
16:00	38	0	37	0	1	266	31	0	0	0	0	0	55	296	2	0	726
16:15	33	0	34	0	1	297	68	0	0	0	0	0	55	243	1	0	732
16:30	27	0	37	1	0	310	47	0	0	0	0	0	69	234	0	0	725
16:45	31	1	48	0	1	296	51	0	0	0	0	0	79	223	0	0	730
Total	129	1	156	1	3	1169	197	0	0	0	0	0	258	996	3	0	2913
17:00	40	0	49	0	1	328	62	0	0	0	0	0	68	261	1	0	810
17:15	38	0	46	0	0	320	70	0	0	0	0	0	74	270	0	0	818
17:30	37	0	37	0	1	286	69	0	0	0	0	0	58	238	0	0	726
17:45	27	0	28	0	0	282	71	0	0	0	0	0	86	239	0	0	733
Total	142	0	160	0	2	1216	272	0	0	0	0	0	286	1008	1	0	3087
Grand Total	564	1	733	1	7	4082	631	0	0	0	0	0	748	3669	4	0	10440
Apprch %	43.4	0.1	56.4	0.1	0.1	86.5	13.4	0	0	0	0	0	16.9	83	0.1	0	
Total %	5.4	0	7	0	0.1	39.1	6	0	0	0	0	0	7.2	35.1	0	0	
Passenger Vehicles	487	1	688	1	7	3988	582	0	0	0	0	0	689	3558	4	0	10005
% Passenger Vehicles	86.3	100	93.9	100	100	97.7	92.2	0	0	0	0	0	92.1	97	100	0	95.8
Heavy Vehicles	74	0	45	0	0	87	49	0	0	0	0	0	59	109	0	0	423
% Heavy Vehicles	13.1	0	6.1	0	0	2.1	7.8	0	0	0	0	0	7.9	3	0	0	4.1
Buses	3	0	0	0	0	7	0	0	0	0	0	0	0	2	0	0	12
% Buses	0.5	0	0	0	0	0.2	0	0	0	0	0	0	0	0.1	0	0	0.1

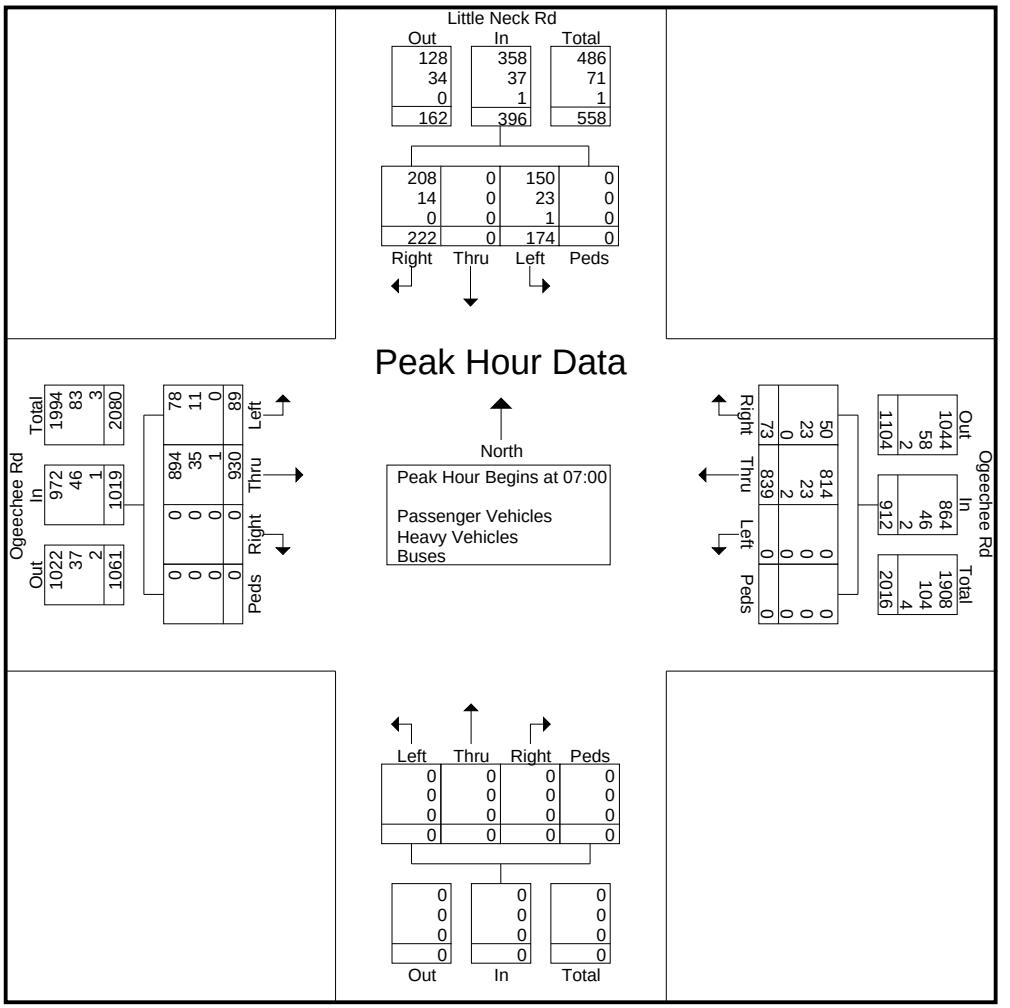
SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Ogeechee Rd
Site Code :
Start Date : 05/27/2021
Page No : 3

	Little Neck Rd Southbound					Ogeechee Rd Westbound					Northbound					Ogeechee Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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	31	0	41	0	72	0	182	22	0	204	0	0	0	0	0	19	207	0	0	226	502
07:15	41	0	63	0	104	0	230	**24**	0	**254**	0	0	0	0	0	16	**258**	0	0	**274**	**632**
07:30	**51**	0	**66**	0	**117**	0	**231**	14	0	245	0	0	0	0	0	25	222	0	0	247	609
07:45	51	0	52	0	103	0	196	13	0	209	0	0	0	0	0	**29**	243	0	0	272	584
Total Volume	174	0	222	0	396	0	839	73	0	912	0	0	0	0	0	89	930	0	0	1019	2327
% App. Total	43.9	0	56.1	0		0	92	8	0		0	0	0	0		8.7	91.3	0	0		
PHF	.853	.000	.841	.000	.846	.000	.908	.760	.000	.898	.000	.000	.000	.000	.000	.767	.901	.000	.000	.930	.920
Passenger Vehicles	150	0	208	0	358	0	814	50	0	864	0	0	0	0	0	78	894	0	0	972	2194
% Passenger Vehicles																					
Heavy Vehicles	23	0	14	0	37	0	23	23	0	46	0	0	0	0	0	11	35	0	0	46	129
% Heavy Vehicles	13.2	0	6.3	0	9.3	0	2.7	31.5	0	5.0	0	0	0	0	0	12.4	3.8	0	0	4.5	5.5
Buses	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	4
% Buses	0.6	0	0	0	0.3	0	0.2	0	0	0.2	0	0	0	0	0	0	0.1	0	0	0.1	0.2

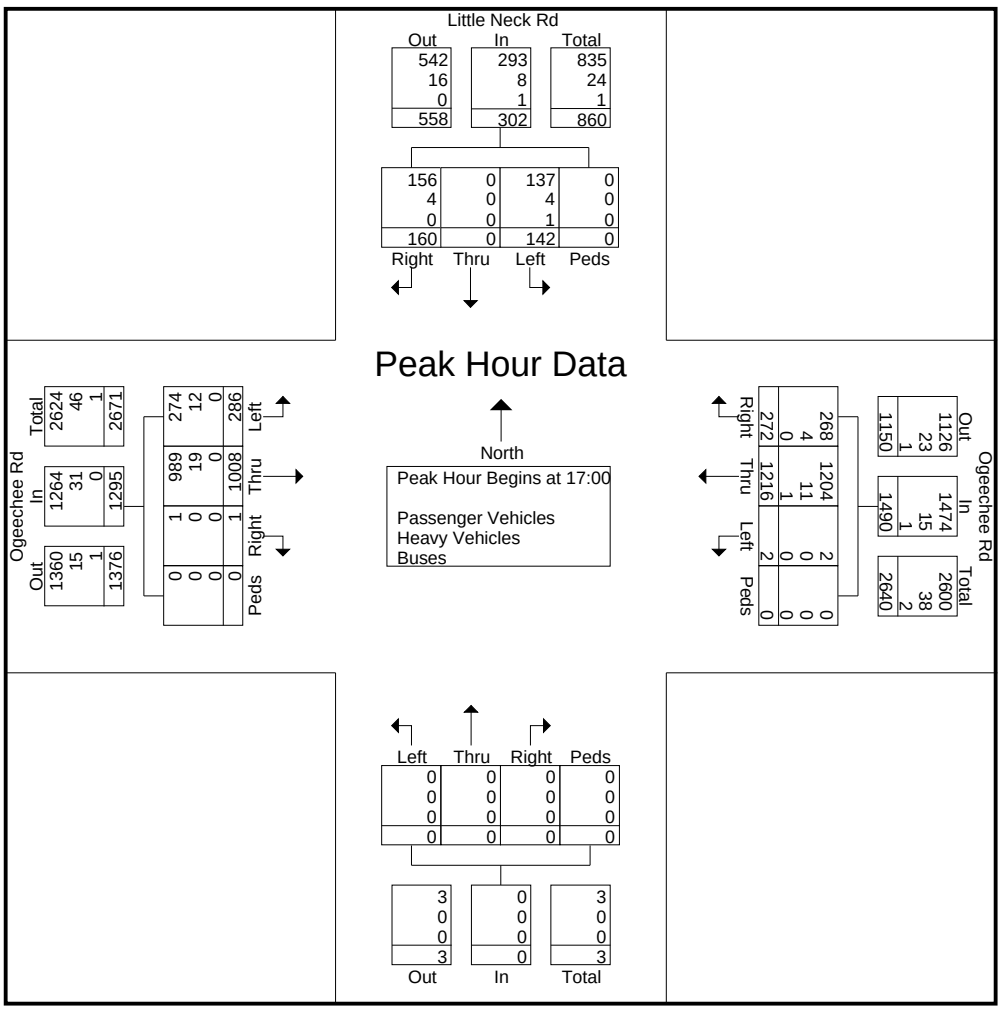


SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201
We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Ogeechee Rd
Site Code :
Start Date : 05/27/2021
Page No : 4

	Little Neck Rd Southbound					Ogeechee Rd Westbound					Northbound					Ogeechee Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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	**40**	0	**49**	0	**89**	**1**	**328**	62	0	**391**	0	0	0	0	0	68	261	**1**	0	330	810
17:15	38	0	46	0	84	0	320	70	0	390	0	0	0	0	0	74	**270**	0	0	**344**	**818**
17:30	37	0	37	0	74	1	286	69	0	356	0	0	0	0	0	58	238	0	0	296	726
17:45	27	0	28	0	55	0	282	**71**	0	353	0	0	0	0	0	**86**	239	0	0	325	733
Total Volume	142	0	160	0	302	2	1216	272	0	1490	0	0	0	0	0	286	1008	1	0	1295	3087
% App. Total	47	0	53	0		0.1	81.6	18.3	0		0	0	0	0		22.1	77.8	0.1	0		
PHF	.888	.000	.816	.000	.848	.500	.927	.958	.000	.953	.000	.000	.000	.000	.000	.831	.933	.250	.000	.941	.943
Passenger Vehicles	137	0	156	0	293	2	1204														
% Passenger Vehicles	96.5	0	97.5	0	97.0	100	99.0	98.5	0	98.9	0	0	0	0	0	95.8	98.1	100	0	97.6	98.2
Heavy Vehicles	4	0	4	0	8	0	11	4	0	15	0	0	0	0	0	12	19	0	0	31	54
% Heavy Vehicles	2.8	0	2.5	0	2.6	0	0.9	1.5	0	1.0	0	0	0	0	0	4.2	1.9	0	0	2.4	1.7
Buses	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
% Buses	0.7	0	0	0	0.3	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.1



SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Al Henderson Blvd
Site Code :
Start Date : 05/27/2021
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

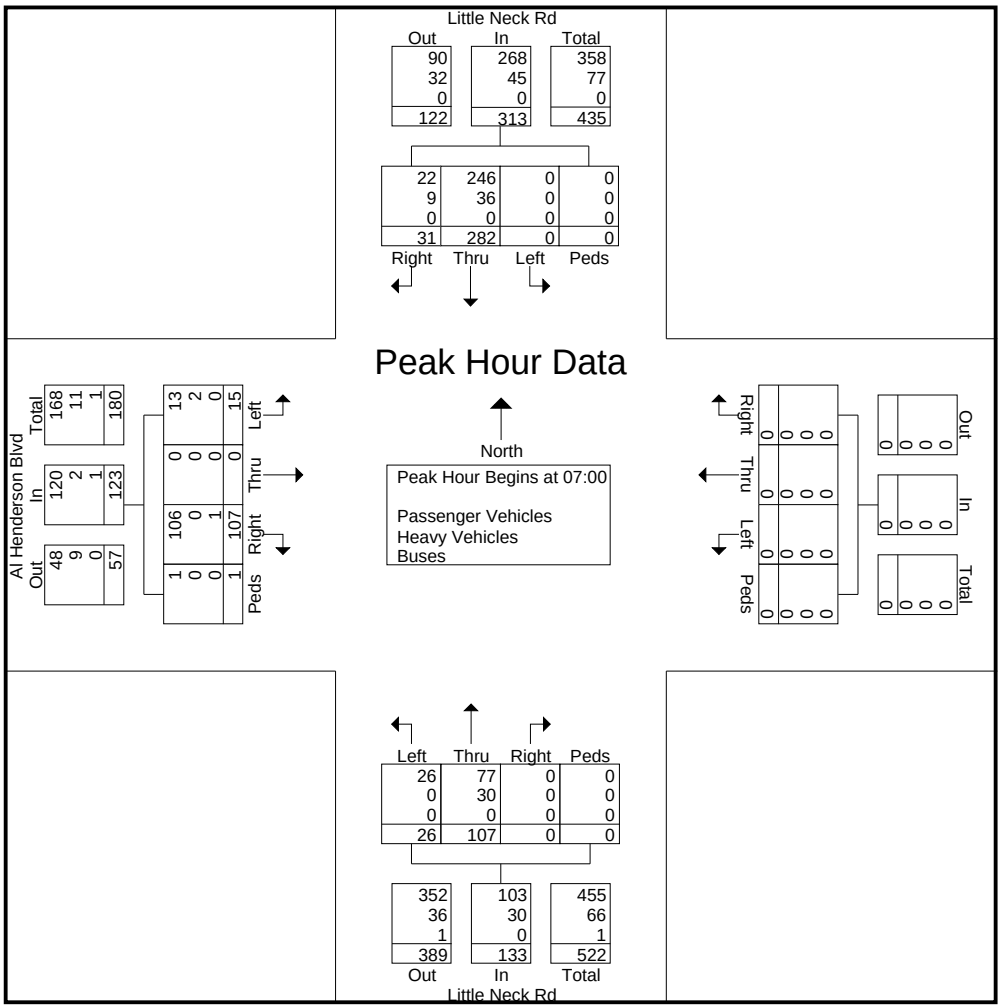
	Little Neck Rd Southbound				Westbound				Little Neck Rd Northbound				Al Henderson Blvd Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	0	53	10	0	0	0	0	0	7	28	0	0	5	0	20	0	123
07:15	0	77	10	0	0	0	0	0	3	30	0	0	4	0	32	0	156
07:30	0	85	7	0	0	0	0	0	10	21	0	0	2	0	26	1	152
07:45	0	67	4	0	0	0	0	0	6	28	0	0	4	0	29	0	138
Total	0	282	31	0	0	0	0	0	26	107	0	0	15	0	107	1	569
08:00	0	54	7	0	0	0	0	0	5	33	0	0	3	0	13	0	115
08:15	0	59	4	0	0	0	0	0	14	29	0	0	1	0	28	0	135
08:30	0	62	3	0	0	0	0	0	10	30	0	0	1	0	21	0	127
08:45	0	48	1	0	0	0	0	0	12	27	0	0	0	0	17	0	105
Total	0	223	15	0	0	0	0	0	41	119	0	0	5	0	79	0	482
16:00	0	40	1	0	0	0	0	0	29	48	0	0	4	0	25	0	147
16:15	0	34	2	0	0	0	0	0	27	86	0	0	7	0	19	0	175
16:30	0	37	5	0	0	0	0	0	31	74	0	0	3	0	19	0	169
16:45	0	55	4	0	0	0	0	0	41	82	0	0	4	0	17	0	203
Total	0	166	12	0	0	0	0	0	128	290	0	0	18	0	80	0	694
17:00	0	57	12	0	0	0	0	0	32	85	0	0	5	0	21	0	212
17:15	0	37	6	0	0	0	0	0	41	97	0	0	11	0	25	0	217
17:30	0	33	10	0	0	0	0	0	42	75	0	0	5	0	32	0	197
17:45	0	33	7	0	0	0	0	0	41	80	0	0	3	0	17	0	181
Total	0	160	35	0	0	0	0	0	156	337	0	0	24	0	95	0	807
Grand Total	0	831	93	0	0	0	0	0	351	853	0	0	62	0	361	1	2552
Apprch %	0	89.9	10.1	0	0	0	0	0	29.2	70.8	0	0	14.6	0	85.1	0.2	
Total %	0	32.6	3.6	0	0	0	0	0	13.8	33.4	0	0	2.4	0	14.1	0	
Passenger Vehicles	0	718	84	0	0	0	0	0	349	753	0	0	59	0	355	1	2319
% Passenger Vehicles	0	86.4	90.3	0	0	0	0	0	99.4	88.3	0	0	95.2	0	98.3	100	90.9
Heavy Vehicles	0	113	9	0	0	0	0	0	2	100	0	0	3	0	3	0	230
% Heavy Vehicles	0	13.6	9.7	0	0	0	0	0	0.6	11.7	0	0	4.8	0	0.8	0	9
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0.1

SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201
We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Al Henderson Blvd
Site Code :
Start Date : 05/27/2021
Page No : 3

	Little Neck Rd Southbound					Westbound					Little Neck Rd Northbound					Al Henderson Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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	53	**10**	0	63	0	0	0	0	0	7	28	0	0	**35**	**5**	0	20	0	25	123
07:15	0	77	10	0	87	0	0	0	0	0	3	**30**	0	0	33	4	0	**32**	0	**36**	**156**
07:30	0	**85**	7	0	**92**	0	0	0	0	0	**10**	21	0	0	31	2	0	26	**1**	29	152
07:45	0	67	4	0	71	0	0	0	0	0	6	28	0	0	34	4	0	29	0	33	138
Total Volume	0	282	31	0	313	0	0	0	0	0	26	107	0	0	133	15	0	107	1	123	569
% App. Total	0	90.1	9.9	0		0	0	0	0		19.5	80.5	0	0		12.2	0	87	0.8		
PHF	.000	.829	.775	.000	.851	.000	.000	.000	.000	.000	.650	.892	.000	.000	.950	.750	.000	.836	.250	.854	.912
Passenger Vehicles	0	246	22	0	268	0	0	0	0	0	26	77	0	0	103	13	0	106	1	120	491
% Passenger Vehicles																					
Heavy Vehicles	0	36	9	0	45	0	0	0	0	0	0	30	0	0	30	2	0	0	0	2	77
% Heavy Vehicles	0	12.8	29.0	0	14.4	0	0	0	0	0	0	28.0	0	0	22.6	13.3	0	0	0	1.6	13.5
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	0	0.8	0.2



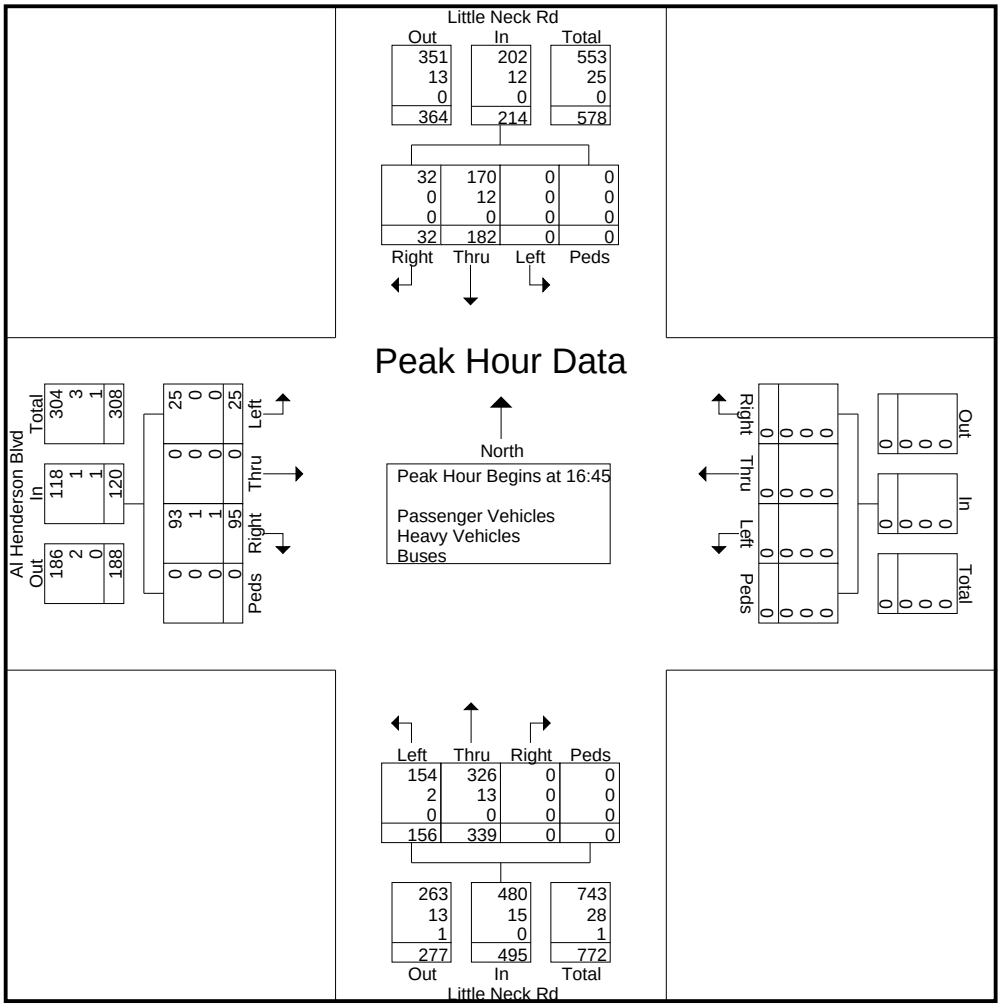
SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Al Henderson Blvd
Site Code :
Start Date : 05/27/2021
Page No : 4

	Little Neck Rd Southbound					Westbound					Little Neck Rd Northbound					Al Henderson Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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	0	55	4	0	59	0	0	0	0	0	41	82	0	0	123	4	0	17	0	21	203
17:00	0	**57**	**12**	0	**69**	0	0	0	0	0	32	85	0	0	117	5	0	21	0	26	212
17:15	0	37	6	0	43	0	0	0	0	0	41	**97**	0	0	**138**	**11**	0	25	0	36	**217**
17:30	0	33	10	0	43	0	0	0	0	0	**42**	75	0	0	117	5	0	**32**	0	**37**	197
Total Volume	0	182	32	0	214	0	0	0	0	0	156	339	0	0	495	25	0	95	0	120	829
% App. Total	0	85	15	0		0	0	0	0		31.5	68.5	0	0		20.8	0	79.2	0		
PHF	.000	.798	.667	.000	.775	.000	.000	.000	.000	.000	.929	.874	.000	.000	.897	.568	.000	.742	.000	.811	.955
Passenger Vehicles	0	170	32	0	202	0	0	0	0	0	154	326	0	0	480	25	0	93	0	118	800
% Passenger Vehicles																					
Heavy Vehicles	0	12	0	0	12	0	0	0	0	0	2	13	0	0	15	0	0	1	0	1	28
% Heavy Vehicles	0	6.6	0	0	5.6	0	0	0	0	0	1.3	3.8	0	0	3.0	0	0	1.1	0	0.8	3.4
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	0	0.8	0.1



SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Zipperer Dr
Site Code :
Start Date : 05/27/2021
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Little Neck Rd Southbound				Westbound				Little Neck Rd Northbound				Zipperer Dr Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	0	52	0	0	0	0	0	0	1	28	0	0	1	0	2	0	84
07:15	0	73	0	0	0	0	0	0	1	30	0	0	1	0	1	0	106
07:30	0	75	0	0	0	0	0	0	1	24	0	0	2	0	10	0	112
07:45	0	69	0	0	0	0	0	0	3	29	0	0	0	0	2	0	103
Total	0	269	0	0	0	0	0	0	6	111	0	0	4	0	15	0	405
08:00	0	53	0	0	0	0	0	0	0	35	0	0	0	0	4	0	92
08:15	0	56	0	0	0	0	0	0	1	27	0	0	0	0	4	0	88
08:30	0	62	0	0	0	0	0	0	1	32	0	0	1	0	2	0	98
08:45	0	53	1	0	0	0	0	0	0	27	0	0	0	0	0	0	81
Total	0	224	1	0	0	0	0	0	2	121	0	0	1	0	10	0	359
16:00	0	38	0	0	0	0	0	0	3	51	0	0	0	0	1	0	93
16:15	0	32	1	0	0	0	0	0	6	84	0	0	0	0	2	0	125
16:30	0	41	0	0	0	0	0	0	3	71	0	0	0	0	1	0	116
16:45	0	54	1	0	0	0	0	0	2	81	0	0	0	0	1	0	139
Total	0	165	2	0	0	0	0	0	14	287	0	0	0	0	5	0	473
17:00	0	51	1	0	0	0	0	0	3	72	0	0	0	0	2	0	129
17:15	0	36	0	0	0	0	0	0	6	101	0	0	0	0	2	0	145
17:30	0	33	0	0	0	0	0	0	4	78	0	0	0	0	2	0	117
17:45	0	40	0	0	0	0	0	0	4	76	0	0	0	0	0	0	120
Total	0	160	1	0	0	0	0	0	17	327	0	0	0	0	6	0	511
Grand Total	0	818	4	0	0	0	0	0	39	846	0	0	5	0	36	0	1748
Apprch %	0	99.5	0.5	0	0	0	0	0	4.4	95.6	0	0	12.2	0	87.8	0	
Total %	0	46.8	0.2	0	0	0	0	0	2.2	48.4	0	0	0.3	0	2.1	0	
Passenger Vehicles	0	710	4	0	0	0	0	0	38	756	0	0	5	0	35	0	1548
% Passenger Vehicles	0	86.8	100	0	0	0	0	0	97.4	89.4	0	0	100	0	97.2	0	88.6
Heavy Vehicles	0	108	0	0	0	0	0	0	1	90	0	0	0	0	1	0	200
% Heavy Vehicles	0	13.2	0	0	0	0	0	0	2.6	10.6	0	0	0	0	2.8	0	11.4
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

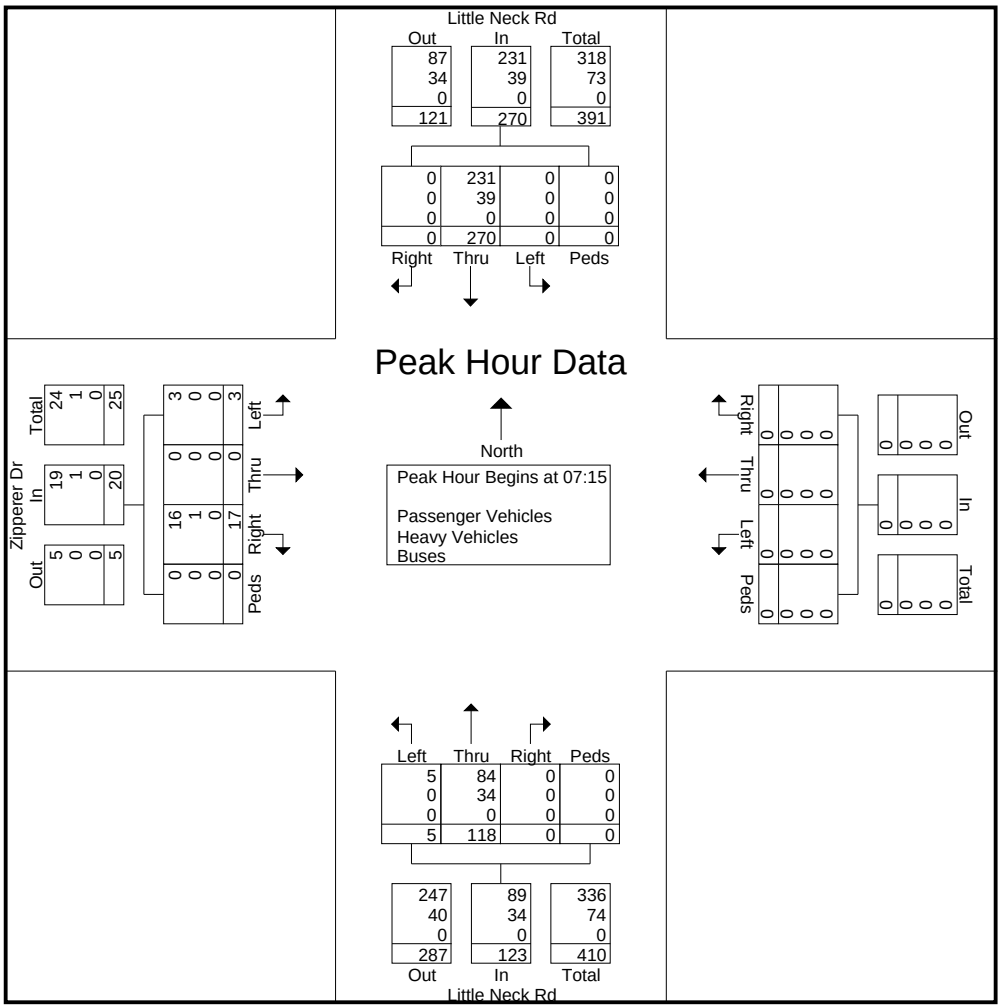
SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Zipperer Dr
Site Code :
Start Date : 05/27/2021
Page No : 3

	Little Neck Rd Southbound					Westbound					Little Neck Rd Northbound					Zipperer Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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	73	0	0	73	0	0	0	0	0	1	30	0	0	31	1	0	1	0	2	106
07:30	0	**75**	0	0	**75**	0	0	0	0	0	1	24	0	0	25	**2**	0	**10**	0	**12**	**112**
07:45	0	69	0	0	69	0	0	0	0	0	**3**	29	0	0	32	0	0	2	0	2	103
08:00	0	53	0	0	53	0	0	0	0	0	0	**35**	0	0	**35**	0	0	4	0	4	92
Total Volume	0	270	0	0	270	0	0	0	0	0	5	118	0	0	123	3	0	17	0	20	413
% App. Total	0	100	0	0		0	0	0	0		4.1	95.9	0	0		15	0	85	0		
PHF	.000	.900	.000	.000	.900	.000	.000	.000	.000	.000	.417	.843	.000	.000	.879	.375	.000	.425	.000	.417	.922
Passenger Vehicles	0	231	0	0	231	0	0	0	0	0	5	84	0	0	89	3	0	16	0	19	339
% Passenger Vehicles																					
Heavy Vehicles	0	39	0	0	39	0	0	0	0	0	0	34	0	0	34	0	0	1	0	1	74
% Heavy Vehicles	0	14.4	0	0	14.4	0	0	0	0	0	0	28.8	0	0	27.6	0	0	5.9	0	5.0	17.9
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

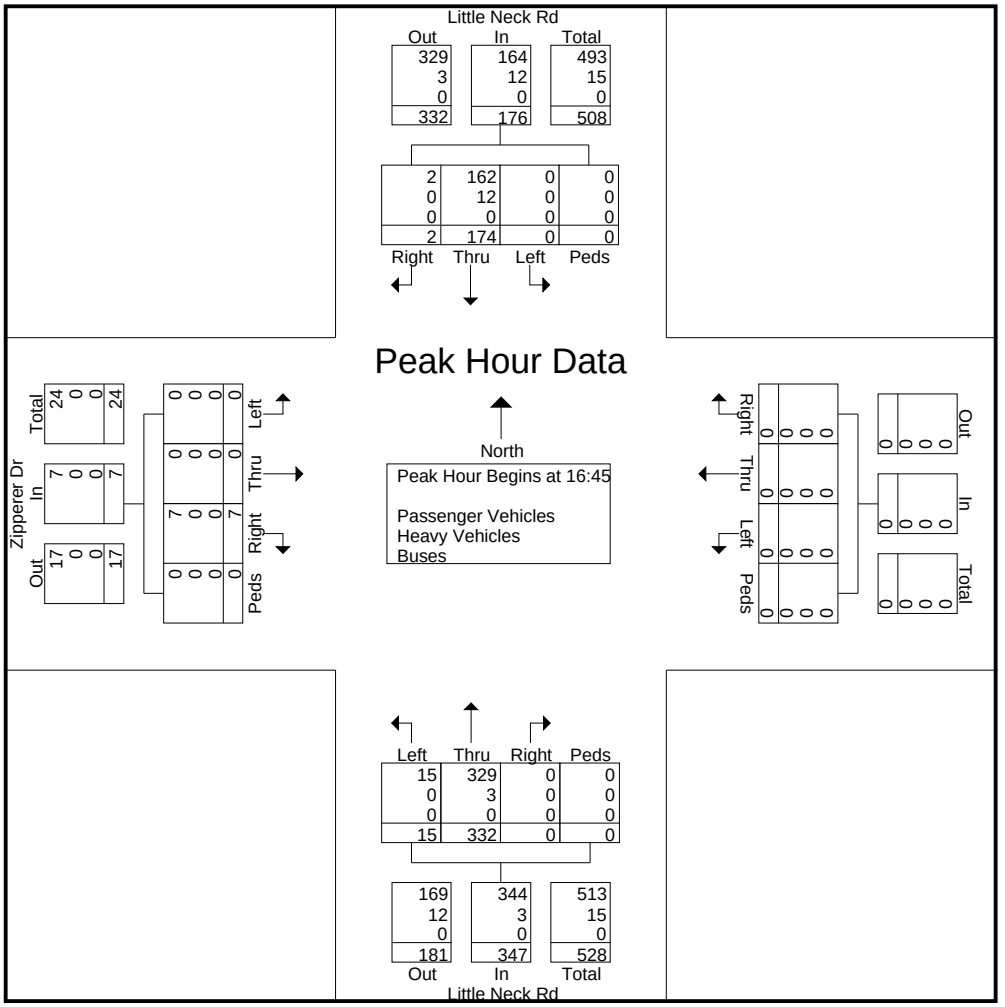


SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201
We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Zipperer Dr
Site Code :
Start Date : 05/27/2021
Page No : 4

	Little Neck Rd Southbound					Westbound					Little Neck Rd Northbound					Zipperer Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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	0	**54**	**1**	0	**55**	0	0	0	0	0	2	81	0	0	83	0	0	1	0	1	139
17:00	0	51	1	0	52	0	0	0	0	0	3	72	0	0	75	0	0	**2**	0	**2**	129
17:15	0	36	0	0	36	0	0	0	0	0	**6**	**101**	0	0	**107**	0	0	2	0	2	**145**
17:30	0	33	0	0	33	0	0	0	0	0	4	78	0	0	82	0	0	2	0	2	117
Total Volume	0	174	2	0	176	0	0	0	0	0	15	332	0	0	347	0	0	7	0	7	530
% App. Total	0	98.9	1.1	0		0	0	0	0		4.3	95.7	0	0		0	0	100	0		
PHF	.000	.806	.500	.000	.800	.000	.000	.000	.000	.000	.625	.822	.000	.000	.811	.000	.000	.875	.000	.875	.914
Passenger Vehicles	0	162	2	0	164	0	0	0	0	0	15	329	0	0	344	0	0	7	0	7	515
% Passenger Vehicles																					
Heavy Vehicles	0	12	0	0	12	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	15
% Heavy Vehicles	0	6.9	0	0	6.8	0	0	0	0	0	0	0.9	0	0	0.9	0	0	0	0	0	2.8
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Henderson Oaks Dr
Site Code :
Start Date : 05/27/2021
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

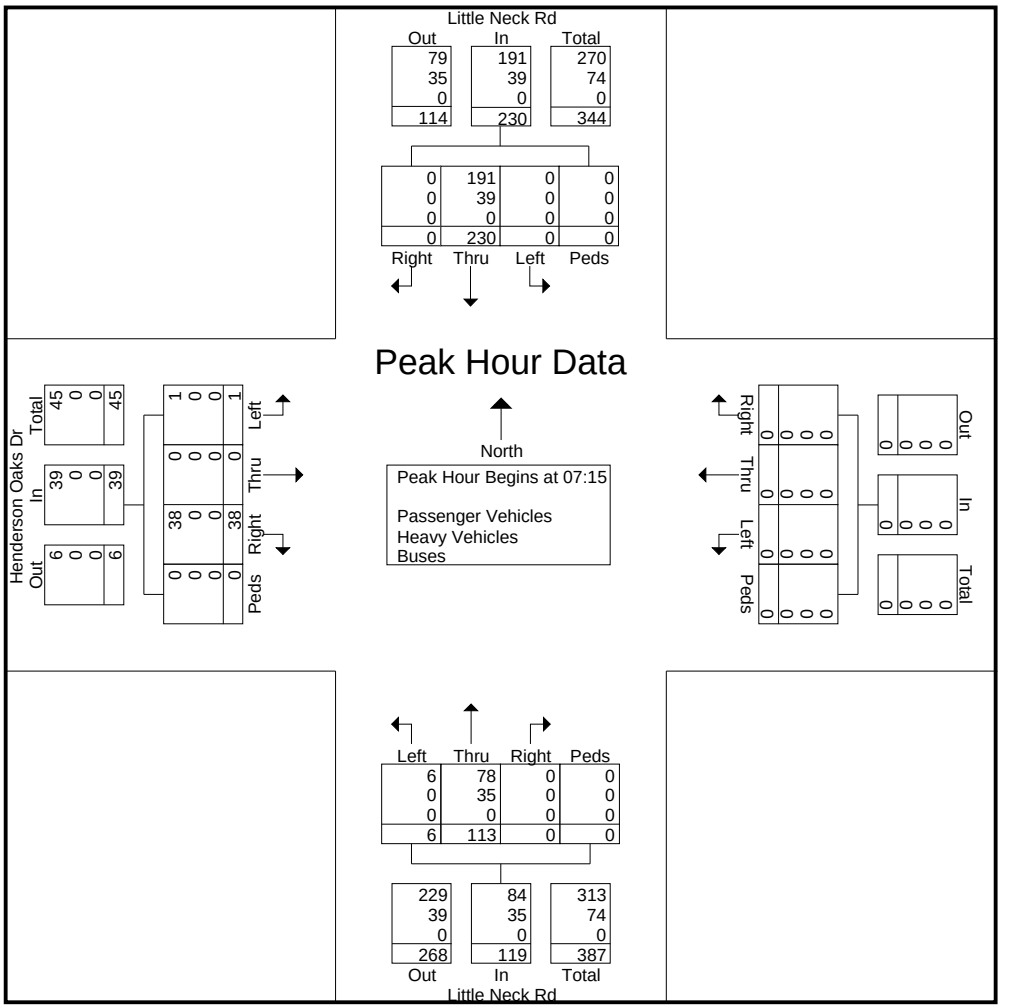
	Little Neck Rd Southbound				Westbound				Little Neck Rd Northbound				Henderson Oaks Dr Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	0	42	0	0	0	0	0	0	2	33	0	0	1	0	5	0	83
07:15	0	60	0	0	0	0	0	0	2	31	0	0	0	0	13	0	106
07:30	0	65	0	0	0	0	0	0	0	28	0	0	1	0	9	0	103
07:45	0	55	0	0	0	0	0	0	1	25	0	0	0	0	9	0	90
Total	0	222	0	0	0	0	0	0	5	117	0	0	2	0	36	0	382
08:00	0	50	0	0	0	0	0	0	3	29	0	0	0	0	7	0	89
08:15	0	48	1	0	0	0	0	0	1	27	0	0	1	0	7	0	85
08:30	0	53	1	0	0	0	0	0	2	31	0	1	0	0	9	0	97
08:45	0	48	0	0	0	0	0	0	1	29	0	0	1	0	4	0	83
Total	0	199	2	0	0	0	0	0	7	116	0	1	2	0	27	0	354
16:00	0	41	0	0	0	0	0	0	4	53	0	0	1	0	3	0	102
16:15	0	29	1	0	0	0	0	0	8	67	0	0	2	0	3	0	110
16:30	0	41	1	0	0	0	0	0	9	64	0	0	0	0	1	0	116
16:45	0	45	0	0	0	0	0	0	5	69	0	0	1	0	7	0	127
Total	0	156	2	0	0	0	0	0	26	253	0	0	4	0	14	0	455
17:00	0	46	0	0	0	0	0	0	8	73	0	0	2	0	7	0	136
17:15	0	32	0	0	0	0	0	0	5	69	0	0	0	0	2	0	108
17:30	0	33	2	0	0	0	0	0	12	80	0	0	0	0	4	0	131
17:45	0	33	1	0	0	0	0	0	8	76	0	0	2	0	2	0	122
Total	0	144	3	0	0	0	0	0	33	298	0	0	4	0	15	0	497
Grand Total	0	721	7	0	0	0	0	0	71	784	0	1	12	0	92	0	1688
Apprch %	0	99	1	0	0	0	0	0	8.3	91.6	0	0.1	11.5	0	88.5	0	
Total %	0	42.7	0.4	0	0	0	0	0	4.2	46.4	0	0.1	0.7	0	5.5	0	
Passenger Vehicles	0	610	7	0	0	0	0	0	71	691	0	1	12	0	92	0	1484
% Passenger Vehicles	0	84.6	100	0	0	0	0	0	100	88.1	0	100	100	0	100	0	87.9
Heavy Vehicles	0	111	0	0	0	0	0	0	0	93	0	0	0	0	0	0	204
% Heavy Vehicles	0	15.4	0	0	0	0	0	0	0	11.9	0	0	0	0	0	0	12.1
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201
We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Henderson Oaks Dr
Site Code :
Start Date : 05/27/2021
Page No : 3

	Little Neck Rd Southbound					Westbound					Little Neck Rd Northbound					Henderson Oaks Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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	60	0	0	60	0	0	0	0	0	2	**31**	0	0	**33**	0	0	**13**	0	**13**	**106**
07:30	0	**65**	0	0	**65**	0	0	0	0	0	0	28	0	0	28	**1**	0	9	0	10	103
07:45	0	55	0	0	55	0	0	0	0	0	1	25	0	0	26	0	0	9	0	9	90
08:00	0	50	0	0	50	0	0	0	0	0	**3**	29	0	0	32	0	0	7	0	7	89
Total Volume	0	230	0	0	230	0	0	0	0	0	6	113	0	0	119	1	0	38	0	39	388
% App. Total	0	100	0	0		0	0	0	0		5	95	0	0		2.6	0	97.4	0		
PHF	.000	.885	.000	.000	.885	.000	.000	.000	.000	.000	.500	.911	.000	.000	.902	.250	.000	.731	.000	.750	.915
Passenger Vehicles	0	191	0	0	191	0	0	0	0	0	6	78	0	0	84	1	0	38	0	39	314
% Passenger Vehicles																					
Heavy Vehicles	0	39	0	0	39	0	0	0	0	0	0	35	0	0	35	0	0	0	0	0	74
% Heavy Vehicles	0	17.0	0	0	17.0	0	0	0	0	0	0	31.0	0	0	29.4	0	0	0	0	0	19.1
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

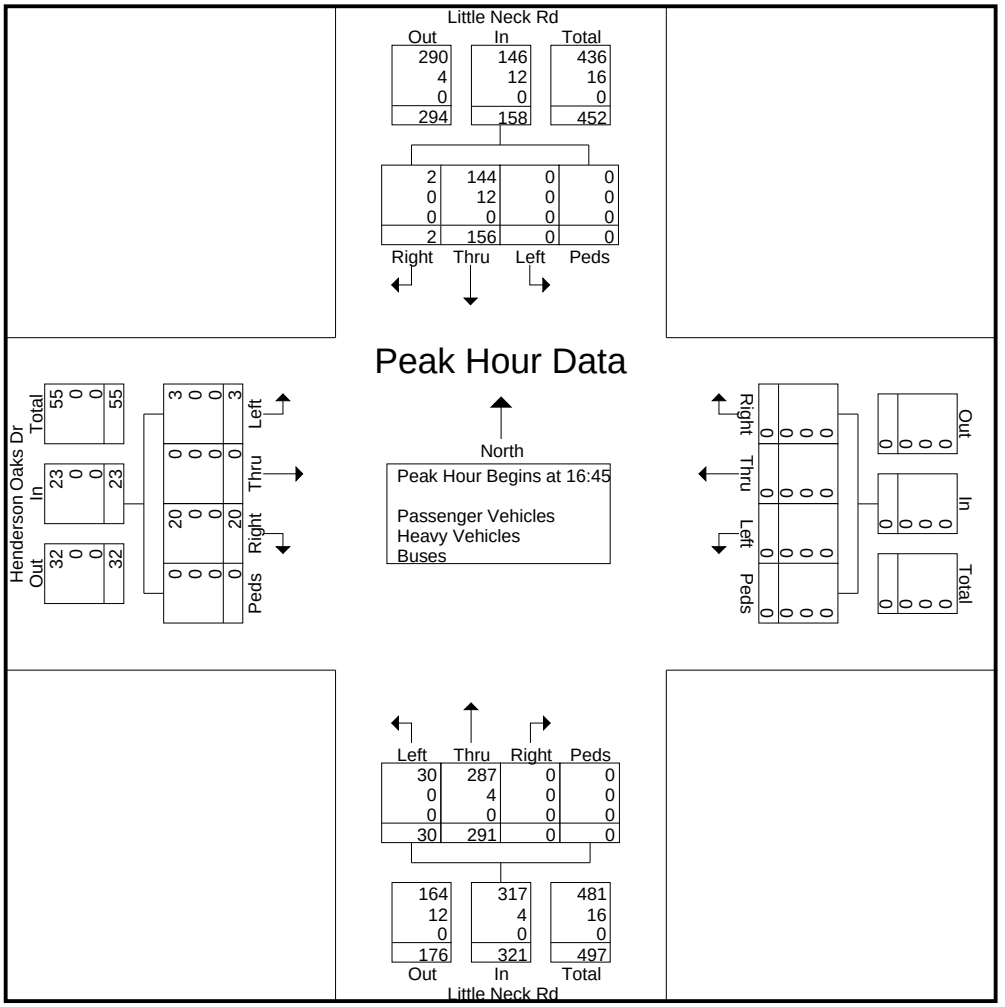


SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201
We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Henderson Oaks Dr
Site Code :
Start Date : 05/27/2021
Page No : 4

	Little Neck Rd Southbound					Westbound					Little Neck Rd Northbound					Henderson Oaks Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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	0	45	0	0	45	0	0	0	0	0	5	69	0	0	74	1	0	**7**	0	8	127
17:00	0	**46**	0	0	**46**	0	0	0	0	0	8	73	0	0	81	**2**	0	7	0	**9**	**136**
17:15	0	32	0	0	32	0	0	0	0	0	5	69	0	0	74	0	0	2	0	2	108
17:30	0	33	**2**	0	35	0	0	0	0	0	**12**	**80**	0	0	**92**	0	0	4	0	4	131
Total Volume	0	156	2	0	158	0	0	0	0	0	30	291	0	0	321	3	0	20	0	23	502
% App. Total	0	98.7	1.3	0		0	0	0	0		9.3	90.7	0	0		13	0	87	0		
PHF	.000	.848	.250	.000	.859	.000	.000	.000	.000	.000	.625	.909	.000	.000	.872	.375	.000	.714	.000	.639	.923
Passenger Vehicles	0	144	2	0	146	0	0	0	0	0	30	287	0	0	317	3	0	20	0	23	486
% Passenger Vehicles																					
Heavy Vehicles	0	12	0	0	12	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	16
% Heavy Vehicles	0	7.7	0	0	7.6	0	0	0	0	0	0	1.4	0	0	1.2	0	0	0	0	0	3.2
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Henderson Lakes Apts
Site Code :
Start Date : 05/27/2021
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

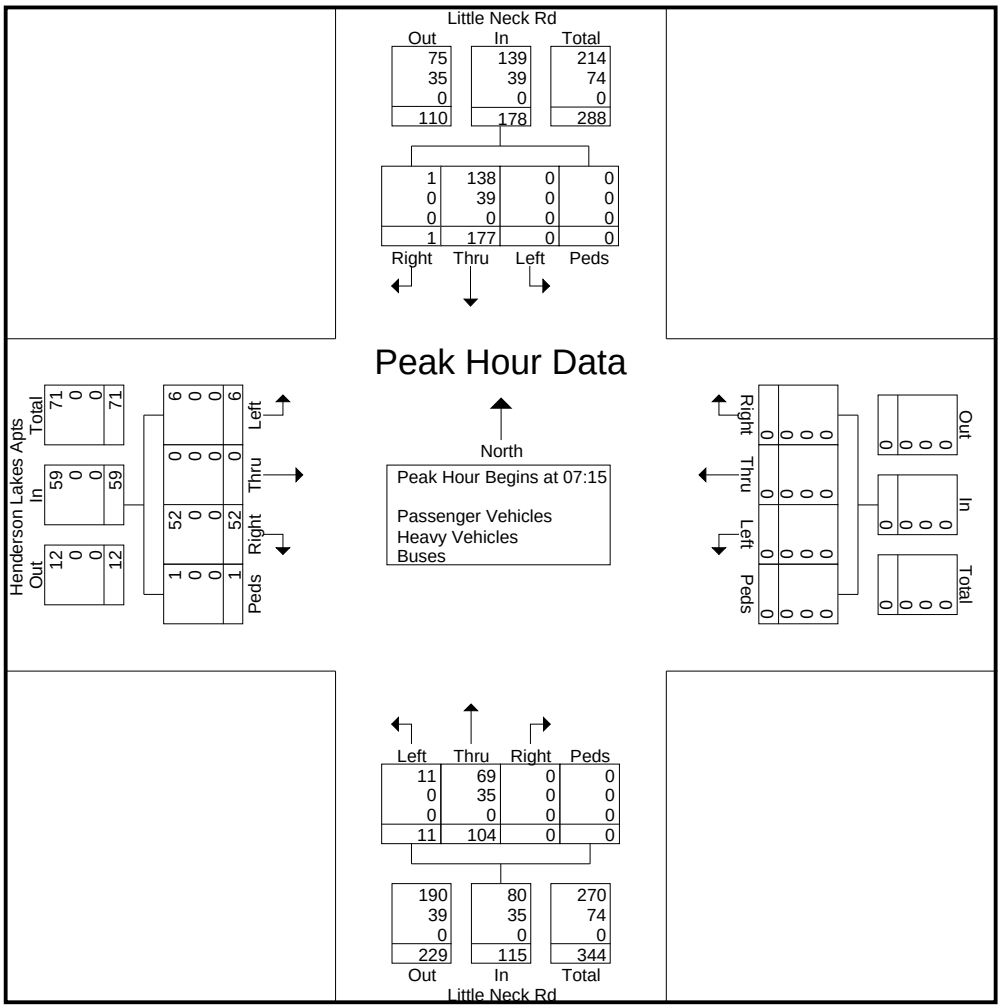
	Little Neck Rd Southbound				Westbound				Little Neck Rd Northbound				Henderson Lakes Apts Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	0	29	0	0	0	0	0	0	3	25	0	0	1	0	12	0	70
07:15	0	47	1	0	0	0	0	0	3	29	0	0	4	0	14	0	98
07:30	0	49	0	0	0	0	0	0	5	21	0	0	0	0	19	0	94
07:45	0	41	0	0	0	0	0	0	0	26	0	0	2	0	14	0	83
Total	0	166	1	0	0	0	0	0	11	101	0	0	7	0	59	0	345
08:00	0	40	0	0	0	0	0	0	3	28	0	0	0	0	5	1	77
08:15	0	35	1	0	0	0	0	0	5	22	0	0	1	0	14	0	78
08:30	0	40	0	0	0	0	0	0	3	30	0	0	0	0	17	0	90
08:45	0	30	0	0	0	0	0	0	4	23	0	0	1	0	17	0	75
Total	0	145	1	0	0	0	0	0	15	103	0	0	2	0	53	1	320
16:00	0	28	0	0	0	0	0	0	15	37	0	0	1	0	6	0	87
16:15	0	24	0	0	0	0	0	0	11	59	0	0	0	0	6	0	100
16:30	0	31	0	0	0	0	0	0	20	45	0	0	3	0	12	0	111
16:45	0	44	0	0	0	0	0	0	17	58	0	0	0	0	5	0	124
Total	0	127	0	0	0	0	0	0	63	199	0	0	4	0	29	0	422
17:00	0	31	1	0	0	0	0	0	9	57	0	0	0	0	11	0	109
17:15	0	22	0	0	0	0	0	0	27	63	0	0	1	0	9	0	122
17:30	0	22	4	0	0	0	0	0	24	48	0	0	1	0	15	0	114
17:45	0	26	1	0	0	0	0	0	19	49	0	0	0	0	13	0	108
Total	0	101	6	0	0	0	0	0	79	217	0	0	2	0	48	0	453
Grand Total	0	539	8	0	0	0	0	0	168	620	0	0	15	0	189	1	1540
Apprch %	0	98.5	1.5	0	0	0	0	0	21.3	78.7	0	0	7.3	0	92.2	0.5	
Total %	0	35	0.5	0	0	0	0	0	10.9	40.3	0	0	1	0	12.3	0.1	
Passenger Vehicles	0	432	8	0	0	0	0	0	168	529	0	0	15	0	189	1	1342
% Passenger Vehicles	0	80.1	100	0	0	0	0	0	100	85.3	0	0	100	0	100	100	87.1
Heavy Vehicles	0	107	0	0	0	0	0	0	0	91	0	0	0	0	0	0	198
% Heavy Vehicles	0	19.9	0	0	0	0	0	0	0	14.7	0	0	0	0	0	0	12.9
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201
We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Henderson Lakes Apts
Site Code :
Start Date : 05/27/2021
Page No : 3

	Little Neck Rd Southbound					Westbound					Little Neck Rd Northbound					Henderson Lakes Apts Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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	47	**1**	0	48	0	0	0	0	0	3	**29**	0	0	**32**	**4**	0	14	0	18	**98**
07:30	0	**49**	0	0	**49**	0	0	0	0	0	**5**	21	0	0	26	0	0	**19**	0	**19**	94
07:45	0	41	0	0	41	0	0	0	0	0	0	26	0	0	26	2	0	14	0	16	83
08:00	0	40	0	0	40	0	0	0	0	0	3	28	0	0	31	0	0	5	**1**	6	77
Total Volume	0	177	1	0	178	0	0	0	0	0	11	104	0	0	115	6	0	52	1	59	352
% App. Total	0	99.4	0.6	0		0	0	0	0		9.6	90.4	0	0		10.2	0	88.1	1.7		
PHF	.000	.903	.250	.000	.908	.000	.000	.000	.000	.000	.550	.897	.000	.000	.898	.375	.000	.684	.250	.776	.898
Passenger Vehicles	0	138	1	0	139	0	0	0	0	0	11	69	0	0	80	6	0	52	1	59	278
% Passenger Vehicles																					
Heavy Vehicles	0	39	0	0	39	0	0	0	0	0	0	35	0	0	35	0	0	0	0	0	74
% Heavy Vehicles	0	22.0	0	0	21.9	0	0	0	0	0	0	33.7	0	0	30.4	0	0	0	0	0	21.0
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

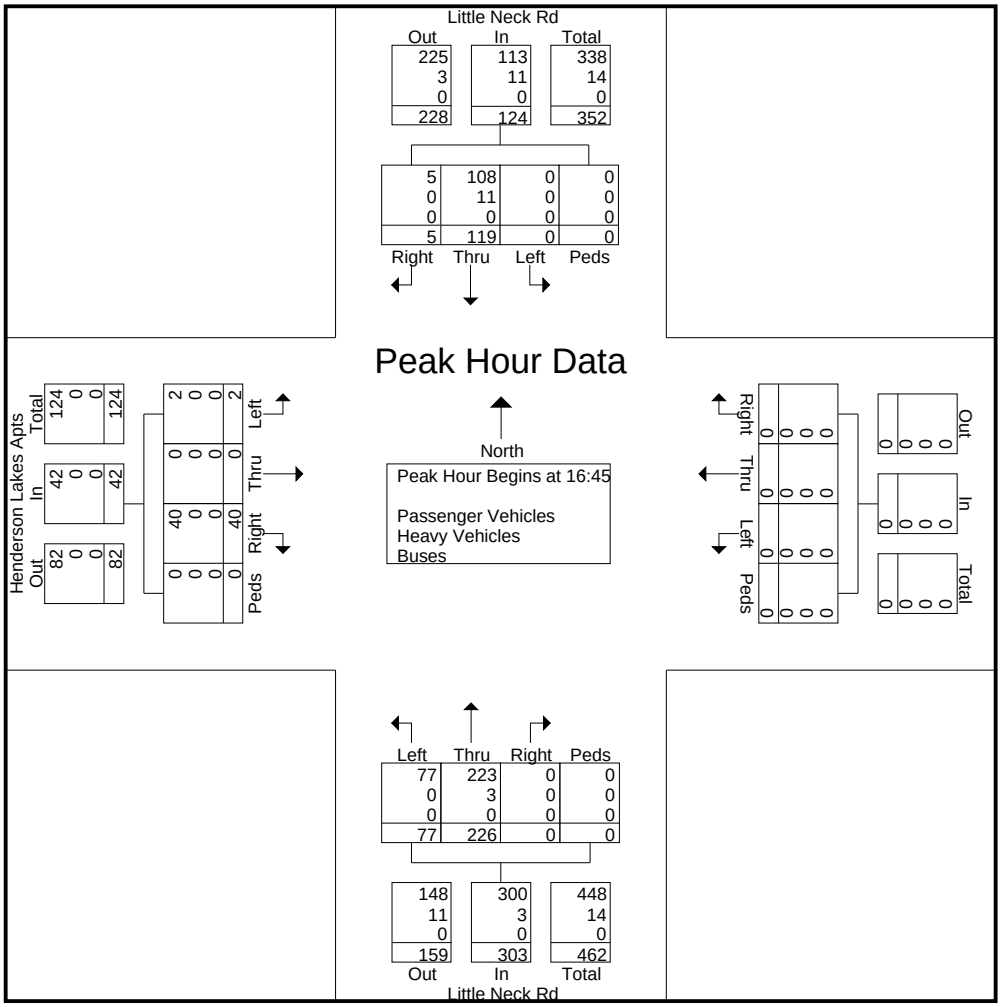


SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201
We can't say we're the Best, but you Can!

File Name : Little Neck Rd @ Henderson Lakes Apts
Site Code :
Start Date : 05/27/2021
Page No : 4

	Little Neck Rd Southbound					Westbound					Little Neck Rd Northbound					Henderson Lakes Apts Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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	0	**44**	0	0	**44**	0	0	0	0	0	17	58	0	0	75	0	0	5	0	5	**124**
17:00	0	31	1	0	32	0	0	0	0	0	9	57	0	0	66	0	0	11	0	11	109
17:15	0	22	0	0	22	0	0	0	0	0	**27**	**63**	0	0	**90**	**1**	0	9	0	10	122
17:30	0	22	**4**	0	26	0	0	0	0	0	24	48	0	0	72	1	0	**15**	0	**16**	114
Total Volume	0	119	5	0	124	0	0	0	0	0	77	226	0	0	303	2	0	40	0	42	469
% App. Total	0	96	4	0		0	0	0	0		25.4	74.6	0	0		4.8	0	95.2	0		
PHF	.000	.676	.313	.000	.705	.000	.000	.000	.000	.000	.713	.897	.000	.000	.842	.500	.000	.667	.000	.656	.946
Passenger Vehicles	0	108	5	0	113	0	0	0	0	0	77	223	0	0	300	2	0	40	0	42	455
% Passenger Vehicles																					
Heavy Vehicles	0	11	0	0	11	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	14
% Heavy Vehicles	0	9.2	0	0	8.9	0	0	0	0	0	0	1.3	0	0	1.0	0	0	0	0	0	3.0
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



LITTLE NECK ROAD
WIDENING CONCEPT

LITTLE NECK ROAD WIDENING CONCEPT PLAN

SHEET 1 OF 2
JANUARY 2017

HUSSEY GAY BELL
Established 1958

SCALE: 1"=50'

Little Neck Road
MATCH LINE STA. 188+50 - SEE SHEET 1
LEGEND
EXISTING PAVEMENT
PROPOSED PAVEMENT
PROPOSED PAVED SHOULDER
PROPOSED MULTI-USE TRAIL / SIDEWALK
PROPOSED CURB AND GUTTER
EXISTING RIGHT OF WAY / PROPERTY LINE
REQUIRED RIGHT OF WAY LINE
REQUIRED RIGHT OF WAY MARKER
CEMETERY
TRANSMISSION UTILITY POLE
WETLANDS
LITTLE NECK ROAD
WIDENING
CONCEPT PLAN
SHEET 2 OF 2
JANUARY 2017
HUSSEY GAY BELL
Established 1958
50' 25' 0 50' 100'
SCALE: 1"=50'
CHATHAM COUNTY
GEORGIA
1777

CAPACITY ANALYSIS

- **Existing**
- **2030 No-Build**
- **2030 Build**
- **Mitigated**

Movement	WBL	WBR	SEL2	SEL	SER	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Traffic Volume (veh/h)	0	0	174	0	222	89	930	0	0	839	73
Future Volume (veh/h)	0	0	174	0	222	89	930	0	0	839	73
Initial Q (Qb), veh			0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00	1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No	
Adj Sat Flow, veh/h/ln			1693	1693	1796	1707	1841	0	1870	1856	1426
Adj Flow Rate, veh/h			189	189	0	97	1011	0	0	912	0
Peak Hour Factor			0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %			14	14	7	13	4	0	2	3	32
Cap, veh/h			224	224		402	2467	0	80	2034	
Arrive On Green			0.14	0.14	0.00	0.05	0.71	0.00	0.00	0.58	0.00
Sat Flow, veh/h			1612	1612	1522	1626	3589	0	558	3526	1208
Grp Volume(v), veh/h			189	189	0	97	1011	0	0	912	0
Grp Sat Flow(s),veh/h/ln			1612	1612	1522	1626	1749	0	558	1763	1208
Q Serve(g_s), s			10.3	10.3	0.0	2.0	10.8	0.0	0.0	13.3	0.0
Cycle Q Clear(g_c), s			10.3	10.3	0.0	2.0	10.8	0.0	0.0	13.3	0.0
Prop In Lane			1.00	1.00	1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h			224	224		402	2467	0	80	2034	
V/C Ratio(X)			0.84	0.84		0.24	0.41	0.00	0.00	0.45	
Avail Cap(c_a), veh/h			394	394		464	2467	0	80	2034	
HCM Platoon Ratio			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh			37.8	37.8	0.0	7.4	5.5	0.0	0.0	10.9	0.0
Incr Delay (d2), s/veh			8.3	8.3	0.0	0.3	0.5	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			4.4	4.4	0.0	0.6	2.9	0.0	0.0	4.5	0.0
Unsig. Movement Delay, s/veh											
LnGrp Delay(d),s/veh			46.1	46.1	0.0	7.7	6.0	0.0	0.0	11.6	0.0
LnGrp LOS			D	D		A	A	A	A	B	
Approach Vol, veh/h			189	189	A		1108			912	A
Approach Delay, s/veh			46.1	46.1			6.2			11.6	
Approach LOS			D	D			A			B	

Timer - Assigned Phs	2	4	5	6
Phs Duration (G+Y+Rc), s	70.5	19.5	11.6	58.9
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0
Max Green Setting (Gmax), s	54.0	22.0	8.0	39.0
Max Q Clear Time (g_c+I1), s	12.8	12.3	4.0	15.3
Green Ext Time (p_c), s	8.0	0.3	0.1	6.2

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Notes

Unsignalized Delay for [SER, SWR] is excluded from calculations of the approach delay and intersection delay.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	142	0	160	0	0	0	286	1008	0	2	1216	272
Future Volume (veh/h)	142	0	160	0	0	0	286	1008	0	2	1216	272
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1856	0	1856				1826	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	151	0	0				304	1072	0	2	1294	0
Peak Hour Factor	0.94	0.92	0.94				0.94	0.94	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	3	0	3				5	2	0	2	2	2
Cap, veh/h	187	0					377	2625	0	378	2013	
Arrive On Green	0.11	0.00	0.00				0.09	0.74	0.00	0.57	0.57	0.00
Sat Flow, veh/h	1767	0	1572				1739	3647	0	526	3554	1585
Grp Volume(v), veh/h	151	0	0				304	1072	0	2	1294	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				1739	1777	0	526	1777	1585
Q Serve(g_s), s	7.5	0.0	0.0				6.0	10.2	0.0	0.1	22.3	0.0
Cycle Q Clear(g_c), s	7.5	0.0	0.0				6.0	10.2	0.0	0.1	22.3	0.0
Prop In Lane	1.00		1.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	0					377	2625	0	378	2013	
V/C Ratio(X)	0.81	0.00					0.81	0.41	0.00	0.01	0.64	
Avail Cap(c_a), veh/h	353	0					483	2625	0	378	2013	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.3	0.0	0.0				14.8	4.4	0.0	8.5	13.3	0.0
Incr Delay (d2), s/veh	8.0	0.0	0.0				7.7	0.5	0.0	0.0	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.0				4.2	2.5	0.0	0.0	7.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.4	0.0	0.0				22.5	4.9	0.0	8.5	14.9	0.0
LnGrp LOS	D	A					C	A	A	A	B	
Approach Vol, veh/h		151	A					1376			1296	A
Approach Delay, s/veh		47.4						8.8			14.9	
Approach LOS		D						A			B	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		73.5		16.5	15.5	58.0						
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0						
Max Green Setting (Gmax), s		58.0		18.0	14.0	37.0						
Max Q Clear Time (g_c+I1), s		12.2		9.5	8.0	24.3						
Green Ext Time (p_c), s		8.8		0.2	0.5	6.8						

Intersection Summary												
HCM 6th Ctrl Delay			13.6									
HCM 6th LOS			B									

Notes

Unsignalized Delay for [SER, SWR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.4

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	289	31	26	136	15	107
Future Vol, veh/h	289	31	26	136	15	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	13	29	2	28	14	2
Mvmt Flow	318	34	29	149	16	118

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	352	0	542	335
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	207	-
Critical Hdwy	-	-	4.12	-	6.54	6.22
Critical Hdwy Stg 1	-	-	-	-	5.54	-
Critical Hdwy Stg 2	-	-	-	-	5.54	-
Follow-up Hdwy	-	-	2.218	-	3.626	3.318
Pot Cap-1 Maneuver	-	-	1207	-	481	707
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	800	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1207	-	469	707
Mov Cap-2 Maneuver	-	-	-	-	469	-
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	781	-

Approach	SE	NW	NE
HCM Control Delay, s	0	1.3	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	806	1207	-	-	-
HCM Lane V/C Ratio	0.166	0.024	-	-	-
HCM Control Delay (s)	10.4	8.1	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.6	0.1	-	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	207	32	156	402	25	95
Future Vol, veh/h	207	32	156	402	25	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	2	2	4	2	2
Mvmt Flow	216	33	163	419	26	99

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	249	0	978	233
Stage 1	-	-	-	-	233	-
Stage 2	-	-	-	-	745	-
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	-	-	1317	-	278	806
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	469	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1317	-	244	806
Mov Cap-2 Maneuver	-	-	-	-	244	-
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	411	-

Approach	SE	NW	NE
HCM Control Delay, s	0	2.3	9
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	1018	1317	-	-	-
HCM Lane V/C Ratio	0.123	0.123	-	-	-
HCM Control Delay (s)	9	8.1	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	0.4	0.4	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	3	17	270	1	5	118
Future Vol, veh/h	3	17	270	1	5	118
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	6	15	2	2	29
Mvmt Flow	3	18	293	1	5	128

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	432	294	0	0	294	0
Stage 1	294	-	-	-	-	-
Stage 2	138	-	-	-	-	-
Critical Hdwy	6.42	6.26	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.354	-	-	2.218	-
Pot Cap-1 Maneuver	581	736	-	-	1268	-
Stage 1	756	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	579	736	-	-	1268	-
Mov Cap-2 Maneuver	579	-	-	-	-	-
Stage 1	756	-	-	-	-	-
Stage 2	885	-	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	10.3	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NWL	NWT	EBLn1	SET	SER
Capacity (veh/h)	1268	-	707	-	-
HCM Lane V/C Ratio	0.004	-	0.031	-	-
HCM Control Delay (s)	7.9	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	1	7	174	2	15	329
Future Vol, veh/h	1	7	174	2	15	329
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	91	91	91	91	91	91
Heavy Vehicles, %	2	2	7	2	2	2
Mvmt Flow	1	8	191	2	16	362

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	586	192	0	0	193	0
Stage 1	192	-	-	-	-	-
Stage 2	394	-	-	-	-	-
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	473	850	-	-	1380	-
Stage 1	841	-	-	-	-	-
Stage 2	681	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	466	850	-	-	1380	-
Mov Cap-2 Maneuver	466	-	-	-	-	-
Stage 1	841	-	-	-	-	-
Stage 2	671	-	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	9.7	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NWL	NWT	EBLn1	SET	SER
Capacity (veh/h)	1380	-	771	-	-
HCM Lane V/C Ratio	0.012	-	0.011	-	-
HCM Control Delay (s)	7.6	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	233	1	6	115	1	38
Future Vol, veh/h	233	1	6	115	1	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	-	175	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	17	2	2	31	2	2
Mvmt Flow	253	1	7	125	1	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	254	0	392	253
Stage 1	-	-	-	-	253	-
Stage 2	-	-	-	-	139	-
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	-	-	1311	-	612	786
Stage 1	-	-	-	-	789	-
Stage 2	-	-	-	-	888	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1311	-	609	786
Mov Cap-2 Maneuver	-	-	-	-	609	-
Stage 1	-	-	-	-	789	-
Stage 2	-	-	-	-	884	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.4	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	780	1311	-	-	-
HCM Lane V/C Ratio	0.054	0.005	-	-	-
HCM Control Delay (s)	9.9	7.8	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	0.2	0	-	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	156	2	30	300	3	20
Future Vol, veh/h	156	2	30	300	3	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	175	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	8	2	2	2	2	2
Mvmt Flow	170	2	33	326	3	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	172	0	562	170
Stage 1	-	-	-	-	170	-
Stage 2	-	-	-	-	392	-
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	-	-	1405	-	488	874
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	683	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1405	-	477	874
Mov Cap-2 Maneuver	-	-	-	-	477	-
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	667	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.7	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	788	1405	-	-	-
HCM Lane V/C Ratio	0.032	0.023	-	-	-
HCM Control Delay (s)	9.7	7.6	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	182	1	11	105	6	52
Future Vol, veh/h	182	1	11	105	6	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	170	270	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	22	2	2	34	2	2
Mvmt Flow	202	1	12	117	7	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	203	0	343	202
Stage 1	-	-	-	-	202	-
Stage 2	-	-	-	-	141	-
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	-	-	1369	-	653	839
Stage 1	-	-	-	-	832	-
Stage 2	-	-	-	-	886	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1369	-	647	839
Mov Cap-2 Maneuver	-	-	-	-	647	-
Stage 1	-	-	-	-	832	-
Stage 2	-	-	-	-	878	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.7	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	814	1369	-	-	-
HCM Lane V/C Ratio	0.079	0.009	-	-	-
HCM Control Delay (s)	9.8	7.7	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	0.3	0	-	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	118	5	77	226	2	40
Future Vol, veh/h	118	5	77	226	2	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	170	270	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	10	2	2	2	2	2
Mvmt Flow	124	5	81	238	2	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	129	0	524	124
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	400	-
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	-	-	1457	-	514	927
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	677	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1457	-	485	927
Mov Cap-2 Maneuver	-	-	-	-	485	-
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	639	-

Approach	SE	NW	NE
HCM Control Delay, s	0	1.9	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	888	1457	-	-	-
HCM Lane V/C Ratio	0.05	0.056	-	-	-
HCM Control Delay (s)	9.3	7.6	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	0.2	0.2	-	-	-

Movement	WBL	WBR	SEL2	SEL	SER	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Traffic Volume (veh/h)	0	0	174	0	222	89	930	0	0	839	73
Future Volume (veh/h)	0	0	174	0	222	89	930	0	0	839	73
Number			7	7	14	5	2	12	1	6	16
Initial Q (Qb), veh			0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00	1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1667	1667	1776	1681	1827	0	1863	1845	1439
Adj Flow Rate, veh/h			246	246	0	126	1314	0	0	1186	0
Adj No. of Lanes			1	1	1	1	2	0	1	2	1
Peak Hour Factor			0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %			14	14	7	13	4	0	2	3	32
Cap, veh/h			280	280	266	293	2319	0	80	1880	656
Arrive On Green			0.18	0.18	0.00	0.05	0.67	0.00	0.00	0.54	0.00
Sat Flow, veh/h			1587	1587	1509	1601	3563	0	417	3505	1223
Grp Volume(v), veh/h			246	246	0	126	1314	0	0	1186	0
Grp Sat Flow(s),veh/h/ln			1587	1587	1509	1601	1736	0	417	1752	1223
Q Serve(g_s), s			13.6	13.6	0.0	3.0	18.2	0.0	0.0	21.3	0.0
Cycle Q Clear(g_c), s			13.6	13.6	0.0	3.0	18.2	0.0	0.0	21.3	0.0
Prop In Lane			1.00	1.00	1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h			280	280	266	293	2319	0	80	1880	656
V/C Ratio(X)			0.88	0.88	0.00	0.43	0.57	0.00	0.00	0.63	0.00
Avail Cap(c_a), veh/h			370	370	352	349	2319	0	80	1880	656
HCM Platoon Ratio			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh			36.1	36.1	0.0	11.6	8.0	0.0	0.0	14.6	0.0
Incr Delay (d2), s/veh			16.8	16.8	0.0	1.0	1.0	0.0	0.0	1.6	0.0
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			7.3	7.3	0.0	1.4	8.9	0.0	0.0	10.6	0.0
LnGrp Delay(d),s/veh			52.9	52.9	0.0	12.6	9.0	0.0	0.0	16.2	0.0
LnGrp LOS			D	D		B	A			B	
Approach Vol, veh/h			246	246			1440			1186	
Approach Delay, s/veh			52.9	52.9			9.3			16.2	
Approach LOS			D	D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		67.1		22.9	11.8	55.3		
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0		
Max Green Setting (Gmax), s		55.0		21.0	8.0	40.0		
Max Q Clear Time (g_c+I1), s		20.2		15.6	5.0	23.3		
Green Ext Time (p_c), s		11.4		0.3	0.1	7.3		

Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	142	0	160	0	0	0	286	1008	0	2	1216	272
Future Volume (veh/h)	142	0	160	0	0	0	286	1008	0	2	1216	272
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1856	0	1856				1826	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	196	0	0				396	1394	0	3	1682	0
Peak Hour Factor	0.94	0.92	0.94				0.94	0.94	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	3	0	3				5	2	0	2	2	2
Cap, veh/h	234	0					327	2531	0	274	1780	
Arrive On Green	0.13	0.00	0.00				0.13	0.71	0.00	0.50	0.50	0.00
Sat Flow, veh/h	1767	0	1572				1739	3647	0	387	3554	1585
Grp Volume(v), veh/h	196	0	0				396	1394	0	3	1682	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				1739	1777	0	387	1777	1585
Q Serve(g_s), s	9.7	0.0	0.0				12.0	16.7	0.0	0.4	40.4	0.0
Cycle Q Clear(g_c), s	9.7	0.0	0.0				12.0	16.7	0.0	0.4	40.4	0.0
Prop In Lane	1.00		1.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	234	0					327	2531	0	274	1780	
V/C Ratio(X)	0.84	0.00					1.21	0.55	0.00	0.01	0.94	
Avail Cap(c_a), veh/h	353	0					327	2531	0	274	1780	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.1	0.0	0.0				28.2	6.1	0.0	11.3	21.3	0.0
Incr Delay (d2), s/veh	10.5	0.0	0.0				120.1	0.9	0.0	0.1	11.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	0.0				17.6	4.5	0.0	0.0	17.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.6	0.0	0.0				148.2	7.0	0.0	11.4	33.0	0.0
LnGrp LOS	D	A					F	A	A	B	C	
Approach Vol, veh/h		196	A					1790			1685	A
Approach Delay, s/veh		48.6						38.2			33.0	
Approach LOS		D						D			C	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		71.1		18.9	19.0	52.1						
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0						
Max Green Setting (Gmax), s		58.0		18.0	12.0	39.0						
Max Q Clear Time (g_c+I1), s		18.7		11.7	14.0	42.4						
Green Ext Time (p_c), s		12.9		0.3	0.0	0.0						

Intersection Summary												
HCM 6th Ctrl Delay			36.4									
HCM 6th LOS			D									

Notes

Unsignalized Delay for [SER, SWR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.7

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	289	31	26	136	15	107
Future Vol, veh/h	289	31	26	136	15	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	13	29	2	28	14	2
Mvmt Flow	413	44	37	194	21	153

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	457	0	703	435
Stage 1	-	-	-	-	435	-
Stage 2	-	-	-	-	268	-
Critical Hdwy	-	-	4.12	-	6.54	6.22
Critical Hdwy Stg 1	-	-	-	-	5.54	-
Critical Hdwy Stg 2	-	-	-	-	5.54	-
Follow-up Hdwy	-	-	2.218	-	3.626	3.318
Pot Cap-1 Maneuver	-	-	1104	-	386	621
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	750	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1104	-	373	621
Mov Cap-2 Maneuver	-	-	-	-	373	-
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	725	-

Approach	SE	NW	NE
HCM Control Delay, s	0	1.3	11.7
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	708	1104	-	-	-
HCM Lane V/C Ratio	0.246	0.034	-	-	-
HCM Control Delay (s)	11.7	8.4	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	1	0.1	-	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	269	42	203	523	33	124
Future Vol, veh/h	269	42	203	523	33	124
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	2	2	4	2	2
Mvmt Flow	280	44	211	545	34	129

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	324	0	1269	302
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	967	-
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	-	-	1236	-	186	738
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	369	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1236	-	154	738
Mov Cap-2 Maneuver	-	-	-	-	154	-
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	306	-

Approach	SE	NW	NE
HCM Control Delay, s	0	2.4	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	733	1236	-	-	-
HCM Lane V/C Ratio	0.223	0.171	-	-	-
HCM Control Delay (s)	11.3	8.5	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.9	0.6	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	3	17	270	1	5	118
Future Vol, veh/h	3	17	270	1	5	118
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	91	92	92	92	92
Heavy Vehicles, %	2	6	15	2	2	29
Mvmt Flow	4	20	382	1	6	167

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	562	383	0	0	383	0
Stage 1	383	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Critical Hdwy	6.42	6.26	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.354	-	-	2.218	-
Pot Cap-1 Maneuver	488	656	-	-	1175	-
Stage 1	689	-	-	-	-	-
Stage 2	852	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	485	656	-	-	1175	-
Mov Cap-2 Maneuver	485	-	-	-	-	-
Stage 1	689	-	-	-	-	-
Stage 2	847	-	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	11	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NWL	NWT	EBLn1	SET	SER
Capacity (veh/h)	1175	-	623	-	-
HCM Lane V/C Ratio	0.005	-	0.038	-	-
HCM Control Delay (s)	8.1	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	1	7	174	2	15	329
Future Vol, veh/h	1	7	174	2	15	329
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	91	91	91	91	91	91
Heavy Vehicles, %	2	2	7	2	2	2
Mvmt Flow	1	8	249	2	18	470

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	756	250	0	0	251	0
Stage 1	250	-	-	-	-	-
Stage 2	506	-	-	-	-	-
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	376	789	-	-	1314	-
Stage 1	792	-	-	-	-	-
Stage 2	606	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	369	789	-	-	1314	-
Mov Cap-2 Maneuver	369	-	-	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	594	-	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	10.3	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NWL	NWT	EBLn1	SET	SER
Capacity (veh/h)	1314	-	691	-	-
HCM Lane V/C Ratio	0.014	-	0.014	-	-
HCM Control Delay (s)	7.8	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	233	1	6	115	1	38
Future Vol, veh/h	233	1	6	115	1	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	-	175	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	17	2	2	31	2	2
Mvmt Flow	329	1	7	163	1	45

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	330	0	506	329
Stage 1	-	-	-	-	329	-
Stage 2	-	-	-	-	177	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1229	-	526	712
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	854	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1229	-	523	712
Mov Cap-2 Maneuver	-	-	-	-	523	-
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	849	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.3	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	705	1229	-	-	-
HCM Lane V/C Ratio	0.066	0.006	-	-	-
HCM Control Delay (s)	10.5	7.9	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.2	0	-	-	-

Intersection	
Int Delay, s/veh	3

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	269	42	203	523	33	124
Future Vol, veh/h	269	42	203	523	33	124
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	2	2	4	2	2
Mvmt Flow	280	44	211	545	34	129

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	324	0	1269	162
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	967	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1234	-	172	855
Stage 1	-	-	-	-	724	-
Stage 2	-	-	-	-	368	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1234	-	143	855
Mov Cap-2 Maneuver	-	-	-	-	143	-
Stage 1	-	-	-	-	724	-
Stage 2	-	-	-	-	305	-

Approach	SE	NW	NE
HCM Control Delay, s	0	2.4	12
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	680	1234	-	-	-
HCM Lane V/C Ratio	0.241	0.171	-	-	-
HCM Control Delay (s)	12	8.5	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.9	0.6	-	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	182	1	11	105	6	52
Future Vol, veh/h	182	1	11	105	6	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	170	270	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	22	2	2	34	2	2
Mvmt Flow	263	1	13	152	7	63

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	264	0	441	263
Stage 1	-	-	-	-	263	-
Stage 2	-	-	-	-	178	-
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	-	-	1300	-	574	776
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	853	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1300	-	568	776
Mov Cap-2 Maneuver	-	-	-	-	568	-
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	844	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.6	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	748	1300	-	-	-
HCM Lane V/C Ratio	0.094	0.01	-	-	-
HCM Control Delay (s)	10.3	7.8	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.3	0	-	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	118	5	77	226	2	40
Future Vol, veh/h	118	5	77	226	2	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	170	270	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	10	2	2	2	2	2
Mvmt Flow	161	6	88	309	2	46

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	167	0	646	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	485	-
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	-	-	1411	-	436	884
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	619	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1411	-	409	884
Mov Cap-2 Maneuver	-	-	-	-	409	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	581	-

Approach	SE	NW	NE
HCM Control Delay, s	0	1.7	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	838	1411	-	-	-
HCM Lane V/C Ratio	0.058	0.063	-	-	-
HCM Control Delay (s)	9.6	7.7	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	0.2	0.2	-	-	-

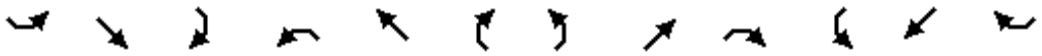
Movement	WBL	WBR	SEL2	SEL	SER	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Traffic Volume (veh/h)	0	0	382	0	612	372	1029	0	0	1091	272
Future Volume (veh/h)	0	0	382	0	612	372	1029	0	0	1091	272
Initial Q (Qb), veh			0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00	1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No	
Adj Sat Flow, veh/h/ln			1693	1693	1796	1707	1841	0	1870	1856	1426
Adj Flow Rate, veh/h			415	415	0	404	1118	0	0	1186	0
Peak Hour Factor			0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %			14	14	7	13	4	0	2	3	32
Cap, veh/h			394	394		374	2098	0	80	1214	
Arrive On Green			0.24	0.24	0.00	0.18	0.60	0.00	0.00	0.34	0.00
Sat Flow, veh/h			1612	1612	1522	1626	3589	0	504	3526	1208
Grp Volume(v), veh/h			415	415	0	404	1118	0	0	1186	0
Grp Sat Flow(s),veh/h/ln			1612	1612	1522	1626	1749	0	504	1763	1208
Q Serve(g_s), s			22.0	22.0	0.0	16.0	16.9	0.0	0.0	29.9	0.0
Cycle Q Clear(g_c), s			22.0	22.0	0.0	16.0	16.9	0.0	0.0	29.9	0.0
Prop In Lane			1.00	1.00	1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h			394	394		374	2098	0	80	1214	
V/C Ratio(X)			1.05	1.05		1.08	0.53	0.00	0.00	0.98	
Avail Cap(c_a), veh/h			394	394		374	2098	0	80	1214	
HCM Platoon Ratio			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh			34.0	34.0	0.0	25.8	10.6	0.0	0.0	29.1	0.0
Incr Delay (d2), s/veh			60.0	60.0	0.0	69.4	1.0	0.0	0.0	20.8	0.0
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			14.6	14.6	0.0	11.0	5.6	0.0	0.0	15.0	0.0
Unsig. Movement Delay, s/veh											
LnGrp Delay(d),s/veh			94.0	94.0	0.0	95.2	11.6	0.0	0.0	49.9	0.0
LnGrp LOS			F	F		F	B	A	A	D	
Approach Vol, veh/h			415	415	A		1522			1186	A
Approach Delay, s/veh			94.0	94.0			33.8			49.9	
Approach LOS			F	F			C			D	

Timer - Assigned Phs	2		4	5	6						
Phs Duration (G+Y+Rc), s	61.0		29.0	23.0	38.0						
Change Period (Y+Rc), s	7.0		7.0	7.0	7.0						
Max Green Setting (Gmax), s	54.0		22.0	16.0	31.0						
Max Q Clear Time (g_c+I1), s	18.9		24.0	18.0	31.9						
Green Ext Time (p_c), s	9.0		0.0	0.0	0.0						

Intersection Summary											
HCM 6th Ctrl Delay		47.9									
HCM 6th LOS		D									

Notes

Unsignalized Delay for [SER, SWR] is excluded from calculations of the approach delay and intersection delay.



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	456	0	627	0	0	0	793	1310	0	3	1581	578
Future Volume (veh/h)	456	0	627	0	0	0	793	1310	0	3	1581	578
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1856	0	1856				1826	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	485	0	0				844	1394	0	3	1682	0
Peak Hour Factor	0.94	0.92	0.94				0.94	0.94	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	3	0	3				5	2	0	2	2	2
Cap, veh/h	393	0					447	2211	0	209	1185	
Arrive On Green	0.22	0.00	0.00				0.21	0.62	0.00	0.33	0.33	0.00
Sat Flow, veh/h	1767	0	1572				1739	3647	0	387	3554	1585
Grp Volume(v), veh/h	485	0	0				844	1394	0	3	1682	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				1739	1777	0	387	1777	1585
Q Serve(g_s), s	20.0	0.0	0.0				19.0	21.9	0.0	0.5	30.0	0.0
Cycle Q Clear(g_c), s	20.0	0.0	0.0				19.0	21.9	0.0	0.5	30.0	0.0
Prop In Lane	1.00		1.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	393	0					447	2211	0	209	1185	
V/C Ratio(X)	1.24	0.00					1.89	0.63	0.00	0.01	1.42	
Avail Cap(c_a), veh/h	393	0					447	2211	0	209	1185	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.0	0.0	0.0				26.8	10.6	0.0	20.2	30.0	0.0
Incr Delay (d2), s/veh	126.0	0.0	0.0				407.8	1.4	0.0	0.1	194.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.7	0.0	0.0				55.0	7.2	0.0	0.0	43.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	161.0	0.0	0.0				434.7	11.9	0.0	20.3	224.0	0.0
LnGrp LOS	F	A					F	B	A	C	F	
Approach Vol, veh/h		485	A					2238			1685	A
Approach Delay, s/veh		161.0						171.4			223.6	
Approach LOS		F						F			F	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		63.0		27.0	26.0	37.0						
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0						
Max Green Setting (Gmax), s		56.0		20.0	19.0	30.0						
Max Q Clear Time (g_c+I1), s		23.9		22.0	21.0	32.0						
Green Ext Time (p_c), s		12.1		0.0	0.0	0.0						

Intersection Summary												
HCM 6th Ctrl Delay			190.2									
HCM 6th LOS			F									

Notes

Unsignalized Delay for [SER, SWR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.5

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	855	40	34	610	20	139
Future Vol, veh/h	855	40	34	610	20	139
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	13	29	2	28	14	2
Mvmt Flow	940	44	37	670	22	153

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	984	0	1706	962
Stage 1	-	-	-	-	962	-
Stage 2	-	-	-	-	744	-
Critical Hdwy	-	-	4.12	-	6.54	6.22
Critical Hdwy Stg 1	-	-	-	-	5.54	-
Critical Hdwy Stg 2	-	-	-	-	5.54	-
Follow-up Hdwy	-	-	2.218	-	3.626	3.318
Pot Cap-1 Maneuver	-	-	702	-	94	310
Stage 1	-	-	-	-	353	-
Stage 2	-	-	-	-	449	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	702	-	89	310
Mov Cap-2 Maneuver	-	-	-	-	89	-
Stage 1	-	-	-	-	353	-
Stage 2	-	-	-	-	425	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.5	24.6
HCM LOS			C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	355	702	-	-	-
HCM Lane V/C Ratio	0.492	0.053	-	-	-
HCM Control Delay (s)	24.6	10.4	-	-	-
HCM Lane LOS	C	B	-	-	-
HCM 95th %tile Q(veh)	2.6	0.2	-	-	-

Intersection	
Int Delay, s/veh	47.8

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	959	42	203	1168	33	124
Future Vol, veh/h	959	42	203	1168	33	124
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	2	2	4	2	2
Mvmt Flow	999	44	211	1217	34	129

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1043	0	2660	1021
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1639	-
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	-	-	667	-	~ 25	287
Stage 1	-	-	-	-	348	-
Stage 2	-	-	-	-	174	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	667	-	~ 17	287
Mov Cap-2 Maneuver	-	-	-	-	~ 17	-
Stage 1	-	-	-	-	348	-
Stage 2	-	-	-	-	119	-

Approach	SE	NW	NE
HCM Control Delay, s	0	1.9	$ 753.6
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	69	667	-	-	-
HCM Lane V/C Ratio	2.37	0.317	-	-	-
HCM Control Delay (s)	$ 753.6	12.9	-	-	-
HCM Lane LOS	F	B	-	-	-
HCM 95th %tile Q(veh)	15.7	1.4	-	-	-

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

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	3	19	830	1	5	586
Future Vol, veh/h	3	19	830	1	5	586
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	6	15	2	2	29
Mvmt Flow	3	21	902	1	5	637

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1550	903	0	0	903	0
Stage 1	903	-	-	-	-	-
Stage 2	647	-	-	-	-	-
Critical Hdwy	6.42	6.26	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.354	-	-	2.218	-
Pot Cap-1 Maneuver	125	330	-	-	753	-
Stage 1	396	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	124	330	-	-	753	-
Mov Cap-2 Maneuver	124	-	-	-	-	-
Stage 1	396	-	-	-	-	-
Stage 2	516	-	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	19.7	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NWL	NWT	EBLn1	SET	SER
Capacity (veh/h)	753	-	269	-	-
HCM Lane V/C Ratio	0.007	-	0.089	-	-
HCM Control Delay (s)	9.8	0	19.7	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	1	8	916	2	16	1073
Future Vol, veh/h	1	8	916	2	16	1073
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	91	91	91	91	91	91
Heavy Vehicles, %	2	2	7	2	2	2
Mvmt Flow	1	9	1007	2	18	1179

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2223	1008	0	0	1009	0
Stage 1	1008	-	-	-	-	-
Stage 2	1215	-	-	-	-	-
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	48	292	-	-	687	-
Stage 1	353	-	-	-	-	-
Stage 2	281	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	44	292	-	-	687	-
Mov Cap-2 Maneuver	44	-	-	-	-	-
Stage 1	353	-	-	-	-	-
Stage 2	260	-	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	26.2	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NWL	NWT	EBLn1	SET	SER
Capacity (veh/h)	687	-	180	-	-
HCM Lane V/C Ratio	0.026	-	0.055	-	-
HCM Control Delay (s)	10.4	0	26.2	-	-
HCM Lane LOS	B	A	D	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	95.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	89	494	1	7	308	275	1	0	41	288	0	63
Future Vol, veh/h	89	494	1	7	308	275	1	0	41	288	0	63
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	100	-	175	100	-	100	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	17	2	2	31	2	2	2	2	2	2	2
Mvmt Flow	97	537	1	8	335	299	1	0	45	313	0	68

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	634	0	0	538	0	0	1266	1381	537	1105	1083	335
Stage 1	-	-	-	-	-	-	731	731	-	351	351	-
Stage 2	-	-	-	-	-	-	535	650	-	754	732	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	949	-	-	1030	-	-	146	144	544	~ 188	217	707
Stage 1	-	-	-	-	-	-	413	427	-	666	632	-
Stage 2	-	-	-	-	-	-	529	465	-	401	427	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	949	-	-	1030	-	-	121	128	544	~ 158	193	707
Mov Cap-2 Maneuver	-	-	-	-	-	-	121	128	-	~ 158	193	-
Stage 1	-	-	-	-	-	-	371	383	-	598	627	-
Stage 2	-	-	-	-	-	-	474	461	-	331	383	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	1.4	0.1	12.7	$ 421.5
HCM LOS			B	F

Minor Lane/Major Mvmt	NELn1	NELn2	NWL	NWT	NWR	SEL	SET	SER	SWLn1	SWLn2
Capacity (veh/h)	121	544	1030	-	-	949	-	-	158	707
HCM Lane V/C Ratio	0.009	0.082	0.007	-	-	0.102	-	-	1.981	0.097
HCM Control Delay (s)	35	12.2	8.5	-	-	9.2	-	-	$ 511.4	10.6
HCM Lane LOS	E	B	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	0	0.3	0	-	-	0.3	-	-	24.2	0.3

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

Intersection	
Int Delay, s/veh	521.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	135	418	2	33	586	449	3	0	22	475	0	184
Future Vol, veh/h	135	418	2	33	586	449	3	0	22	475	0	184
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	100	-	175	100	-	100	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	8	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	147	454	2	36	637	488	3	0	24	516	0	200

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1125	0	0	456	0	0	1801	1945	454	1470	1459	637
Stage 1	-	-	-	-	-	-	748	748	-	709	709	-
Stage 2	-	-	-	-	-	-	1053	1197	-	761	750	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	621	-	-	1105	-	-	62	65	606	~ 105	129	477
Stage 1	-	-	-	-	-	-	404	420	-	~ 425	437	-
Stage 2	-	-	-	-	-	-	274	259	-	~ 398	419	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	621	-	-	1105	-	-	29	48	606	~ 81	95	477
Mov Cap-2 Maneuver	-	-	-	-	-	-	29	48	-	~ 81	95	-
Stage 1	-	-	-	-	-	-	308	320	-	~ 324	423	-
Stage 2	-	-	-	-	-	-	154	250	-	~ 292	320	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	3.1	0.3	27.2	$ 1821
HCM LOS			D	F

Minor Lane/Major Mvmt	NELn1	NELn2	NWL	NWT	NWR	SEL	SET	SER	SWLn1	SWLn2
Capacity (veh/h)	29	606	1105	-	-	621	-	-	81	477
HCM Lane V/C Ratio	0.112	0.039	0.032	-	-	0.236	-	-	6.374	0.419
HCM Control Delay (s)	144.3	11.2	8.4	-	-	12.6	-	-	$ 2519.4	17.9
HCM Lane LOS	F	B	A	-	-	B	-	-	F	C
HCM 95th %tile Q(veh)	0.3	0.1	0.1	-	-	0.9	-	-	57.8	2

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

Intersection	
Int Delay, s/veh	4.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	32	426	1	15	249	106	7	6	69	79	2	15
Future Vol, veh/h	32	426	1	15	249	106	7	6	69	79	2	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	170	270	-	100	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	90	90	90	90	92	90	92	90	92	92	92
Heavy Vehicles, %	2	22	2	2	34	2	2	2	2	2	2	2
Mvmt Flow	35	473	1	17	277	115	8	7	77	86	2	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	392	0	0	474	0	0	921	969	473	897	855	277
Stage 1	-	-	-	-	-	-	543	543	-	311	311	-
Stage 2	-	-	-	-	-	-	378	426	-	586	544	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1167	-	-	1088	-	-	251	254	591	261	296	762
Stage 1	-	-	-	-	-	-	524	520	-	699	658	-
Stage 2	-	-	-	-	-	-	644	586	-	496	519	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1167	-	-	1088	-	-	236	242	591	215	282	762
Mov Cap-2 Maneuver	-	-	-	-	-	-	236	242	-	215	282	-
Stage 1	-	-	-	-	-	-	508	504	-	678	647	-
Stage 2	-	-	-	-	-	-	618	577	-	413	503	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.6	0.3	13.7	28.7
HCM LOS			B	D

Minor Lane/Major Mvmt	NELn1	NELn2	NWL	NWT	NWR	SEL	SET	SER	SWLn1	SWLn2
Capacity (veh/h)	236	531	1088	-	-	1167	-	-	215	635
HCM Lane V/C Ratio	0.033	0.157	0.015	-	-	0.03	-	-	0.399	0.029
HCM Control Delay (s)	20.8	13	8.4	-	-	8.2	-	-	32.5	10.8
HCM Lane LOS	C	B	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.1	0.6	0	-	-	0.1	-	-	1.8	0.1

Intersection	
Int Delay, s/veh	25.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	21	361	5	106	552	100	2	2	57	137	7	33
Future Vol, veh/h	21	361	5	106	552	100	2	2	57	137	7	33
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	100	-	170	270	-	100	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	95	95	95	95	92	95	92	95	92	92	92
Heavy Vehicles, %	2	10	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	380	5	112	581	109	2	2	60	149	8	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	690	0	0	385	0	0	1308	1340	380	1265	1236	581
Stage 1	-	-	-	-	-	-	426	426	-	805	805	-
Stage 2	-	-	-	-	-	-	882	914	-	460	431	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	905	-	-	1173	-	-	136	153	667	~ 146	176	514
Stage 1	-	-	-	-	-	-	606	586	-	376	395	-
Stage 2	-	-	-	-	-	-	341	352	-	581	583	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	905	-	-	1173	-	-	111	135	667	~ 119	155	514
Mov Cap-2 Maneuver	-	-	-	-	-	-	111	135	-	~ 119	155	-
Stage 1	-	-	-	-	-	-	591	571	-	367	357	-
Stage 2	-	-	-	-	-	-	281	319	-	513	568	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.5	1.2	12.8	184.9
HCM LOS			B	F

Minor Lane/Major Mvmt	NELn1	NELn2	NWL	NWT	NWR	SEL	SET	SER	SWLn1	SWLn2
Capacity (veh/h)	111	586	1173	-	-	905	-	-	119	366
HCM Lane V/C Ratio	0.019	0.106	0.095	-	-	0.025	-	-	1.251	0.119
HCM Control Delay (s)	38.1	11.9	8.4	-	-	9.1	-	-	234.1	16.2
HCM Lane LOS	E	B	A	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	0.1	0.4	0.3	-	-	0.1	-	-	9.6	0.4

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

Intersection	
Int Delay, s/veh	1.7

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	7	387	231	40	72	13
Future Vol, veh/h	7	387	231	40	72	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	-	-	100	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	421	251	43	78	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	294	0	-	0	688	251
Stage 1	-	-	-	-	251	-
Stage 2	-	-	-	-	437	-
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	1268	-	-	-	412	788
Stage 1	-	-	-	-	791	-
Stage 2	-	-	-	-	651	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1268	-	-	-	410	788
Mov Cap-2 Maneuver	-	-	-	-	410	-
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	651	-

Approach	SE	NW	SW
HCM Control Delay, s	0.1	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1268	-	410	788
HCM Lane V/C Ratio	-	-	0.006	-	0.191	0.018
HCM Control Delay (s)	-	-	7.9	-	15.8	9.7
HCM Lane LOS	-	-	A	-	C	A
HCM 95th %tile Q(veh)	-	-	0	-	0.7	0.1

Intersection	
Int Delay, s/veh	1.7

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	15	320	502	85	67	12
Future Vol, veh/h	15	320	502	85	67	12
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	-	-	100	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	348	546	92	73	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	638	0	-	0	926	546
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	380	-
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	946	-	-	-	298	538
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	691	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	946	-	-	-	293	538
Mov Cap-2 Maneuver	-	-	-	-	293	-
Stage 1	-	-	-	-	570	-
Stage 2	-	-	-	-	691	-

Approach	SE	NW	SW
HCM Control Delay, s	0.4	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	946	-	293	538
HCM Lane V/C Ratio	-	-	0.017	-	0.249	0.024
HCM Control Delay (s)	-	-	8.9	-	21.3	11.9
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	1	0.1

Intersection	
Int Delay, s/veh	1.2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	3	348	229	15	46	8
Future Vol, veh/h	3	348	229	15	46	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	100	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	378	249	16	50	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	265	0	-	0	633	249
Stage 1	-	-	-	-	249	-
Stage 2	-	-	-	-	384	-
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	1299	-	-	-	444	790
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	688	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1299	-	-	-	443	790
Mov Cap-2 Maneuver	-	-	-	-	443	-
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	688	-

Approach	SE	NW	SW
HCM Control Delay, s	0.1	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1299	-	443	790
HCM Lane V/C Ratio	-	-	0.003	-	0.113	0.011
HCM Control Delay (s)	-	-	7.8	-	14.2	9.6
HCM Lane LOS	-	-	A	-	B	A
HCM 95th %tile Q(veh)	-	-	0	-	0.4	0

Intersection	
Int Delay, s/veh	0.8

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	9	304	463	51	31	5
Future Vol, veh/h	9	304	463	51	31	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	100	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	330	503	55	34	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	558	0	-	0	853	503
Stage 1	-	-	-	-	503	-
Stage 2	-	-	-	-	350	-
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	1013	-	-	-	330	569
Stage 1	-	-	-	-	607	-
Stage 2	-	-	-	-	713	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1013	-	-	-	327	569
Mov Cap-2 Maneuver	-	-	-	-	327	-
Stage 1	-	-	-	-	601	-
Stage 2	-	-	-	-	713	-

Approach	SE	NW	SW
HCM Control Delay, s	0.2	0	16.5
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1013	-	327	569
HCM Lane V/C Ratio	-	-	0.01	-	0.103	0.01
HCM Control Delay (s)	-	-	8.6	-	17.3	11.4
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0	-	0.3	0

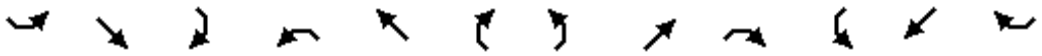
Movement	WBL	WBR	SEL2	SEL	SER	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Traffic Volume (veh/h)	0	0	382	0	612	372	1029	0	0	1091	272
Future Volume (veh/h)	0	0	382	0	612	372	1029	0	0	1091	272
Initial Q (Qb), veh			0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00	1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No	
Adj Sat Flow, veh/h/ln			1693	1693	1796	1707	1841	0	1870	1856	1426
Adj Flow Rate, veh/h			415	415	0	404	1118	0	0	1186	0
Peak Hour Factor			0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %			14	14	7	13	4	0	2	3	32
Cap, veh/h			466	466		435	2569	0	60	1827	
Arrive On Green			0.15	0.15	0.00	0.16	0.73	0.00	0.00	0.52	0.00
Sat Flow, veh/h			3127	3127	2679	1626	3589	0	504	3526	1208
Grp Volume(v), veh/h			415	415	0	404	1118	0	0	1186	0
Grp Sat Flow(s),veh/h/ln			1564	1564	1340	1626	1749	0	504	1763	1208
Q Serve(g_s), s			15.6	15.6	0.0	15.9	15.0	0.0	0.0	29.3	0.0
Cycle Q Clear(g_c), s			15.6	15.6	0.0	15.9	15.0	0.0	0.0	29.3	0.0
Prop In Lane			1.00	1.00	1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h			466	466		435	2569	0	60	1827	
V/C Ratio(X)			0.89	0.89		0.93	0.44	0.00	0.00	0.65	
Avail Cap(c_a), veh/h			495	495		598	2569	0	60	1827	
HCM Platoon Ratio			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh			50.1	50.1	0.0	24.7	6.2	0.0	0.0	21.0	0.0
Incr Delay (d2), s/veh			17.5	17.5	0.0	17.3	0.5	0.0	0.0	1.8	0.0
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			7.1	7.1	0.0	7.8	4.5	0.0	0.0	11.6	0.0
Unsig. Movement Delay, s/veh											
LnGrp Delay(d),s/veh			67.6	67.6	0.0	41.9	6.8	0.0	0.0	22.8	0.0
LnGrp LOS			E	E		D	A	A	A	C	
Approach Vol, veh/h			415	415	A		1522			1186	A
Approach Delay, s/veh			67.6	67.6			16.1			22.8	
Approach LOS			E	E			B			C	

Timer - Assigned Phs	2		4	5	6						
Phs Duration (G+Y+Rc), s	95.1		24.9	25.9	69.2						
Change Period (Y+Rc), s	7.0		7.0	7.0	7.0						
Max Green Setting (Gmax), s	87.0		19.0	31.0	49.0						
Max Q Clear Time (g_c+I1), s	17.0		17.6	17.9	31.3						
Green Ext Time (p_c), s	9.8		0.2	1.0	7.6						

Intersection Summary		
HCM 6th Ctrl Delay	25.5	
HCM 6th LOS	C	

Notes

Unsignalized Delay for [SER, SWR] is excluded from calculations of the approach delay and intersection delay.



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	456	0	627	0	0	0	793	1310	0	3	1581	578
Future Volume (veh/h)	456	0	627	0	0	0	793	1310	0	3	1581	578
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1856				1826	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	485	0	0				844	1394	0	3	1682	0
Peak Hour Factor	0.94	0.92	0.94				0.94	0.94	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	3	2	3				5	2	0	2	2	2
Cap, veh/h	530	0					596	2459	0	209	1303	
Arrive On Green	0.15	0.00	0.00				0.31	0.69	0.00	0.00	0.37	0.00
Sat Flow, veh/h	3534	0	3145				1739	3647	0	1781	3554	1585
Grp Volume(v), veh/h	485	0	0				844	1394	0	3	1682	0
Grp Sat Flow(s),veh/h/ln	1767	0	1572				1739	1777	0	1781	1777	1585
Q Serve(g_s), s	16.2	0.0	0.0				37.0	23.9	0.0	0.1	44.0	0.0
Cycle Q Clear(g_c), s	16.2	0.0	0.0				37.0	23.9	0.0	0.1	44.0	0.0
Prop In Lane	1.00		1.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	530	0					596	2459	0	209	1303	
V/C Ratio(X)	0.91	0.00					1.42	0.57	0.00	0.01	1.29	
Avail Cap(c_a), veh/h	530	0					596	2459	0	276	1303	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.00				1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.2	0.0	0.0				35.9	9.4	0.0	23.8	38.0	0.0
Incr Delay (d2), s/veh	18.5	0.0	0.0				196.8	1.0	0.0	0.0	136.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	0.0				48.2	8.0	0.0	0.1	42.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.8	0.0	0.0				232.7	10.3	0.0	23.8	174.8	0.0
LnGrp LOS	E	A					F	B	A	C	F	
Approach Vol, veh/h		485	A					2238			1685	A
Approach Delay, s/veh		68.8						94.2			174.5	
Approach LOS		E						F			F	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	5.0	90.0		25.0	44.0	51.0
Change Period (Y+Rc), s	4.5	7.0		7.0	7.0	7.0
Max Green Setting (Gmax), s	5.0	78.5		18.0	37.0	44.0
Max Q Clear Time (g_c+I1), s	2.1	25.9		18.2	39.0	46.0
Green Ext Time (p_c), s	0.0	13.8		0.0	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay		122.1
HCM 6th LOS		F

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SER, SWR] is excluded from calculations of the approach delay and intersection delay.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	855	40	34	610	0	20	0	139	0	0	0
Future Volume (veh/h)	0	855	40	34	610	0	20	0	139	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1707	1470	1870	1485	0	1760	1870	1870			
Adj Flow Rate, veh/h	0	940	44	37	670	0	22	0	0			
Peak Hour Factor	0.92	0.91	0.91	0.91	0.91	0.92	0.91	0.92	0.91			
Percent Heavy Veh, %	2	13	29	2	28	0	14	2	2			
Cap, veh/h	80	2302	884	478	2316	0	42	0				
Arrive On Green	0.00	0.71	0.71	0.03	0.82	0.00	0.02	0.00	0.00			
Sat Flow, veh/h	767	3244	1246	1781	2896	0	1781	0	0			
Grp Volume(v), veh/h	0	940	44	37	670	0	22	0	0			
Grp Sat Flow(s),veh/h/ln	767	1622	1246	1781	1411	0	1781	0	0			
Q Serve(g_s), s	0.0	10.7	1.0	0.4	5.0	0.0	1.1	0.0	0.0			
Cycle Q Clear(g_c), s	0.0	10.7	1.0	0.4	5.0	0.0	1.1	0.0	0.0			
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00			
Lane Grp Cap(c), veh/h	80	2302	884	478	2316	0	42	0				
V/C Ratio(X)	0.00	0.41	0.05	0.08	0.29	0.00	0.53	0.00				
Avail Cap(c_a), veh/h	80	2302	884	517	2316	0	396	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	0.0	5.3	3.9	3.5	1.9	0.0	43.4	0.0	0.0			
Incr Delay (d2), s/veh	0.0	0.5	0.1	0.1	0.3	0.0	9.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	3.1	0.2	0.1	0.8	0.0	0.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.9	4.0	3.6	2.2	0.0	53.3	0.0	0.0			
LnGrp LOS	A	A	A	A	A	A	D	A				
Approach Vol, veh/h		984			707			22	A			
Approach Delay, s/veh		5.8			2.3			53.3				
Approach LOS		A			A			D				

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		80.9		9.1	10.0	70.9						
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0						
Max Green Setting (Gmax), s		56.0		20.0	5.0	44.0						
Max Q Clear Time (g_c+I1), s		7.0		3.1	2.4	12.7						
Green Ext Time (p_c), s		5.7		0.0	0.0	8.3						

Intersection Summary												
HCM 6th Ctrl Delay			5.0									
HCM 6th LOS			A									

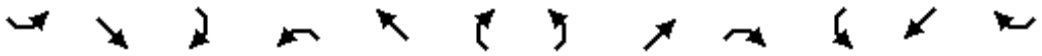
Notes

Unsignalized Delay for [NER] is excluded from calculations of the approach delay and intersection delay.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	959	42	203	1168	0	33	0	124	0	0	0
Future Volume (veh/h)	0	959	42	203	1168	0	33	0	124	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1796	1870	1870	1841	0	1945	1870	1870			
Adj Flow Rate, veh/h	0	999	44	211	1217	0	34	0	129			
Peak Hour Factor	0.92	0.96	0.96	0.96	0.96	0.92	0.96	0.92	0.96			
Percent Heavy Veh, %	2	7	2	2	4	0	2	2	2			
Cap, veh/h	80	2063	958	437	2522	0	42	0	158			
Arrive On Green	0.00	0.60	0.60	0.07	0.72	0.00	0.12	0.00	0.12			
Sat Flow, veh/h	459	3413	1585	1781	3589	0	338	0	1284			
Grp Volume(v), veh/h	0	999	44	211	1217	0	163	0	0			
Grp Sat Flow(s),veh/h/ln	459	1706	1585	1781	1749	0	1622	0	0			
Q Serve(g_s), s	0.0	14.7	1.0	3.7	13.4	0.0	8.8	0.0	0.0			
Cycle Q Clear(g_c), s	0.0	14.7	1.0	3.7	13.4	0.0	8.8	0.0	0.0			
Prop In Lane	1.00		1.00	1.00		0.00	0.21		0.79			
Lane Grp Cap(c), veh/h	80	2063	958	437	2522	0	200	0	0			
V/C Ratio(X)	0.00	0.48	0.05	0.48	0.48	0.00	0.82	0.00	0.00			
Avail Cap(c_a), veh/h	80	2063	958	570	2522	0	324	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	0.09	0.09	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	0.0	10.0	7.2	7.3	5.4	0.0	38.5	0.0	0.0			
Incr Delay (d2), s/veh	0.0	0.8	0.1	0.1	0.1	0.0	8.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	5.2	0.3	1.1	3.8	0.0	3.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.8	7.3	7.4	5.4	0.0	46.4	0.0	0.0			
LnGrp LOS	A	B	A	A	A	A	D	A	A			
Approach Vol, veh/h		1043			1428			163				
Approach Delay, s/veh		10.6			5.7			46.4				
Approach LOS		B			A			D				

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		71.9		18.1	10.5	61.4						
Change Period (Y+Rc), s		7.0		7.0	4.5	7.0						
Max Green Setting (Gmax), s		58.0		18.0	12.7	40.8						
Max Q Clear Time (g_c+I1), s		15.4		10.8	5.7	16.7						
Green Ext Time (p_c), s		12.4		0.5	0.3	8.1						

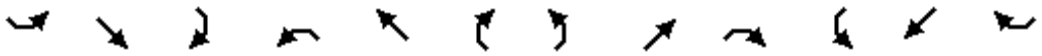
Intersection Summary												
HCM 6th Ctrl Delay			10.2									
HCM 6th LOS			B									



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	89	494	1	7	308	275	1	0	41	288	0	63
Future Volume (veh/h)	89	494	1	7	308	275	1	0	41	288	0	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1648	1870	1870	1441	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	537	1	8	335	299	1	0	45	313	0	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	17	2	2	31	2	2	2	2	2	2	2
Cap, veh/h	347	1030	522	325	901	522	87	0	77	539	0	247
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.05	0.00	0.05	0.16	0.00	0.16
Sat Flow, veh/h	793	3131	1585	867	2737	1585	1781	0	1585	3456	0	1585
Grp Volume(v), veh/h	97	537	1	8	335	299	1	0	45	313	0	68
Grp Sat Flow(s),veh/h/ln	793	1566	1585	867	1369	1585	1781	0	1585	1728	0	1585
Q Serve(g_s), s	4.8	6.3	0.0	0.3	4.2	7.0	0.0	0.0	1.3	3.8	0.0	1.7
Cycle Q Clear(g_c), s	9.0	6.3	0.0	6.6	4.2	7.0	0.0	0.0	1.3	3.8	0.0	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	347	1030	522	325	901	522	87	0	77	539	0	247
V/C Ratio(X)	0.28	0.52	0.00	0.02	0.37	0.57	0.01	0.00	0.58	0.58	0.00	0.27
Avail Cap(c_a), veh/h	614	2086	1056	617	1823	1056	752	0	669	1535	0	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.0	12.2	10.1	14.9	11.6	12.5	20.4	0.0	21.0	17.6	0.0	16.8
Incr Delay (d2), s/veh	0.4	0.4	0.0	0.0	0.3	1.0	0.1	0.0	6.9	1.0	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.6	0.0	0.1	1.0	1.9	0.0	0.0	0.6	1.4	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	12.6	10.1	14.9	11.8	13.5	20.4	0.0	27.8	18.6	0.0	17.4
LnGrp LOS	B	B	B	B	B	B	C	A	C	B	A	B
Approach Vol, veh/h		635			642			46			381	
Approach Delay, s/veh		13.1			12.6			27.7			18.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.8		9.2		21.8		14.0				
Change Period (Y+Rc), s		7.0		7.0		7.0		7.0				
Max Green Setting (Gmax), s		30.0		19.0		30.0		20.0				
Max Q Clear Time (g_c+I1), s		9.0		3.3		11.0		5.8				
Green Ext Time (p_c), s		3.0		0.1		3.8		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			14.5									
HCM 6th LOS			B									



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	135	418	2	33	586	449	3	0	22	475	0	184
Future Volume (veh/h)	135	418	2	33	586	449	3	0	22	475	0	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1781	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	147	454	2	36	637	488	3	0	24	516	0	200
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	8	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	314	1904	892	543	2000	892	49	0	43	611	331	280
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.03	0.00	0.03	0.18	0.00	0.18
Sat Flow, veh/h	501	3385	1585	935	3554	1585	1781	0	1585	3456	1870	1585
Grp Volume(v), veh/h	147	454	2	36	637	488	3	0	24	516	0	200
Grp Sat Flow(s),veh/h/ln	501	1692	1585	935	1777	1585	1781	0	1585	1728	1870	1585
Q Serve(g_s), s	19.9	6.1	0.0	1.8	8.6	17.5	0.1	0.0	1.3	13.0	0.0	10.7
Cycle Q Clear(g_c), s	28.5	6.1	0.0	7.9	8.6	17.5	0.1	0.0	1.3	13.0	0.0	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	314	1904	892	543	2000	892	49	0	43	611	331	280
V/C Ratio(X)	0.47	0.24	0.00	0.07	0.32	0.55	0.06	0.00	0.56	0.84	0.00	0.71
Avail Cap(c_a), veh/h	314	1904	892	543	2000	892	356	0	317	691	374	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	9.9	8.6	11.9	10.5	12.4	42.7	0.0	43.2	35.9	0.0	34.9
Incr Delay (d2), s/veh	5.0	0.3	0.0	0.2	0.4	2.4	0.5	0.0	10.7	8.6	0.0	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.0	0.0	0.4	3.0	5.8	0.1	0.0	0.7	6.1	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	10.2	8.6	12.2	10.9	14.8	43.2	0.0	53.9	44.5	0.0	41.3
LnGrp LOS	C	B	A	B	B	B	D	A	D	D	A	D
Approach Vol, veh/h		603			1161			27			716	
Approach Delay, s/veh		13.4			12.6			52.7			43.6	
Approach LOS		B			B			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		57.6		9.5		57.6		22.9				
Change Period (Y+Rc), s		7.0		7.0		7.0		7.0				
Max Green Setting (Gmax), s		33.0		18.0		33.0		18.0				
Max Q Clear Time (g_c+I1), s		19.5		3.3		30.5		15.0				
Green Ext Time (p_c), s		5.0		0.1		1.0		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			22.1									
HCM 6th LOS			C									

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	0	19	0	830	1	5	586	0	0	0
Future Vol, veh/h	0	19	0	830	1	5	586	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	-	200	-	-	200	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16965	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	6	2	15	2	2	29	2	2	2
Mvmt Flow	0	21	0	902	1	5	637	0	0	0

Major/Minor	Minor1		Major1			Major2		
Conflicting Flow All	1232	452	637	0	0	903	0	0
Stage 1	903	-	-	-	-	-	-	-
Stage 2	329	-	-	-	-	-	-	-
Critical Hdwy	6.84	7.02	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	3.36	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	169	544	943	-	-	749	-	0
Stage 1	356	-	-	-	-	-	-	0
Stage 2	701	-	-	-	-	-	-	0
Platoon blocked, %				-	-		-	
Mov Cap-1 Maneuver	168	544	943	-	-	749	-	-
Mov Cap-2 Maneuver	168	-	-	-	-	-	-	-
Stage 1	356	-	-	-	-	-	-	-
Stage 2	696	-	-	-	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	14.2	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NWL	NWT	EBLn1	SEL	SET	SER
Capacity (veh/h)	749	-	417	943	-	-
HCM Lane V/C Ratio	0.007	-	0.057	-	-	-
HCM Control Delay (s)	9.8	-	14.2	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	1	0	8	0	0	0	0	916	2	16	1073	0
Future Vol, veh/h	1	0	8	0	0	0	0	916	2	16	1073	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	17747	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	92	91	92	92	92	92	91	91	91	91	92
Heavy Vehicles, %	2	2	2	2	2	2	2	7	2	2	2	2
Mvmt Flow	1	0	9	0	0	0	0	1007	2	18	1179	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	1634	2223	505	1179	0	0	1009	0	0
Stage 1	1008	1008	-	-	-	-	-	-	-
Stage 2	626	1215	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	92	43	512	588	-	-	683	-	0
Stage 1	313	316	-	-	-	-	-	-	0
Stage 2	495	252	-	-	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	90	0	512	588	-	-	683	-	-
Mov Cap-2 Maneuver	90	0	-	-	-	-	-	-	-
Stage 1	313	0	-	-	-	-	-	-	-
Stage 2	482	0	-	-	-	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	16	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NWL	NWT	EBLn1	SEL	SET	SER
Capacity (veh/h)	683	-	337	588	-	-
HCM Lane V/C Ratio	0.026	-	0.029	-	-	-
HCM Control Delay (s)	10.4	-	16	0	-	-
HCM Lane LOS	B	-	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	32	426	1	15	249	106	7	6	69	79	2	15
Future Vol, veh/h	32	426	1	15	249	106	7	6	69	79	2	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	270	-	200	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	90	90	90	90	92	90	92	90	92	92	92
Heavy Vehicles, %	2	22	2	2	34	2	2	2	2	2	2	2
Mvmt Flow	35	473	1	17	277	115	8	7	77	86	2	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	392	0	0	474	0	0	717	969	237	621	855	139
Stage 1	-	-	-	-	-	-	543	543	-	311	311	-
Stage 2	-	-	-	-	-	-	174	426	-	310	544	-
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	1163	-	-	1084	-	-	317	252	764	372	294	884
Stage 1	-	-	-	-	-	-	492	518	-	674	657	-
Stage 2	-	-	-	-	-	-	811	584	-	675	517	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1163	-	-	1084	-	-	299	240	764	317	280	884
Mov Cap-2 Maneuver	-	-	-	-	-	-	299	240	-	317	280	-
Stage 1	-	-	-	-	-	-	477	502	-	654	646	-
Stage 2	-	-	-	-	-	-	781	575	-	581	501	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.6	0.3	11.8	18.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NELn1	NELn2	NWL	NWT	NWR	SEL	SET	SER	SWLn1	SWLn2
Capacity (veh/h)	299	652	1084	-	-	1163	-	-	317	705
HCM Lane V/C Ratio	0.026	0.128	0.015	-	-	0.03	-	-	0.271	0.026
HCM Control Delay (s)	17.4	11.3	8.4	-	-	8.2	-	-	20.5	10.2
HCM Lane LOS	C	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.1	0.4	0	-	-	0.1	-	-	1.1	0.1

Intersection	
Int Delay, s/veh	14.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	21	361	5	106	552	100	2	2	57	137	7	33
Future Vol, veh/h	21	361	5	106	552	100	2	2	57	137	7	33
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	200	-	200	270	-	100	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	95	95	95	95	92	95	92	95	92	92	92
Heavy Vehicles, %	2	10	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	380	5	112	581	109	2	2	60	149	8	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	690	0	0	385	0	0	945	1340	190	1042	1236	291
Stage 1	-	-	-	-	-	-	426	426	-	805	805	-
Stage 2	-	-	-	-	-	-	519	914	-	237	431	-
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	900	-	-	1170	-	-	217	151	820	184	175	706
Stage 1	-	-	-	-	-	-	577	584	-	342	393	-
Stage 2	-	-	-	-	-	-	508	350	-	745	581	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	900	-	-	1170	-	-	180	133	820	153	154	706
Mov Cap-2 Maneuver	-	-	-	-	-	-	180	133	-	153	154	-
Stage 1	-	-	-	-	-	-	562	569	-	333	355	-
Stage 2	-	-	-	-	-	-	427	316	-	670	566	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.5	1.2	11.2	99.3
HCM LOS			B	F

Minor Lane/Major Mvmt	NELn1	NELn2	NWL	NWT	NWR	SEL	SET	SER	SWLn1	SWLn2
Capacity (veh/h)	180	695	1170	-	-	900	-	-	153	434
HCM Lane V/C Ratio	0.012	0.089	0.095	-	-	0.025	-	-	0.973	0.1
HCM Control Delay (s)	25.2	10.7	8.4	-	-	9.1	-	-	124.2	14.2
HCM Lane LOS	D	B	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	0	0.3	0.3	-	-	0.1	-	-	7.2	0.3

Intersection	
Int Delay, s/veh	1.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	7	387	0	0	231	40	0	0	0	72	0	13
Future Vol, veh/h	7	387	0	0	231	40	0	0	0	72	0	13
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	100	-	-	200	-	100	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	421	0	0	251	43	0	0	0	78	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	294	0	-	421	0	0	563	731	211	478	-	126
Stage 1	-	-	-	-	-	-	437	437	-	251	-	-
Stage 2	-	-	-	-	-	-	126	294	-	227	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	-	3.32
Pot Cap-1 Maneuver	1264	-	0	1135	-	-	409	347	794	470	0	901
Stage 1	-	-	0	-	-	-	568	578	-	731	0	-
Stage 2	-	-	0	-	-	-	865	668	-	755	0	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1264	-	-	1135	-	-	401	345	794	468	-	901
Mov Cap-2 Maneuver	-	-	-	-	-	-	401	345	-	468	-	-
Stage 1	-	-	-	-	-	-	565	575	-	727	-	-
Stage 2	-	-	-	-	-	-	851	668	-	750	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.1	0	0	13.4
HCM LOS			A	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	1135	-	-	1264	-	468	901
HCM Lane V/C Ratio	-	-	-	-	0.006	-	0.167	0.016
HCM Control Delay (s)	0	0	-	-	7.9	-	14.2	9.1
HCM Lane LOS	A	A	-	-	A	-	B	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	0.6	0

Intersection	
Int Delay, s/veh	1.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	15	320	0	0	502	85	0	0	0	67	0	12
Future Vol, veh/h	15	320	0	0	502	85	0	0	0	67	0	12
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	100	-	-	200	-	100	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	348	0	0	546	92	0	0	0	73	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	638	0	-	348	0	0	653	1018	174	752	-	273
Stage 1	-	-	-	-	-	-	380	380	-	546	-	-
Stage 2	-	-	-	-	-	-	273	638	-	206	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	-	3.32
Pot Cap-1 Maneuver	942	-	0	1208	-	-	352	236	839	299	0	725
Stage 1	-	-	0	-	-	-	614	612	-	490	0	-
Stage 2	-	-	0	-	-	-	710	469	-	777	0	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	942	-	-	1208	-	-	341	232	839	295	-	725
Mov Cap-2 Maneuver	-	-	-	-	-	-	341	232	-	295	-	-
Stage 1	-	-	-	-	-	-	604	602	-	482	-	-
Stage 2	-	-	-	-	-	-	697	469	-	764	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.4	0	0	19.5
HCM LOS			A	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	1208	-	-	942	-	295	725
HCM Lane V/C Ratio	-	-	-	-	0.017	-	0.247	0.018
HCM Control Delay (s)	0	0	-	-	8.9	-	21.2	10.1
HCM Lane LOS	A	A	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	0	-	-	0.1	-	1	0.1

Intersection	
Int Delay, s/veh	1

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	3	348	229	15	46	8
Future Vol, veh/h	3	348	229	15	46	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	100	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	378	249	16	50	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	265	0	-	0	444	125
Stage 1	-	-	-	-	249	-
Stage 2	-	-	-	-	195	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1296	-	-	-	542	902
Stage 1	-	-	-	-	769	-
Stage 2	-	-	-	-	819	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1296	-	-	-	541	902
Mov Cap-2 Maneuver	-	-	-	-	541	-
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	819	-

Approach	SE	NW	SW
HCM Control Delay, s	0.1	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1296	-	541	902
HCM Lane V/C Ratio	-	-	0.003	-	0.092	0.01
HCM Control Delay (s)	-	-	7.8	-	12.3	9
HCM Lane LOS	-	-	A	-	B	A
HCM 95th %tile Q(veh)	-	-	0	-	0.3	0

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	9	304	463	51	31	5
Future Vol, veh/h	9	304	463	51	31	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	330	503	55	34	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	558	0	-	0	688	252
Stage 1	-	-	-	-	503	-
Stage 2	-	-	-	-	185	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1009	-	-	-	380	748
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1009	-	-	-	376	748
Mov Cap-2 Maneuver	-	-	-	-	376	-
Stage 1	-	-	-	-	567	-
Stage 2	-	-	-	-	828	-

Approach	SE	NW	SW
HCM Control Delay, s	0.2	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1009	-	376	748
HCM Lane V/C Ratio	-	-	0.01	-	0.09	0.007
HCM Control Delay (s)	-	-	8.6	-	15.5	9.8
HCM Lane LOS	-	-	A	-	C	A
HCM 95th %tile Q(veh)	-	-	0	-	0.3	0